

# aselsan

**2017 ANNUAL REPORT**



ASELSAN is a company of Turkish Armed Forces Foundation.



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Communications and Information Technologies Business Sector  
Defense System Technologies Business Sector  
Microelectronics, Guidance and Electro-Optics Business Sector  
Radar and Electronic Warfare Systems Business Sector  
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## VISION

To be a reliable, competitively preferred, environment-friendly and human conscious technology firm which preserves its sustainable growth in the global market via the values created for stakeholders, as well as serving its establishment purposes.

## MISSION

By focusing primarily on the needs of the Turkish Armed Forces; to provide high-value-added, innovative and reliable products and solutions to both local and foreign customers in the fields of electronic technologies and system integration; continuing activities in line with global targets as well as increasing brand awareness and contributing to the technological independence of Turkey.

## ETHICAL AND BASIC VALUES

National Consciousness  
Honesty and Trustworthiness  
Customer Oriented  
Respect to People and Nature  
Innovation and Creativeness  
Modesty  
Corporate Loyalty  
Research and Entrepreneurial Spirit  
Objective Driven  
Team Spirit and Solidarity  
Work Discipline  
Cost Consciousness

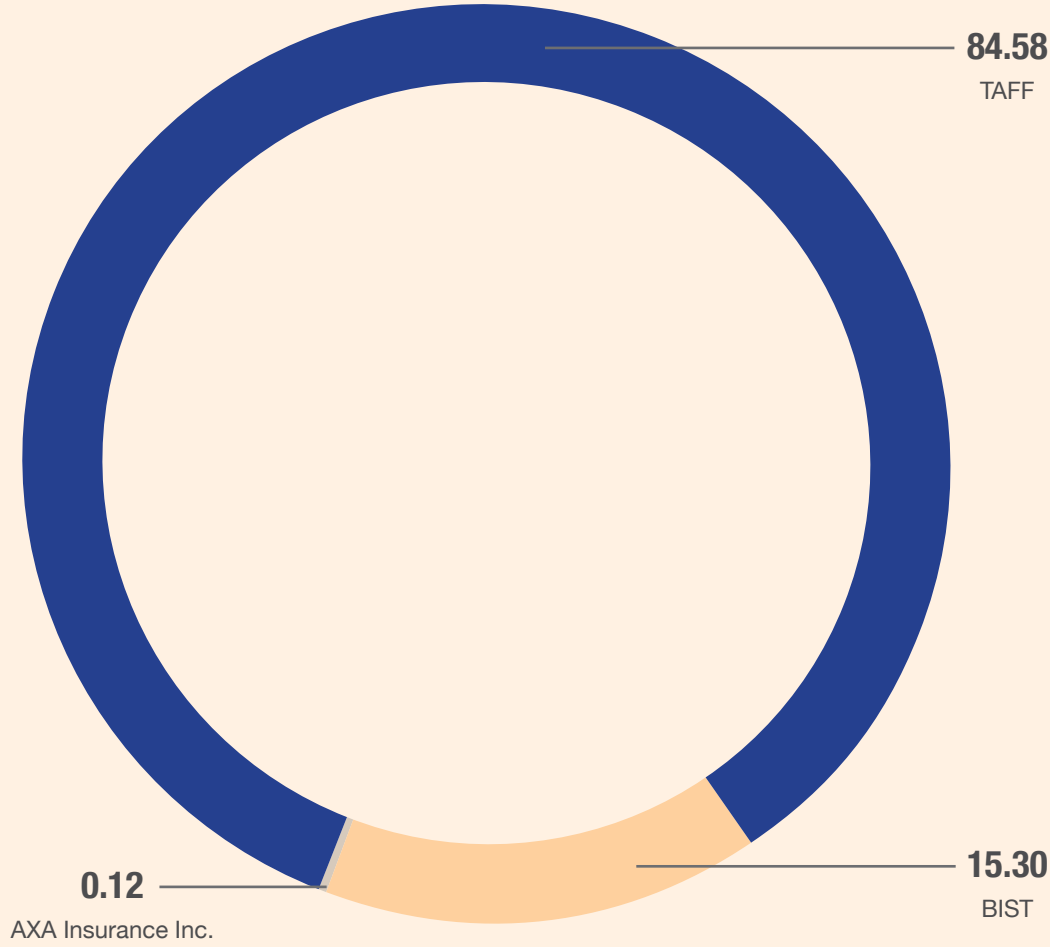


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# ASELSAN Shareholding Structure

## Our Shareholders

%



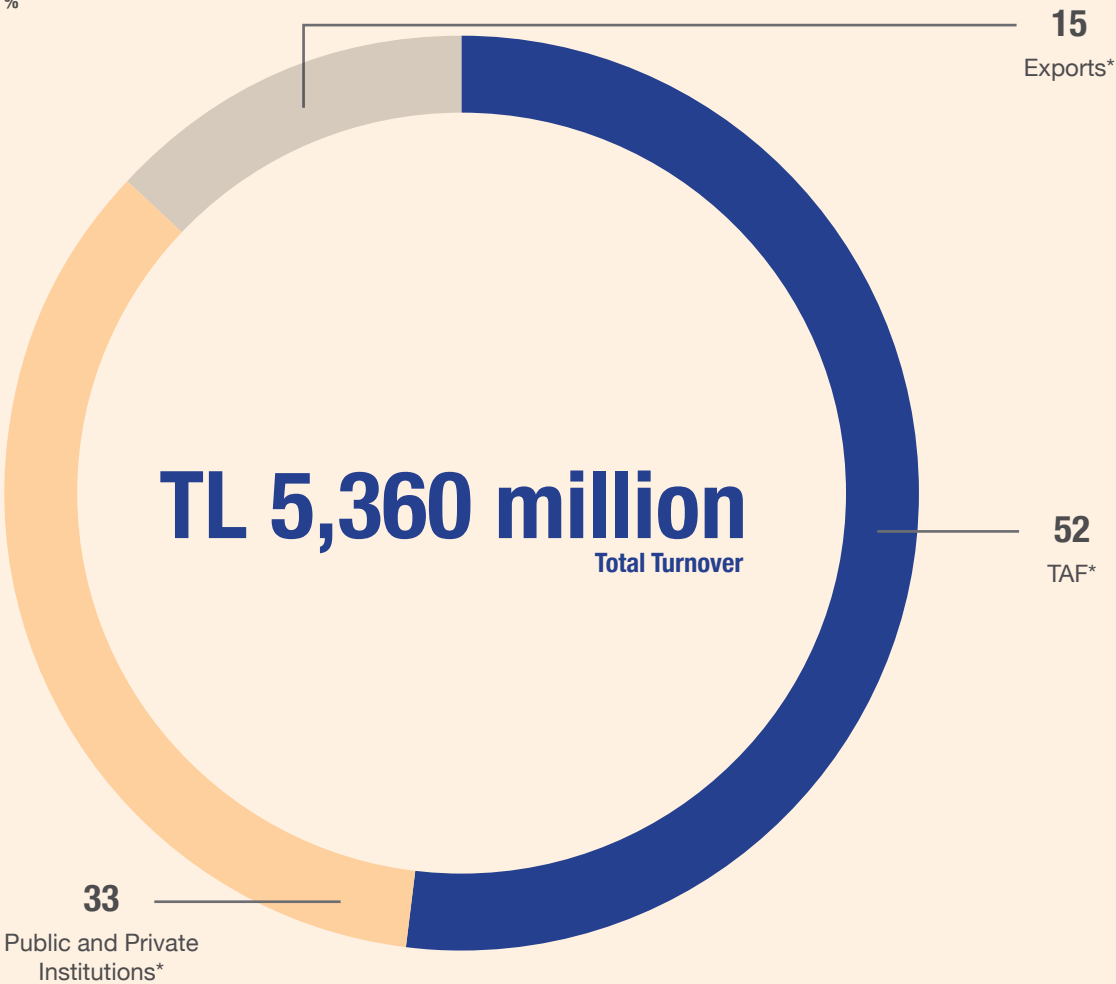
Our Shareholders	Share Amount (TL)	Share (%)
TAFF	845,825,624.46	84.58
Quoted on the BIST	153,018,684.65	15.30
AXA Insurance Inc.	1,155,690.89	0.12
Total	1,000,000,000.00	100

ASELSAN is a joint stock company and one of the subsidiaries of the Turkish Armed Forces Foundation (TAFF). As the main shareholder, TAFF owns 84.58% of the shares and 15.30% of the shares are listed on Borsa İstanbul (BIST).



# ASELSAN Summary Financials

Sales  
%



ASELSAN realized 52% of its total sales of TL 5,360 million to the Turkish Armed Forces, 33% of its sales to private organizations or other corporate customers, and with 15% of its sales being exported.

A total of TL 7,557 million of orders were signed in 2017, with an order amount of USD 6.8 billion for ASELSAN pertaining to the following years.

In 2017, ASELSAN's share price fluctuated from a low of TL 12.05 and a high of TL 47.22 throughout the year, and rounded off the year with a return of more than 150%. Accordingly, the market value of ASELSAN stood at USD 8.43 billion at the end of 2017.

\*As a percentage of total sales.

## Local Affiliates

### **Mikroelektronik R&D Design and Trading Ltd. Co. - MİKROELEKTRONİK**

Established to design and develop integrated circuits and electronic systems in İstanbul, ASELSAN became a partner in MİKROELEKTRONİK in 2010 with an 85% stake.

### **Microelectronics Industry and Trade Inc.**

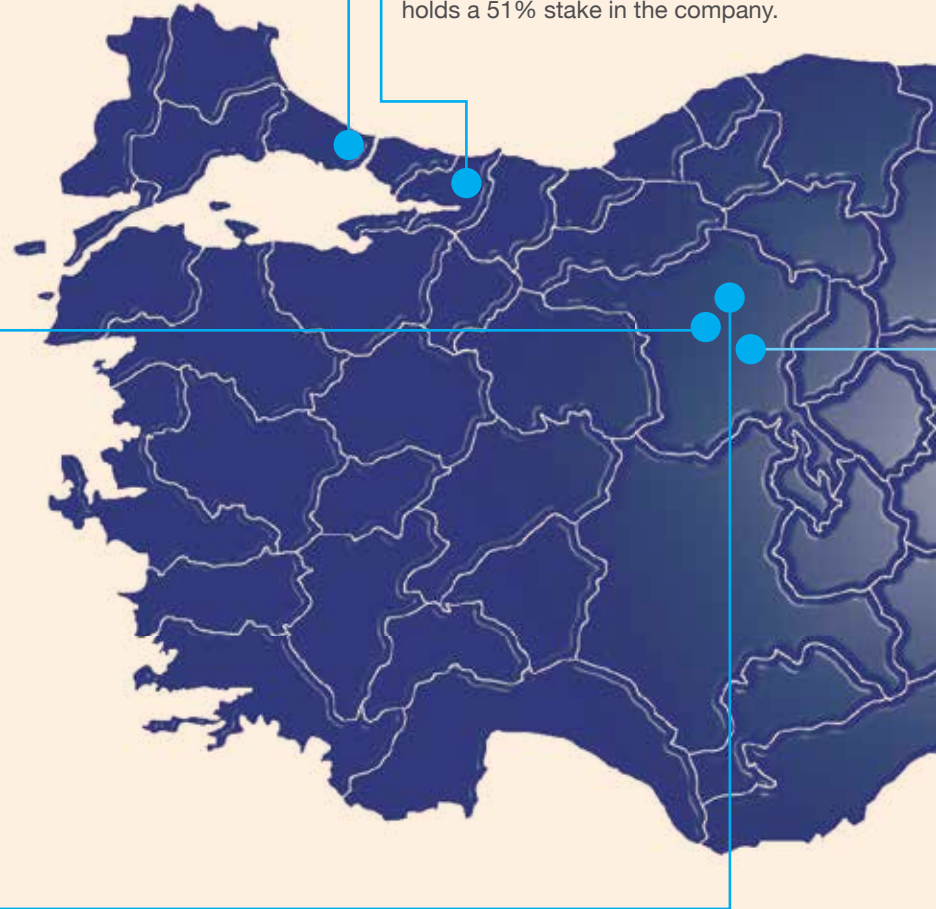
The company was established in Kocaeli, Gebze in 2017 in order to perform activities related to micro and nano dimensional devices that contain semiconductors and similar technological materials. ASELSAN holds a 51% stake in the company.

### **ASELSANNET Electronic and Communication Systems Industry, Trade, Construction and Contracting Ltd. Co.**

The company was established in Ankara in 2004 to meet the electronic and communication device requirements of civilian institutions and organizations. Since 2009, it has also added turn-key and installation work for communication system infrastructure among its activities. ASELSAN is the company's 100% shareholder.

### **Rocket Industry and Trade Inc.**

Roketsan was established in Ankara in 1988 to manufacture all kinds of missiles, rockets, rocket launchers and rocket fuel and their engines, warheads and other components, and also to manufacture, market and sell all kinds of military and civilian products and their parts where a high level and sensitive technology is required. ASELSAN holds a 14.897% stake in the company.



● Represents ASELSAN facilities or affiliates.



#### ASELSAN Precision Optics Industry and Trade Inc.

The company was established in Sivas in 2014 in order to carry out research and development studies for optical, optical set and optical devices for all types of ultraviolet, visible and near infrared bands, and to manufacture and sell such optical elements. ASELSAN holds a 50% stake in the company.

#### ASELSAN Bilkent Micro Nano

#### Technologies Industry and Trade Inc.

The company was established in Bilkent, Ankara in 2014 to carry out research and development studies for the applications of all types of semiconductors and similar technological materials, and to manufacture and sell micro and nano dimensional devices that contain these materials. ASELSAN owns 50% of the company's capital.

#### ASPIİSAN Energy Industry and Trade Inc.

Aspilsan was originally established in the Kayseri Organized Industrial Zone on 21 May 1981 to meet the basic requirements of the Turkish Armed Forces for rechargeable nickel cadmium batteries. Today, the company produces all kinds of civil and military back-hand radios, combat tools and equipment for war, complex battery for aircraft and helicopters. ASELSAN holds a 1% stake in the company.

## Local Subsidiaries, Affiliates and Marketable Securities

Local Subsidiaries	Share Amount	ASELSAN's Share (%)
ASELSANNET Elektronik ve Haberleşme Sistemleri Sanayi Tic. İnşaat ve Taahhüt Ltd. Şti.	3,300,000 TL	100.00
Mikroelektronik Ar-Ge Tasarım ve Tic. Ltd. Şti.	55,250 TL	85.00
YİTAL Mikroelektronik Sanayi ve Ticaret A.Ş.	8,905,875 TL	51.00
ASELSAN Hassas Optik San. ve Tic. A.Ş.	6,500,000 TL	50.00
ASELSAN BİLKENT Mikro Nano Tek. San. ve Tic. A.Ş.	9,000,000 TL	50.00
ROKETSAN Roket San. ve Tic. A.Ş.	21,906,222 TL	14.897
ASPIİSAN Enerji San. ve Tic. A.Ş.	56,000 TL	1.00

## Global Affiliates

### **ASELSAN Baku Company (Baku - Azerbaijan)**

Established in 1998 to carry out the promotion/marketing and sales activities of military and civil communication devices, the company is a 100% participation of ASELSAN.

### **ASELSAN Middle East Private Shareholding Company Limited - AME (Amman - Jordan)**

The company was established in 2012 with ASELSAN holding a 49% stake in the company and the KADDB Investment Group (KIG) holding a 51% stake. The company is engaged in the design, production, development and marketing activities of night vision and thermal imaging devices to meet the requirements of the Jordanian Armed Forces.

### **Kazakhstan ASELSAN Engineering LLP. - KAE (Astana - Kazakhstan)**

The company was established in 2011 with ASELSAN holding a 49% stake in the company, the Undersecretariat for Defense Industries (UDI) holding a 1% stake and Kazakhstan Engineering holding a 50% stake. The company is engaged in the production, development and maintenance-repair activities for electronic devices and systems to meet military and civil requirements in Kazakhstan.

### **ASELSAN External Profit Company - ASELSAN South Africa / ASA (Pretoria - South Africa Republic)**

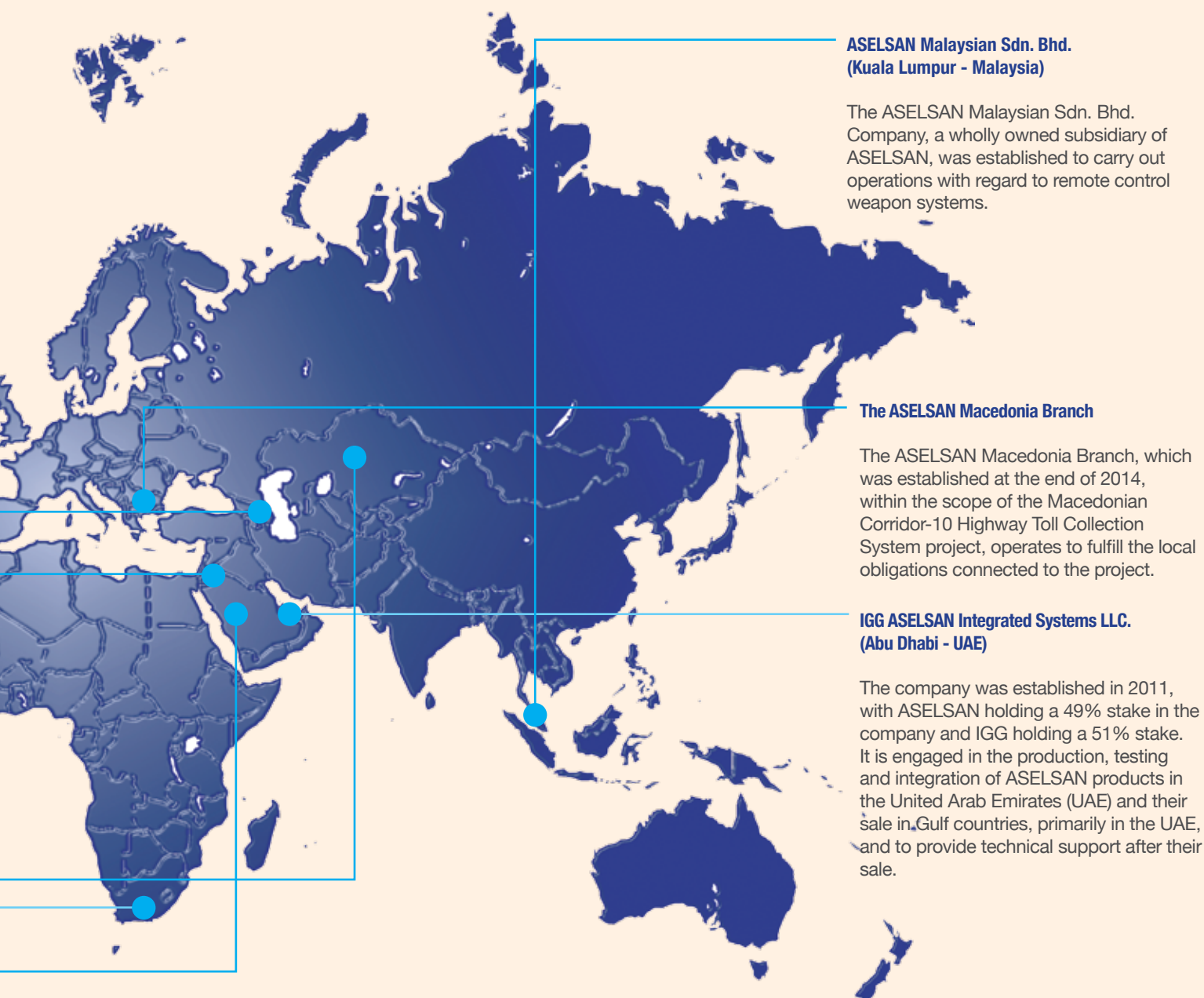
The company was established in 2011 to design optical systems and to operate in the promotion and marketing of ASELSAN products in South Africa and neighboring countries.

### **SADEC LLC. - Saudi Defense Electronics Company (Riyadh - Saudi Arabia)**

SADEC LLC was established in 2016 with a 50%-50% partnership between ASELSAN and TAQNIYA DST to carry out the production, development and maintenance-repair of electronic devices and systems to meet Saudi Arabia's requirements for radar, electronic warfare and electro-optical systems.

● Represents ASELSAN facilities or affiliates.





## Global Subsidiaries, Affiliates and Branches

Global Subsidiaries	Share Amount	Share (%)
ASELSAN Baku Company	1,735,212 USD	100.00
ASELSAN Malaysian Sdn. Bhd.	100 Malaysian Ringgit	100.00
SADEC LLC. (Saudi Defense Electronics Company)	11,250,000 Saudi Arabian Riyal	50.00
ASELSAN Middle East PSC. Ltd.	1,225,000 Jordanian Dinar	49.00
IGG ASELAN Integrated Systems LLC.	9,800,000 UAE Dirham	49.00
Kazakhstan ASELAN Engineering LLP.	3,464,300,000 Kazakhstan Tenge	49.00

Branches
ASELSAN South Africa (ASA)
ASELSAN Macedonia

## Facilities in Turkey

### Macunköy Facility

The Macunköy Facility was established over a total area of 186,000 m<sup>2</sup>, of which 110,000 m<sup>2</sup> is closed. ASELSAN Macunköy Facility is home to the CEO, Communications and Information Technologies Business Sector and Defense System Technologies Business Sector and Transportation, Security Energy and Automation Business Sector.



### Akyurt Facility

The Akyurt Facility was established on a total area of 231,000 m<sup>2</sup> of which 54,000 m<sup>2</sup> is closed. The Microelectronics Guidance and Electro-Optic Business Sector is located in the ASELSAN Akyurt Facility.

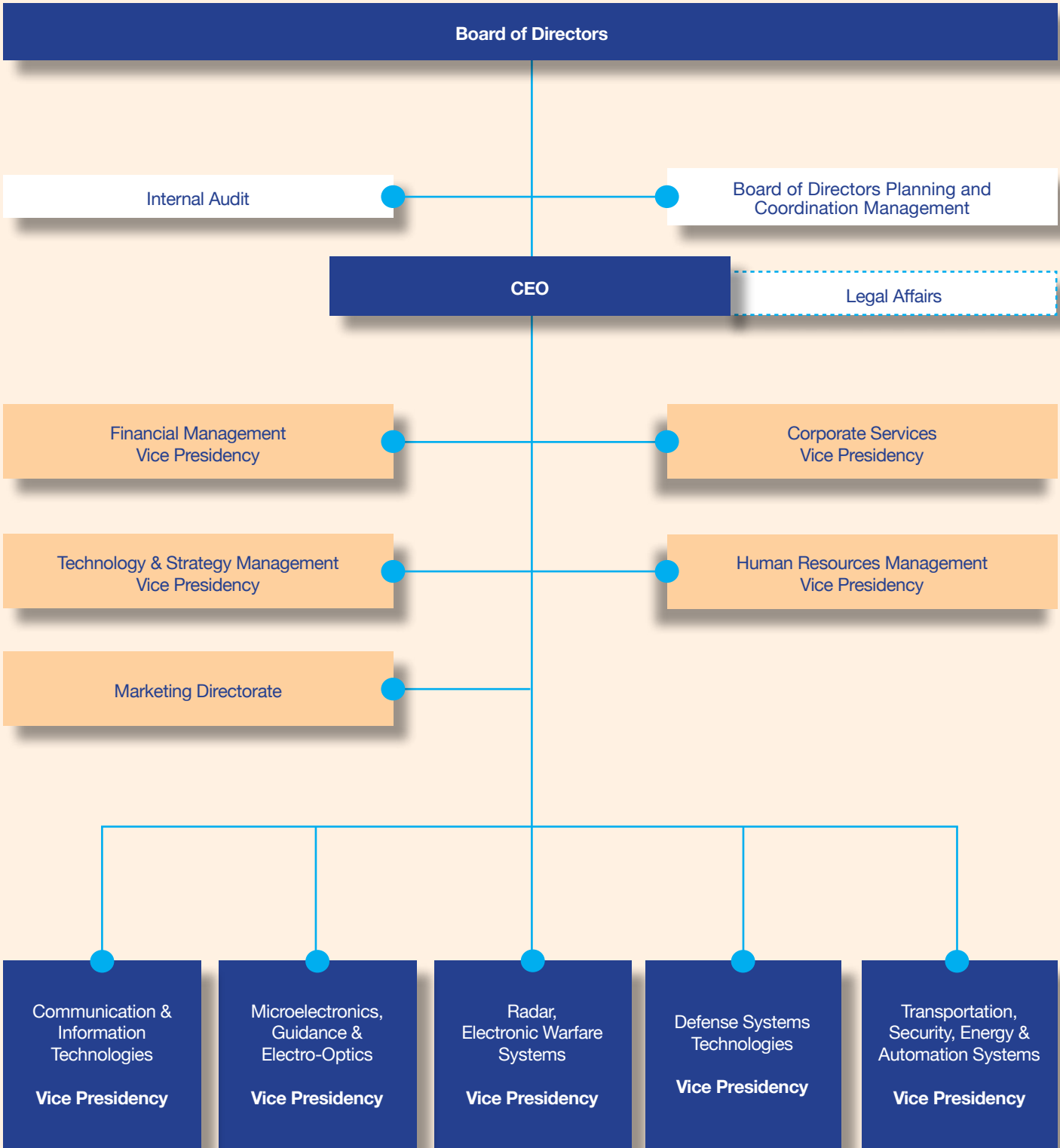
### Gölbaşı Facility

The Facility was established in the Gölbaşı district of Ankara, and houses production plants for radar and electronic warfare systems for land, air, sea, space and unmanned platforms. This Facility was established on a total area of 350,000 m<sup>2</sup>, of which 75,000 m<sup>2</sup> is closed. The Facility, of which construction began in 2013, was inaugurated in 2015.





# Organizational Structure

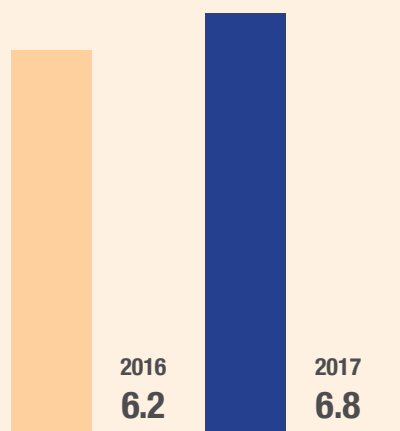


# Main Financial Indicators

## Financial Indicators

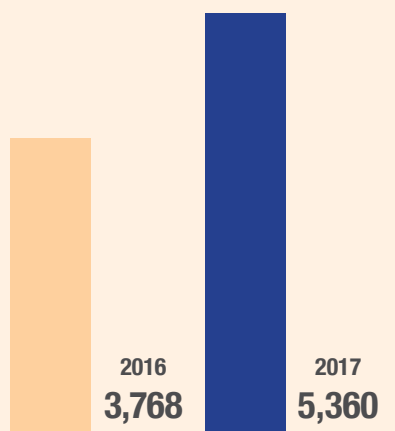
### Backlog

USD billion



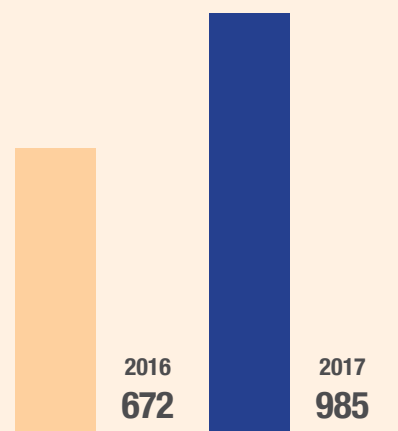
### Net Sales

TL million



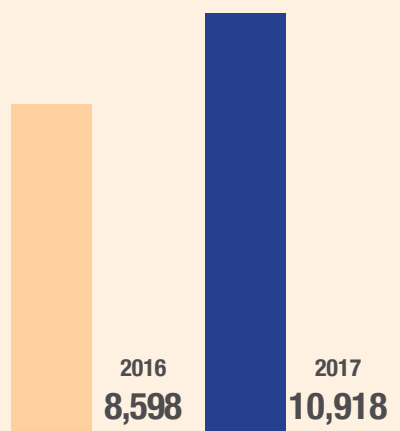
### Sales per Employee

TL thousand



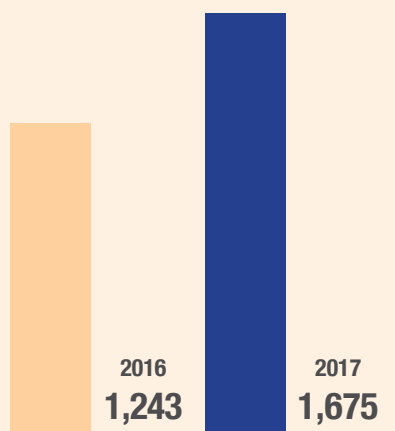
### Total Assets

TL billion



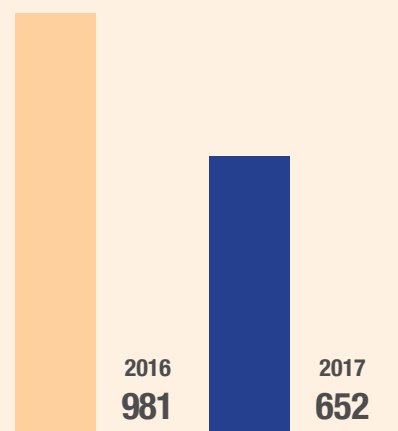
### R&D Expenses

TL million



### Net Cash Provided by Operations

TL million



# 10%

Growth in Backlog  
(USD basis)

# 42%

Growth in Sales

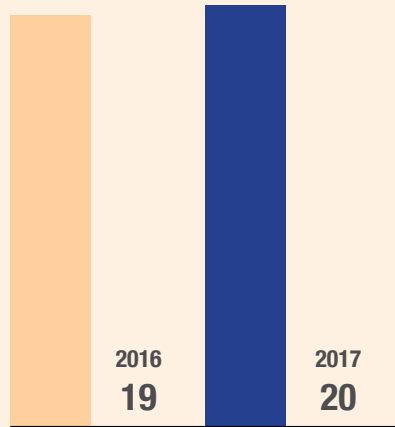
# 46%

Growth in EBITDA

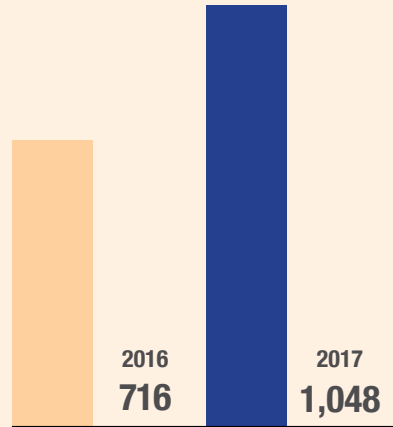


**EBITDA Margin**

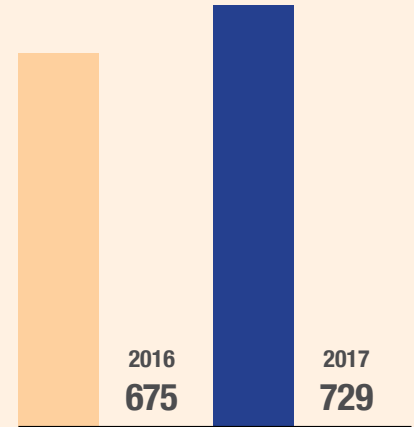
%

**EBITDA**

TL million

**Net Cash**

TL million



Summary Balance Sheet (TL million)	2016	2017
Total Assets	8,598	10,918
Tangible Assets	968	1,091
Intangible Assets	697	869
Total Equity	3,691	5,048

Summary Income Statement (TL million)	2016	2017
Net Sales	3,768	5,360
EBITDA	716	1,048
Net Profit for the Year	795	1,388

Main Indicators	2016	2017
R&D Expenses (TL million)	1,243	1,675
Sales per employee (TL thousand)	672	985
EBITDA Margin (%)	19	20
Net Cash Provided by Operations (TL million)	981	652
Cash and Cash Equivalents (TL million)	1,169	1,263

# ASELSAN Human Resources

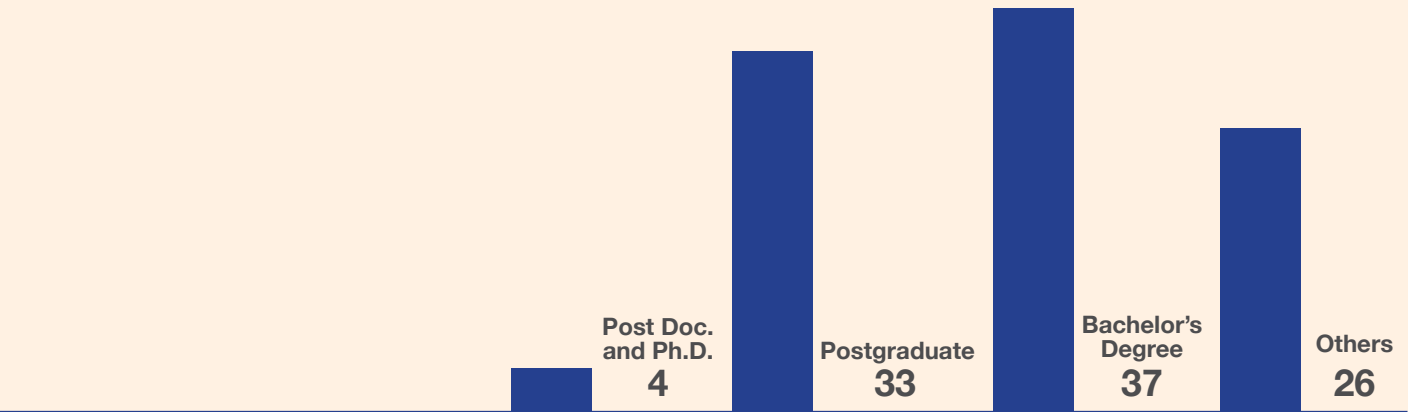
## Number of Personnel

5,348

In order to reach its rising targets with every passing year, ASELSAN recruits highly qualified employees, constantly monitors employee satisfaction to ensure sustainable success, and continues its activities being aware of the fact that value creation is only possible with talented human resources.

## Educational Background

%



## R&D Activities

### Total R&D Expenditure

TL million

1,675

ASELSAN never compromised from its target of gaining national technology, which is its main strategy since its establishment on 1975. The Company constantly upgraded its R&D capabilities and developed unique products under the consciousness of difficulties that depending abroad will bring during periods when national interests are at the forefront. Besides the defense technologies, its main field of activity, ASELSAN continued to grow its R&D activities in the framework of national goals, in other areas such as energy, transportation, medical systems, and next generation cellular communication.

# Collaboration with Universities

## Number of Collaboration

**31** ASELSAN collaborated with 29 Turkish universities and 2 universities from different regions of Europe in 2017.

## Number of Projects

**117** Number of projects conducted with universities

## Value of Projects

**7.7** USD million  
Value of projects assigned to the universities reached USD 7.7 million in 2017.

# Collaboration with Suppliers

## Payment to Sub-contractors

**1.8** TL billion  
TL 1.8 billion was paid to sub-contractors for tasks carried out in 2017.

## Number of Sub-contractors

**770** The number of domestic sub-contractors, 651 of which are SMEs.

## Total Backlog

**3.8** TL billion  
SMEs and domestic sub-contractors' total backlog



## Chairman's Message



**Our Company posted an exemplary performance in the country in 2017, and ranked 57<sup>th</sup> among the world's largest 100 defense industry companies.**

A handwritten signature in black ink, which appears to read 'İbrahim Özkol', written in a cursive style.

Prof. Dr. İbrahim ÖZKOL  
Chairman of the Board of Directors

Our Company posted an exemplary performance in 2017, and climbed to 57<sup>th</sup> place in the ranking of the world's largest 100 defense industry companies. This rating illustrates ASELSAN's clout on an international scale, and is a great source of pride for all of us.

ASELSAN is the clearest example of the technological level Turkey has reached. We stand among the global defense companies with our products which are used in more than sixty countries throughout the world.

ASELSAN owes its competitive power in the international arena to its human resources that care about the added value that it creates and demonstrate the intellectual capital it possesses with this awareness. We are also proud to note that in the surveys conducted, we are in first place in the list of companies where our country's talented young people want to work.

By pursuing employee satisfaction to achieve our sustainable growth and success, we add highly qualified employees to our business. The greatest factor in reaching our goals and in coming to this point we have arrived at is the presence of our employees.

ASELSAN has never compromised on its goal of achieving national technology, which has been its strategy since its establishment more than forty years ago. Aware of the difficulties that foreign dependency can bring to our country during times when national interest is of such paramount importance; our Company has continuously advanced its R&D capabilities forward and developed novel products. In the recent period, ASELSAN has pursued R&D activity in fields such as energy, transportation, health and next generation cellular communication, as well as defense technologies - its main field of activity - by expanding them within the framework of the national goals.

In the field of electronic technologies, ASELSAN aims to provide novel products and systems, with a target of exceeding expectations by efficiently deploying national resources for all customers, especially the Turkish Armed Forces, and to continuously increase the value of its assets and resources.

Our Company has achieved significant strides with business partnerships that will create an operational climate in Kazakhstan, Azerbaijan, Jordan, the United Arab Emirates (UAE), the Republic of South Africa and in Saudi Arabia. In addition, the new company established in Malaysia and the project office opened in Qatar represent new investments that reinforce ASELSAN's global corporate identity.

Our Company's shares positively decoupled from other shares listed on the Stock Exchange İstanbul (BIST) in 2017, as was seen in the previous year. While the BIST-100 Index generated a 48% return during the year, ASELSAN shares provided investors with a return of about 150%.

In 2017, we achieved another year of sales growth, with a 42% expansion in turnover compared to the previous year. Meanwhile, ASELSAN wrote a gross profit of TL 1,355 million and a net profit of TL 1,388 million. Our backlog reached USD 6.8 billion, a record level.

The fruits of ASELSAN's efforts serve as an indication of what can be accomplished, when perseverance, confidence in the Turkish people, hard work, the right and smart management and technical staff come together.

## Members of the Board of Directors



**Prof. Dr. İbrahim ÖZKOL**

**Chairman of the Board of Directors (Independent Member)**

Prof. Dr. İbrahim ÖZKOL started his undergraduate studies in Istanbul Technical University Faculty of Aeronautics and Astronautics, Department of Aeronautical Engineering and completed his master's and doctoral studies in the same department. His academic career has been interrupted for 15 months between 1992 and 1993 for the duties given by the Undersecretariat for Defense Industries (UDI) regarding the projects "CASA-3000" and "CN-235" in Spain. He continued his career in the academic world, that he returned in 1996 and received the title "Professor" in 2005. Prof. Dr. İbrahim ÖZKOL has been serving as the Vice Rector of Istanbul Technical University, as well as teaching staff in the Department of Aeronautical Engineering at the Faculty of Aeronautics and Astronautics. Prof. Dr. İbrahim ÖZKOL was appointed as the Chairman of the Board of Directors on 15 March 2017.



**Mustafa Murat ŞEKER**

**Vice Chairman of the Board of Directors (Executive Member)**

Mustafa Murat ŞEKER began working at the Undersecretariat for Defense Industries in 1992. He has been working as a Deputy Undersecretary since June 2015. Mustafa Murat ŞEKER, who was elected as a Member of Board of Directors with the resolution of Board of Directors in May 2013, has been served as the Chairman of Board of Directors between March 2015-March 2017. In 15 March 2017, he was selected as the Vice Chairman of the Board of Directors.



**Ziya AKBAŞ**

**Independent Board Member**

Ziya AKBAŞ became a Certified Public Accountant in 1997. He has worked in different institutions and companies as an Independent Auditor, Member of the Auditing Committee and as an Ombudsman since 1997. He was elected as an Independent Board Member of ASELSAN in the Ordinary General Assembly Meeting held on 31 March 2014.



**Prof. Dr. Ercüment ARVAS**

**Independent Board Member**

Ercüment ARVAS earned his BSc and masters degrees at Middle East Technical University and his Ph.D. at Syracuse University, New York USA. He has been pursuing his academic career at Syracuse University from 1988 onwards and served as a professor at the same university from 1994 to 2014. Currently employed at the Electrical Engineering Department of Istanbul Medipol University, Prof. Ercüment ARVAS was elected as an independent board member of ASELSAN in the Ordinary General Assembly Meeting held on 31 March 2016.



**Bayram GENÇCAN**

**Board Member**

Bayram GENÇCAN graduated from the Department of Electronics Engineering of the Military Academy as a Communication Lieutenant in 1985. In 2008, Bayram GENÇCAN, who was retired as a Senior Colonel from the Armed Forces, started to provide consultancy services on communication systems in the Ministry of Health since 2009. In particular, he worked on 112 radio communication infrastructure improvement and integration project with JEMUS. Bayram GENÇCAN, who has completed two master's degree programs on Public Administration and Organization Management, also studied at the Ankara University Faculty of Law. Bayram GENÇCAN was elected as a Board Member at the ASELSAN Ordinary General Assembly held on 15 March 2017.



**Prof. Dr. Haluk GÖRGÜN****Board Member**

Prof. Dr. Haluk GÖRGÜN completed his undergraduate and graduate education in Electrical Engineering Department of Yıldız Technical University and his Ph.D. in Rensselaer Polytechnic Institute in New York USA in 2003. After his Ph.D. graduation, he has engaged in scientific studies at the University of Connecticut in 2004-2005. He became an associate professor in 2008 and became a professor in 2014 at Yıldız Technical University, where he served from 2005-2008 as an assistant professor. Since November 2014, he has been serving as the Rector at Gebze Technical University. In addition to being a member of the Board of Directors of the Informatics Valley since 2014, he has also served in various committees and boards in TÜBİTAK and YÖK. Prof. Dr. Haluk GÖRGÜN was elected as a Board Member at the ASELSAN Ordinary General Assembly Meeting held on 15 March 2017.

**Emin Sami ÖRGÜÇ****Board Member**

E. Sami ÖRGÜÇ received his undergraduate degree in Electrical/Electronics department of Turkish Naval Academy between 1977-1981 and his Electrical Engineering graduate degree from Naval Post Graduate School/USA in 1985-1988. In 1981-1985, he served as a specialist engineer in various combat class ships and in Turkish Naval Forces Tactical Simulators after his graduate education in 1988-1991. During his Technical Presidency duty, in which he was assigned in 2007 by being promoted to the degree as a Senior Engineer Commodore, he was promoted to Rear Admiral degree in 2011 and continued to serve as the Logistics President, also, until 2013. In 2013, he voluntarily resigned from his duties by demanding his retirement. E. Sami ÖRGÜÇ was elected as a Board Member at the ASELSAN Ordinary General Assembly Meeting held on 15 March 2017

**Ercan TOPACA****Board Member**

Ercan TOPACA graduated from the Faculty of Political Sciences of Istanbul University in 1987. In the same year, he started serving as an assistant auditor in the Turkish Court of Accounts; then he was nominated as a district governor of Kırıkkale in 1989 by passing the candidacy exam for district governorship. Ercan TOPACA served as District Governor, Deputy Governor, Branch Manager in the General Directorate of Local Authorities of the Ministry of the Interior, Head of Department and Deputy General Manager at the same General Directorate. Ercan TOPACA, who was appointed as Governor of Düzce, Kocaeli and Hatay, was lastly appointed as the Governor of Ankara by the decree dated 07.09.2016 and numbered 2016/9158 and still serves at the same duty.

**Dr. Murat ÜÇÜNCÜ****Board Member (Executive Member)**

Murat ÜÇÜNCÜ earned his BSc degree from Boğazici University Electrical and Electronics Engineering Department in 1983, his masters degree in 1985 and was awarded his Ph.D. in 1989. He was retired as a brigadier general from the Turkish Armed Forces in 2012. Dr. Murat ÜÇÜNCÜ was appointed as a Board Member in 2013 with the resolution of Board of Directors and has been served as the Vice Chairman of Board of Directors between March 2014-March 2017. His ASELSAN Board Membership was extended for one year as of 15 March 2017.



# Corporate Governance

ASELSAN continues to work with an approach that does not compromise on the principles of fairness, transparency, accountability and responsibility, which are the basic principles of corporate governance, and continues to improve its corporate governance processes by displaying due diligence for the sensitivity of the sector in which it operates. Placing emphasis on compliance with both national and international legal regulations, our Company goes to every effort to oversee all stakeholders' interests in a balanced manner.

ASELSAN, which has a place in the echelons of the world's brands in the defense industry, is determined to maintain the stable growth it has achieved for 42 years by contributing to society and the environment, while adhering to ethical principles as well as the laws and regulations.

Adopting its approach to Corporate Governance as an unwavering principle, ASELSAN has published a Corporate Governance Principles Compliance Report every year since 2004. Under the Corporate Governance Principles issued by the Capital Market Board, topics such as shareholder rights, including minority rights, and general assembly meetings, profit distribution policy, information policy, human resources and ethical principles, relations with stakeholders, the structure of the Board of Directors, its formation, its operating principles and its committees, risk management and internal audit under the main headings of shareholders, public disclosure and transparency, stakeholders and the board of directors are featured in the report in detail. The Corporate Governance Principles Compliance Reports are published on the Company's website ([www.aselsan.com.tr](http://www.aselsan.com.tr)) and in the annual reports.

## ASELSAN's corporate governance rating rises to 9.20.

In 2012, the corporate governance rating for ASELSAN was determined as 8.77 out of 10 by SAHA Corporate Governance and Credit Rating Inc. (SAHA) on 13 December 2012. This note was the second best starting rating for a corporate governance rating awarded in Turkey. Since then, our Company's level of compliance with corporate governance principles has been assessed by an independent rating agency every year, and the corporate governance rating has been updated accordingly.

## Improving and developing its corporate governance processes each year, ASELSAN rounded off 2017 with its highest ever corporate rating, adding value to its stakeholders.

As a result of the work carried out throughout 2017 to improve the corporate governance rating, our Corporate Governance Rating, which stood at 9.15 out of 10 in 2016, was raised to 9.20 out of 10 in the report published by SAHA on 12 December 2017. The corporate governance ratings pertaining to the years 2016 and 2017 and their breakdown according to subheading are as given at the bottom of the page.

## ASELSAN'S MANAGEMENT STRUCTURE

### ASELSAN Board of Directors

The management structure of ASELSAN is a single level structure with a Board of Directors elected by the General Assembly. There are no executive members in the Board of Directors.

In other words, the roles of the Chairman of the Board of Directors and the CEO are separated at ASELSAN. Three of the nine members of the Board of Directors are independent members. All members of the Board of Directors are responsible for the economic performance of the Company. The CEO bears responsibility for execution in the social and environmental fields.

Established in accordance with the corporate governance regulations of the Capital Markets Board, three committees operate, which ensures that the Board of Directors fulfills its duties and responsibilities in a healthy manner, at ASELSAN.

2016 Rating Distribution		2017 Rating Distribution	
Shareholders	83.62 / 100	Shareholders	83.63 / 100
Public Disclosure and Transparency	98.46 / 100	Public Disclosure and Transparency	98.70 / 100
Stakeholders	95.87 / 100	Stakeholders	98.09 / 100
Board of Directors	90.32 / 100	Board of Directors	90.70 / 100
<b>Average 9.15</b>		<b>Average 9.20</b>	

The ASELSAN Corporate Rating Reports published by SAHA are available on the Company website at [www.aselsan.com.tr](http://www.aselsan.com.tr).

ASELSAN has been listed on the Corporate Governance Index of the Borsa İstanbul since it was first awarded a corporate governance rating.

## COMMITTEES OPERATING AT ASELSAN

In accordance with the Corporate Governance Principles of the Capital Markets Board, there are three committees established by the ASELSAN Board of Directors.

### Audit Committee

The committee consists of two independent members of the Board of Directors. The main tasks of the committee are to ensure the disclosure of financial information to the public and to oversee the functioning and effectiveness of ASELSAN's accounting system, independent audit, internal audit and internal control system. The Internal Audit Department reports directly to the Audit Committee and the Board of Directors. The Audit Committee meets at least four times a year.

### Early Detection and Management of Risk Committee

The committee consists of three members of the Board of Directors. The chairman of the committee is an independent member of the Board of Directors, and the investor relations manager is a member of the committee within the framework of the regulations of the Capital Markets Board. The committee offers recommendations to the Board of Directors for the realization of compliance with corporate governance principles and improvement efforts. The committee also oversees the activities of the Investor Relations Division. The Corporate Governance Committee meets at least four times a year.

### Corporate Governance Committee

This committee was established with the participation of two members of the Board of Directors in order to determine the Company's operational, strategic, financial

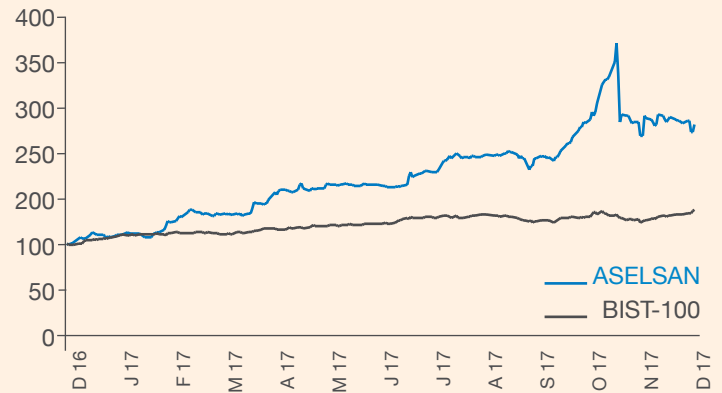
and other risks and to manage them in accordance with the Company's risk taking profile. The chairman of the committee is an independent member of the Board of Directors. The Committee meets at least six times a year.

At ASELSAN, the principles for the formation of committees, working, meeting and reporting bases are determined by the Board of Directors. Detailed information on ASELSAN's corporate governance structure, members of the Board of Directors and its committees can be found at [www.aselsan.com.tr](http://www.aselsan.com.tr).

### ASELSAN shares provide investors with a return of over 150% in 2017.

In 2017, shares in ASELSAN, traded on Borsa İstanbul, were among the highest yielding stocks in the stock market, providing investors with a return of over 150%, vastly outperforming the increase of 48% in the stock market indices.

Comparison Of BIST-100 and ASELSAN Share Performance



Audit Committee	Corporate Governance Committee**	Early Detection and Management of Risk Committee
Ziya AKBAŞ* (Chairman of the Committee)	Ercüment ARVAS* (Chairman of the Committee)	Ziya AKBAŞ* (Chairman of the Committee)
Ercüment ARVAS* (Member of the Committee)	Haluk GÖRGÜN (Member of the Committee)	Bayram GENÇCAN (Member of the Committee)
	Emin Sami ÖRGÜÇ (Member of the Committee)	
	Pınar ÇELEBİ (Member of the Committee)	

\* Independent Board Member

\*\* At ASELSAN, the Candidate Nomination Committee and the Remuneration Committee have not been established in accordance with the structure of the Board of Directors, and the duties and responsibilities of these committees are fulfilled by the Corporate Governance Committee.



## Message from the CEO



**By maintaining the ASELSAN tradition of ascending higher than ever before, we completed a successful year with record deliveries.**

A handwritten signature in black ink, which appears to read 'Faik Eken', written in a cursive style.

Dr. Faik EKEN  
CEO

By continuing the ASELSAN tradition of ascending higher than before again in 2017, we completed a successful year with record deliveries. The significant improvement in our fiscal indicators that started in 2016 continued in 2017 as well. Our shares performed well, and indeed ASELSAN was one of the best performing stocks on the stock market.

In the eyes of our domestic customers, we have become the most important address for national, domestic and reliable technology. We have come a long way towards realizing our mission to reduce the external dependency of our heroic and self-sacrificing security forces.

We aim to open to new markets by maintaining our sustainable growth, placing technology at the core of our activities and investing in human capital. We will continue to deploy our knowledge in all areas to build a stronger Turkey, while also transferring the experience we have gained in the military sphere to civilian areas.

As we move forward in this mission, fired up with success and passion, supporting the products we produce not only in the domestic market, but also supporting them with our investments in the international arena, we are working for a strong Turkey in line with our national export goals.

In 2017, we realized TL 5.4 billion worth of deliveries. We received TL 7.6 billion of new orders and expanded our backlog to USD 6.8 billion. We also realized USD 215 million of exports in the same period.

The growth and the positive trend in financial indicators, which started in 2016, continue. We have posted a sound financial performance, as has been reflected to the value of our shares. One of our goals is to sustain this momentum in 2018 and 2019. We intend to boost our exports in order to maintain growth, while improving our competitive clout. We have a slew of signed projects that we are on course to deliver in 2018. In other words, we have already reached the business potential that will provide growth for 2018 on the strength of the orders we have received.

However, it is crucial that we maintain timely delivery and the completion of projects on time and at the desired specifications. Therefore, we will work without wavering to fulfill our commitments and to meet the needs placed upon us on time in 2018, as we did in 2017.

ASELSAN is a technology company and a company investing in technology. It owes its development so far to its investments in this field. ASELSAN has recently been winning more projects, and its turnover is also growing. The main underlying reason for this is that its abilities have developed. This is the result of more than forty years of investment. We have technology at our base. As long as we keep this in focus, ASELSAN's development will only continue to gather pace.

Taking its place as one of the world's leading defense companies with its domestic and foreign subsidiaries, ASELSAN continues to move forward in this direction by growing as a global player in its position as a pioneer in the sector, and serving as a custodian of the trust that has been placed in it by the Turkish people since 1975.

## Members of the Executive Board



**Dr. Faik EKEN**

**CEO**

He graduated with a BSc. in Electrical/Electronics Engineering from the Michigan Technical University in the USA and was awarded a Ph.D. from Tulane University in 1985. He started working as an electronic engineer in the Digital Systems Department in 1986. He was appointed as the President of the Communications and Information Technologies Group and as Vice President in 2006. He was appointed as the CEO of ASELSAN in 2014.



**Okan TURAN**

**CFO and Vice President, Financial Management**

He received his undergraduate degree (BSc.) from İstanbul Technical University, Aeronautical and Astronautical Engineering Faculty in 1989 and master's degree (MSc) İstanbul Technical University, Faculty of Management, Management Engineering in 1992. He began his professional career in 1992 and he has vast experience and expertise in the areas such as Financial Analyst, Vice President for Finance, Chief Financial Officer and Corporate Control Director. He has been working as a Vice President in the Financial Management department at ASELSAN since 4 January 2016.



**Hezarfen ORUÇ**

**Vice President, Shared Services**

He graduated with a BSc. in Electrical/Electronics Engineering from the İstanbul Technical University in 1985. He started working as an electronic engineer in the Defense Systems Department in 1988. He was appointed as a Business Development Manager in 1996, as an International Marketing Manager in 2011 and as a Shared Services Vice President in 2014.



**Dr. Hüseyin YAVUZ**

**Vice President, Human Resources Management**

He graduated with a BSc. in Electrical/Electronics Engineering from the Middle East Technical University in 1985, and a MSc. in Electrical/Electronic from the same university in 1987 and a Ph.D., also in Electrical Engineering, from the same university in 1993. He started working as a co-op engineer in 1984. He was appointed as the Weapon and Missile Systems Engineering Manager in the Defense Systems Technologies Group in 2005 and Human Resources Vice President in 2014.



**Prof. Dr. Mehmet ÇELİK**

**Vice President, Technology and Strategy Management**

He graduated from Mechanical Engineering Department of Middle East Technical University (Turkey) in 1989. He obtained his M.Sc. and Ph.D. degrees in Mechanical Engineering from the same department in 1991 and 1997, respectively. During 1998-2010 he worked in the industry as the manager of Mechanical Analysis and Test Unit and as a Senior Lead Design Engineer within ASELSAN MST/REHİS. In 2003 he completed his habilitation for the title of Associate Professor Degree in Mechanical Engineering. In 2010 he was appointed as a full professor at KTO Karatay University. Prof. ÇELİK served as a Vice President, Acting President and as a Member of the Science Board of The Scientific and Technological Council of Turkey (TÜBİTAK) and YÖK Quality Council Member between February 2015 and 2017. He is still a teaching professor in KTO Karatay University Mechanical Engineering Department and a member of TÜBA (Turkish Academy of Sciences). Prof. ÇELİK was appointed as the Vice President responsible from Technology and Strategy Management, effective beginning May, 2017.

**Yavuz BAYIZ****Vice President, Communications and Information Technologies Business Sector CEO**

He graduated with a BSc. in Electrical/Electronics Engineering from the Middle East Technical University and a master's degree from the same university in 1988. He started working as a hardware designer in the R&D group in 1984 before being appointed as a Professional Systems.

**Oğuz ŞENER****Vice President, Radar and Electronic Warfare Systems Business Sector CEO**

He graduated with a BSc. in Electrical/Electronics Engineering from the Middle East Technical University, and an MSc. in Electronic Engineering from the same university in 1990. He started working as a co-op engineer in 1986. He worked as an Electronic Hardware Manager in Microwave System Technologies Group and as the Radar Electronic Warfare Systems Design Technologies Director in between the years 2008-2014. He was then appointed as Sector CEO and Vice President in 2014.

**Mustafa KAVAL****Vice President, Defense System Technologies Business Sector CEO**

He earned his BSc. in Mechanical Engineering from Middle East Technical University, and MSc. in Mechanical Engineering from the same university in 1989. He started working as an engineer in 1986 and was appointed as a Director in 2012. He was then appointed as Sector CEO and Vice President in 2014.

**Yavuz Suat BENGÜR\*****Vice President, Transportation, Security, Energy and Automation Systems Business Sector CEO**

He graduated with a BSc. in Electrical/Electronics Engineering from the Middle East Technical University and a MSc. in Electrical/Electronics Engineering from the same university. He started working as an R&D engineer at ASELSAN in 1981. He was appointed as Naval Systems Program Director in 2008 and as Sector CEO and Vice President in 2014. Yavuz Suat BENGÜR has been serving as Advisor to the Board of Directors since 2 October 2017.

\* İbrahim BEKAR was appointed as Vice President and Transportation, Security, Energy and Automation Systems Business Sector CEO as of 5 February 2018.

**Alper ÜNSOY****Acting Vice President, Microelectronics, Guidance and Electro-Optic Business Sector CEO**

He graduated with a BSc. in Mechanical Engineering from the Middle East Technical University, and a MSc. degree from the same university. He started working as designer in 1994 and became System Design Manager in 2009. In 2014 he was appointed as the Head of Electro-Optic Systems Division, a position he still holds. Since May 2017 he has also been the Sector CEO and acting Vice President.





## Marketing Activities

Ranking as the 57<sup>th</sup> largest global company operating in the field of defense, ASELSAN has successfully represented our country in the intensely competitive international arena by exporting to more than sixty countries on five continents. Its wide range of products, direct investments with production infrastructure in eight countries and a high product quality that is reinforced by actively participating in the NATO joint research/development/production programs all contribute to ASELSAN's exports. Aware of the high added value potential of the defence industry for our country's exports, ASELSAN goes to ever greater lengths to promote our capabilities in this field with the full support of our government.

Within the framework of the Turkish-Ukrainian defence cooperation agreement, a contract between ASELSAN and the STE Company of Ukraine involving the export of radio products was signed under the auspices of our President, Mr. Recep Tayyip Erdoğan and Ukrainian President Mr. Petro Poroshenko in Kiev, the Ukrainian capital.



ASELSAN is determined to continue to offer its innovative solutions to the global market on the back of the technological competence that it has achieved and its ever growing experience in the international sector.

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The Marketing Directorate carries out and coordinates ASELSAN's marketing and export activities together with the International Business Development Department which acts under Business Sector Departments.

The increase in the number of foreign trading partners, the expanding geographical domain and the growth in business volume stand as the key indicators of the significant gains achieved in ASELSAN's export strategy for 2017. These gains are fed by the synergies that extend from the corporate structure which has grown more effective to the proactive market development methods and competitive engineering clout.

ASELSAN has been operating in a wider geographical area and in more diversified fields of activity compared to the previous year, and is constantly adding new trading partners to its list. In 2017, ASELSAN increased its business volume by achieving an increase in its turnover when compared to the previous year's results, and was placed 57<sup>th</sup> in the ranking of the Defense News Top 100 list of international defense companies. ASELSAN's corporate and strategic structure allows an understanding of the bases of growing export volume.

During the last five years, which has been crucial for ASELSAN's international business development strategy, controlled and sustainable export growth was targeted. The upward trend in export contracts was maintained in 2017 with new investments and ventures.

Our Company has taken significant strides forward with its business partnerships that will lay groundwork in Kazakhstan, Azerbaijan, Jordan, the United Arab Emirates (UAE), the Republic of South Africa and Saudi Arabia. In addition, the new company established in Malaysia and the opening of a project office in Qatar attracted attention as new investments, serving to reinforce ASELSAN's global corporate identity. Investments undertaken in Qatar, Saudi Arabia, Jordan and the UAE are aimed at transforming ASELSAN's presence in the Middle East into long term cooperation. As a result of these international initiatives, sales undertaken through ASELSAN project offices rose from USD 7 million to USD 40 million. ASELSAN will continue to grow by opening new international offices in a bid to be directly in touch with potential buyers, to understand their problems and to provide solutions.

Foreign partnerships and overseas offices raise ASELSAN's competitive clout by increasing its recognition in international markets and create the advantage of exploiting growth opportunities by accessing new markets. The Saudi Defense Electronics Company (SADEC), a joint venture established by ASELSAN in Saudi Arabia, aims to provide high added value, reliable products and system solutions to local and foreign customers. Another aim is to support the localization plan that is aimed at supplying 50% of Saudi Arabia's military equipment purchases from local sources by supporting Saudi Arabia in terms of innovation and technological independence.





In addition, SADEC will also provide support for the creation of the ecosystem of the Saudi Small and Medium Enterprises (SMEs). SADEC plans to initiate the construction of the Radar, Electronic Warfare and Electro-Optics Technologies campus in Saudi Arabia in 2018. The infrastructure and facilities are expected to be up and running within two years, thus enabling needs to be responded to quickly, while also playing an effective role in the internal dynamics of the market.

In addition to the Middle East, ASELSAN has also stepped up its presence in the highly competitive South American and Asia-Pacific markets. The results of the work, which has been ongoing for ten years in South America, have started to be seen. In addition to geographical distance, political and economic instability, the lack of after-sales services and logistical support have emerged as an obstacle for ASELSAN; however, solutions have been developed to eliminate these obstacles. By constantly following developments in the defense industry, and the country's needs, in the mentioned regions through its local representatives, ASELSAN was able to establish long term agreements, create mutual trust and demonstrated successes in the project processes, playing an important role in obtaining effective results in South America. The projects won and the established cooperative agreements

in South America so far have also served as a reference for ASELSAN to create a working base in other regional countries such as Brazil, Colombia and Peru.

ASELSAN's exports are also rising in the Asia-Pacific region. The wide range of products offered by ASELSAN increase our country's ability to provide the products and systems needed by the countries in the region. Deliveries of the Remote Commanded Stabilized Weapon Systems for marine platforms continued in Malaysia in 2017. The ASELSAN Malaysia Company was established by taking advantage of the increased business potential. The company aims to closely follow up all needs in the country, to be in direct and continuous contact with end-user authorities, and to rapidly coordinate developments in areas related to our Company's field of activity. In Indonesia, marketing and business development activities aimed at civilian institutions as well as Air, Sea and Land Forces continued intensively with the sale of Stabilized Weapon Systems, Communication Systems and Anti-Drone systems. In the Philippines, we continued our activities in the field of electro-optics. We offer technology transfers to procurement authorities and end-users to promote the development of the local industry and to fulfill local contribution and offsetting obligations in the countries where





ASELSAN has reached a position where it can be competitive in the international sector in line with the importance it attaches to research and development, and thus to the development of the original product/system, which it has set as its goal since the years of its establishment.

we operate. This has helped ASELSAN strengthen its position in the Asia-Pacific region.

In addition to the activities concentrated in the Central Asia region, especially in Kazakhstan and Turkmenistan, work on meeting long awaited needs in Uzbekistan gained pace in response to the softening of the political environment in the country. Having expanded its operations to include the production of new equipment and systems, the Kazakhstan-Aselsan Engineering Company, which operates in Kazakhstan, along with new contracts signed in Turkmenistan, played an important role in boosting exports in 2017.

A major breakthrough was also realized in Ukraine in 2017 in the field of Tactical Communications where, in the culmination of great efforts, a contract was signed to export ASELSAN Communication Systems to meet the needs of the Ukrainian Armed Forces.

ASELSAN will continue its promotion, marketing and business development activities carried out to provide products and systems in the field of defense systems that are needed by friendly and allied countries, and the Company will exploit all opportunities to increase exports.



# Human Resources Management at ASELSAN

ASELSAN owes its crucial position, which it has maintained in the national defense industry, and its ever increasing competitive clout in the international arena to its human resources, which care about the added value they create, and ASELSAN demonstrates its intellectual capital with this awareness. Setting out with this belief, strategic work towards sustainable human resources (HR) management gained momentum in 2017. In order to properly position human resources systems that will shape the future, the Company aimed to provide operational excellence and the management, moving with this approach, was adopted in line with this goal.

With a focus on innovation, ASELSAN is considered as a reliable supplier of technology and a business partner both in Turkey and in international markets with the products it has developed. In 2017 we continued work on our projects, which we have undertaken in order to bring on board talented individuals who will share with us in the excitement of being a part of this great family. We have created many employment opportunities with our strengthening employer brand, with a host of new employees.

## ASELSAN: The First Choice for Young Talent at the Universum 2017

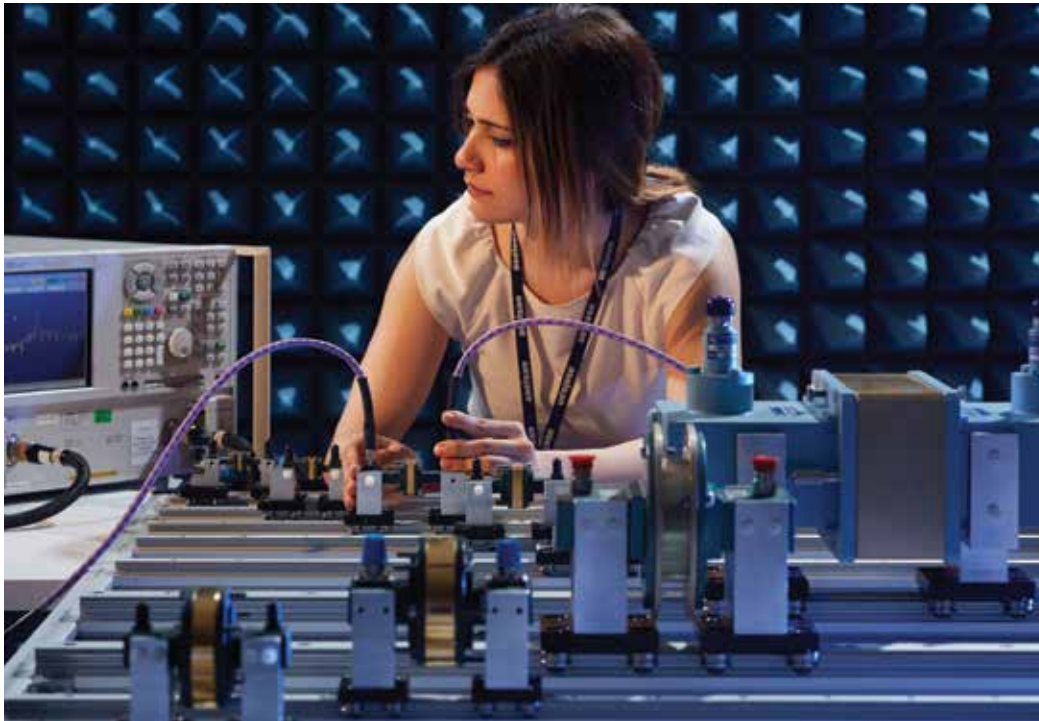
The development of human resources, which has been the most important value for ASELSAN since its establishment, and the recruitment of qualified employees for ASELSAN in line with new targets are among the most important missions of the Human Resources Department. In this context, we have added new work to what has already been carried out jointly with universities' careers offices as well as public and research institutions.

The ASELSAN Human Resources Department, supporting young talented individuals in the process of transition between academic life and work life throughout Turkey, joined 16 different careers events across Turkey in 2017.

ASELSAN was once again the first choice for students in the Engineering/IT (Information Technologies) field, according to the results of a survey conducted by Universum, the leader in global studies on employer brand studies. The survey took place with the participation of 44,260 young people at 39 universities in 2017.

ASELSAN was ranked fourth among the most popular companies in Turkey in a similar study conducted jointly by the Bloomberg Businessweek Turkey and Realtor Consulting.





The primary objective of all human resource systems is to support the added value created by our highly qualified workforce.

### The Process Management Approach to Human Resources Systems

The primary objective of all human resource systems is to support the added value created by our highly qualified workforce. In this context, efforts have been initiated to address all HR operations with a process management approach. Under the process approach, work carried out in the written environment is transferred to electronic workflows. With the spread and application of these systems, the performance of systems can be measured to determine the areas open to improvement, and increase system efficiency. Thus, our operations will be followed up through analytical methods and our performance will be improved continuously.

The most important element of the process management approach is the systematic feedback applications, where opinions of managers and employees regarding Human Resources systems can be collected. The data obtained from the employee satisfaction surveys conducted at the end of each year and the feedback expressed by employees through other channels are taken into account in the system development and process improvement studies.

### Career and Personal Development Management Integrated with Performance Evaluation

The career management system applications are integrated with the performance evaluation, which allows employee's strengths to be revealed. Regular review work is carried out to optimize the systems. The goal of our performance evaluation system is to give feedback to our employees, which will contribute to both

their work performance and personal development. As such, our employees have the opportunity to pursue the career path that will suit them best. Our employees' core competencies, personal traits and work performance are reviewed in consultation with managers, and accordingly, activities expected to be beneficial for their development are planned.

### We stand behind our employees with HR technologies.

We strive to ensure that our employees reach human resources services in the fastest possible way, and digital technologies are actively deployed in addition to all other communication channels. In 2017, with a total of 25,000 requests solved through the Human Resources Help Desk, employees' needs were met rapidly while the time saved this way contributed to ASELSAN's efficiency.

### The Learning and Corporate Development Directorship

The Learning and Corporate Development Directorship carries out activities to ensure that individuals and teams develop in an institutionally integrated manner. The most important of these activities are providing individual and corporate learning and development, increasing the level of competence of employees and the Company and providing information sharing to create corporate memory. Thus, the Learning and Corporate Development Directorship supports ASELSAN's corporate objectives and strategies and aims to ensure that ASELSAN employees are always competent. In this context, the Directorship systematically executes the alignment, measurement and improvement activities of learning and development activities with ASELSAN's strategies and business plans.



### ASELSAN Competency Model

Competency is the sum of knowledge that employees may gain during their academic life or lifelong learning process, the skills that they may acquire and develop through experience gained in their professional life, and the ability to apply this knowledge and skills to their work and related processes. Developing employee competencies by taking into account career paths increases process capabilities and therefore, the company's performance. Efforts are ongoing to develop ASELSAN Competency Model and to evaluate employees' competencies so that learning and development activities can be defined as competency-based in line with ASELSAN's strategies and business plans. Within the scope of job descriptions, ASELSAN Competency Model includes the required competencies, their definitions, associated levels, and metrics. The development of ASELSAN Competency Model was started with engineering competencies, and in 2017, an important part of the technical competencies within this

context was defined. In 2018, ASELSAN aims to complete the competencies and match them with job descriptions and create a personal inventory in accordance with this model.

### Individual Goal Setting Study

Individual goal setting activities were initiated in 2017 so ASELSAN's strategic targets could cascade down to each unit and employee, and create individual target cards compatible with ASELSAN's strategies, which would include measurable targets. The unit target cards will be used in 2018. With the individual target cards planned to be implemented in 2019, the performance of our employees will be evaluated with objective measures in parallel with the corporate goals and strategic plans, in a manner to add value to corporate development.



### Learning and Development Activities

The performance of design and development activities carried out in ASELSAN is closely related to qualified and sustainable intellectual capital. In addition to enhancing the intellectual capital of our Company, the investment made in the learning and development of our employees will contribute to increasing efficiency, innovation and employee satisfaction at ASELSAN, and will create a highly motivated employee profile that adopts the ASELSAN culture. In this context, in 2017, a total of 14,142 man hours of training were provided by the in-house trainers of the Learning and Corporate Development Directorship. In addition, the Learning and Corporate Development Directorship coordinated 21,680 man hours of training under 41 different headings for the ASELSAN employees through outsourcing. In addition to this, mandatory occupational health and safety training has also been provided for a total of 35,344 man hours. In addition to in-service training, training is also provided for sub-contractors. To ensure the learning and development programs address ASELSAN's needs, training content specific to ASELSAN has been provided by ASELSAN employees or academics/consultants who are deemed to be competent in their subjects. At ASELSAN, distance learning is used to provide

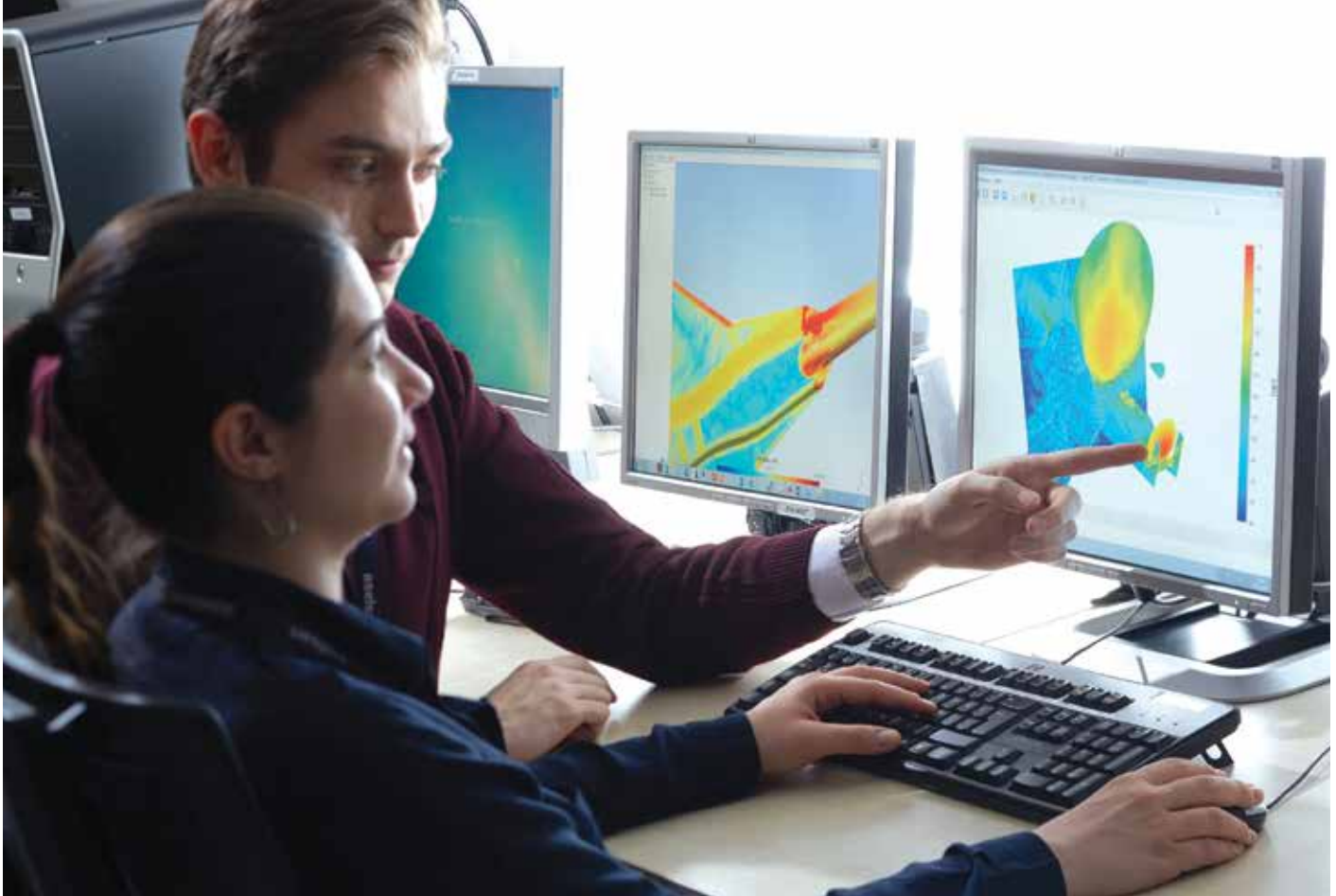
training on ethical principles, various policies and standards which are deemed to be important for employees to be informed of. In addition to classroom training and e-learning, learning and development methods such as active learning and coaching have also been utilized.

### Workshops for Information Sharing

In 2017, workshops, information days and seminars were held with the participation of ASELSAN and universities in order to preserve corporate memory, distribution and recording of the information acquired and the lessons learned. More than 600 ASELSAN employees participated in these events.

### Long-Term Work Force Raising Program

The scholarship and internship programs initiated with the aim of contributing to the ASELSAN's workforce are carried out under the coordination of the Learning and Corporate Development Directorship. Within this scope, internships were provided for 830 university students, and vocational training was given to 308 students at high school, vocational colleges and technology faculties. In 2017, a total of 11 people, including four ASELSAN staff, received support through scholarships for doctoral and post-doctoral research both in Turkey and abroad.





# Technology and Strategy Management

ASELSAN's most important strategic advantage is its ability to produce high-tech solutions that are fully compatible with customer requirements. In order to maintain this advantage, ASELSAN manages technology by taking technological developments and Turkey's changing needs into consideration, in line with strategies.

Meeting customer demands with high-tech solutions is possible with effective technology management. R&D projects stem from the Technology Roadmap and Investment Plan created for this purpose, where academic studies of the personnel is directed and collaborations are made with universities. In addition, technology investments aiming to reduce external dependency are carried out to avoid the restrictive and retarding effects such as government approvals applied to critical components, export restrictions and embargos. On the product and subsystem basis, indigenous production is carried out, especially for the components considered to have supply risk. These activities are supported by both contracted projects and ASELSAN's in-house funds. Domestic and international support programs are utilized to the greatest extent in activities carried out with in-house funding. All these activities are performed in-line with the strategic objectives.

## Strategy Management

As a reflection of its vision and mission, ASELSAN's strategy is based on achieving growth, having a global presence, value creation for customers, R&D activities, being competitive and efficient, and strengthening its human resources and financial structure. ASELSAN's Strategic Plan incorporates a 5-year term and adherence to the plan is monitored via Strategic Management System. In addition, examination, analysis and reporting activities are carried out in order to support strategic decision making.

### Strategic Planning and Corporate Performance Activities

Within the scope of the Strategic Management System, strategies are planned in line with the stakeholder strategies, especially the Turkish Armed Forces Foundation (TAFF), based on ASELSAN's vision, mission, core values and advantages. Formation of related goals and targets is coordinated, and progress towards these goals and targets is monitored and measured periodically.

Balanced Scorecards are defined at the beginning of each year to evaluate ASELSAN's and Vice Precedencies' performances. Key performance indicators are monitored periodically and communicated within the company. At the end of each year, ASELSAN's and Vice Precedencies' year-end performances are evaluated.

## Technology Management

### Technology Road Map

The Technology Roadmap pertaining to the technologies to be acquired and developed in order to strengthen the competitive position of ASELSAN in its fields of activity, is prepared annually, covering a period of five years. In 2017, literature search was conducted in order to increase the effectiveness of our technology roadmap, and the information obtained from academia was combined with ASELSAN's needs with a more

comprehensive technology roadmap was prepared for the 2018-2022 period. We also established links with our technological investments and our self-funded R&D projects. Our new term roadmap was named as the ASELSAN Technology Road Map and Investment Plan (TRMIP).



By associating the TRMIP with the ASELSAN Academy, the thesis topic proposals for each area of technology included in the TRMIP were separately identified, ensuring an increase in the variety of the thesis pool.

### Management and Follow-Up of Self-Funded Projects

Innovation is the most important key for ASELSAN to boost its competitive strength. In addition to R&D spending, carried out within the scope of the contracted projects in line with its strategic targets, ASELSAN is committed to invest minimum of 7% of its annual turnover to innovative R&D projects. In 2017, the R&D expenditures financed by ASELSAN's own resources exceeded TL 310 million. ASELSAN Self-Funded R&D Management Process was put into effect in order to determine, select and follow up of the self-funded projects.



Within the scope of this process, projects, which are innovative, indigenous and aligned with the TRMIP, gets priority, and with the designed control and tracking system, the projects are subject to internal referee evaluation and follow-up tracking system.

Following the initiation of the projects, the projects are monitored by the referees for the purpose of effective follow-up of the work, and are evaluated from a technical and financial point of view over certain intervals.

## Investments in the R&D Center

### The Turkish Republic of Northern Cyprus (TRNC) ASELSAN Research Center

The feasibility study prepared on the establishment of an ASELSAN research center in the METU (Middle East Technical University) Kalkanlı Technology Valley (KALTEV), which is a Technology Development Zone in the Turkish Republic of Northern Cyprus (TRNC), was accepted with the approval of the Board of Directors.

In this context, ASELSAN will start working on research topics that will use the existing researcher potential at the highest level by establishing a research center in the Turkish Republic of Northern Cyprus. Due to the geographical location of the research center, it will also be a test facility to be used by different Business Sectors.



### The Technopark İstanbul ASELSAN Research Center

The decision was taken to enlarge the İstanbul office, which continues its activities at Technopark İstanbul. Our İstanbul office, which has been operating on Naval Systems, will carry out research activities in the areas of advanced material technologies, bio-defense, health and transportation technologies starting from 2018. ASELSAN building will be constructed in Technopark İstanbul to accommodate our growing activities in İstanbul.

### Researcher Training Program for the Defense Industry (SAYP)

In 2011, SAYP was launched under the leadership of Undersecretariat for Defense Industries (SSM) with the aim of increasing the accumulation of R&D and technological knowledge and creating a suitable environment for cooperation between industry and academia. As a participant of the program, ASELSAN signed protocols with 19 universities.

## R&D Collaborations and Technology Transfer Activities

ASELSAN aims to enhance collaboration with universities, research centers, technology transfer offices, technoparks and SMEs for advanced research to gain access to the state of the art technologies. The scientific research studies and technological developments carried out at these institutions are constantly monitored.

ASELSAN aims to maximize the utilization of domestic (TÜBİTAK TEYDEB, ARDEB etc.) and foreign support programs and funds (Horizon 2020 R&D Program, EUREKA Technology Networks, international bilateral and multilateral cooperation programs etc.) for ASELSAN's R&D projects.

### Dual Use

Some of ASELSAN's technological background developed in military areas, found ground in commercial applications. ASELSAN successfully adopts these matured technologies to commercial use to create added value for the company.

### Intellectual Property Rights

The patent strategies and policies were directed under a holistic perspective. As an incentive to increase our intellectual property rights inventory, any of our personnel with a successful patent registration is awarded by the company.

### Industry 4.0/ Digitization of Production

The ASELSAN Digital Transformation in Production (ASAD) team was established in order to determine what could be achieved under the new approach in production at ASELSAN. The team met several technology providers and exchanged ideas with the leading companies that table such applications in Turkey. In addition, extensive workshops were held to discuss Industry 4.0 solutions. A road map was prepared regarding the actions to be taken on this issue between 2018 and 2023. The goals were included in the ASELSAN Strategic Plan.

### 5G Technology Activities

Within the framework of our goal of becoming one of the first countries to transition into 5G with indigenous technology, development studies on 5G technology continued with other stakeholders of the ecosystem. ASELSAN's 5G Technology Roadmap is prepared by closely following up standardization studies.

A 5G demonstration in millimeter wave band, which shows beam forming and beam steering between base station and terminal in real time, was exhibited in international and national fairs and conferences, thereby demonstrating ASELSAN's technical superiority in this field.

"5G and Beyond" Technology Conference, which was held with domestic and international participation from various universities and research centers, took place in Ankara on 24 January 2017 with the participation of the senior protocol.

ASELSAN actively participates in the 5GTR Forum activities, which operates under the coordination of the Information and Communications Technologies Authority (ICTA).

# ASELSAN Research Center



In order to generate an atmosphere that encourages creativity at ASELSAN Research Center, an innovative and dynamic research environment was created where researchers, graduate students and scientists can work together.

## Academic Publications and Patents

Since ASELSAN Research Center is mainly engaged in applied research studies, the main outputs of the projects are academic publications and intellectual rights which arise as a result of the technological acquisition and know-how. ASELSAN Research Center has produced 66 academic publications, 54 of which are international, in three years since its establishment. The applications of 13 academic publications, 11 of which are international, are at the finalization stage. Special importance is also given to protect intellectual property rights. There are currently eight patent applications, two of which are in the USA and six of which are at the PCT (The Patent Cooperation Treaty).

## Compressed Sensing Radar Techniques

ASELSAN Research Center aims to develop novel techniques for optimizing the placement of T/R modules and antenna elements of phased array radar systems developed by the Radar and Electronic Warfare Systems Sector (REWS) with the Compressed Sensing and advanced optimization techniques, which are being developed at ASELSAN Research Center.

## High Resolution Infrared Imaging

Optimization based advanced imaging techniques are developed at our center by using Compressed Sensing and Computational Imaging methods. A prototype imaging system is under development beyond sensor resolutions by using digital micromirror devices.

## Computational Imaging

Within the scope of an ongoing project in the field of Magnetic Resonance (MR) Imaging with Bilkent University - National Magnetic Resonance Research Center (UMRAM), we aim to accelerate MR scan without sacrificing quality. Compressed multi-contrast imaging/parametric mapping, which represents the first work on this subject, was completed, and patenting process has been initiated for the know-how. The first stage is aimed at ensuring that the knowledge gained creates technological infrastructure for the Transportation, Security, Energy and Automation Systems Sector's (TSEAS) product development work.

## Vehicle Brand/Model Recognition with Deep Learning

In order to resolve problems in the vehicle brand, model, type and color recognition required in the Urban Security Management System and Plate Recognition System (USMS-PRS) project, which is carried out under the TSEAS Sector, deep learning based technology that is developed at our center has started to be used in the field and is being delivered to the customers.

## Visual Target Tracking

At our center, research is being carried out on attribute learning methods for the correlation based visual tracking, which are quite efficient in terms of computation complexity. A method developed in this context won the VOT2017 Visual Object Tracking challenge.

## Natural Language Processing

Research activities are continuing in our Center to process natural languages, especially Turkish, and develop solid capabilities for ASELSAN in the field of natural language processing.

## Visual Analysis Capabilities for Urban Security Practices

Original deep learning based crowd detection and counting, motion analysis, panic/stampede detection in video images and camera sabotage detection (focus deterioration, closure, direction change) algorithms were developed by ASELSAN Research Center.

## Biodefence

ASELSAN Research Center Biotechnology team develops unique and innovative biodefence technologies, which realize testing and diagnose of newly emerging and rarely observed living diseases, microorganisms and particles that pose a risk to human health.

ASELSAN Research Center unit to be formed at the Technopark İstanbul plans to work on advanced material technologies in coordination with our country's material ecosystem. By offering new technologies, it will develop for use of all sectors of ASELSAN, the superior qualities and competitive aspects of the products developed will be further enhanced, improving competitiveness in international sales.

## ASELSAN Research Center

Advanced  
RF &  
Microwave

Photonics

Autonomy  
& Adaptive  
Control

Artificial  
Intelligence

Advanced  
Signal &  
Image  
Processing

Advanced  
Materials

Biodefence

Internet of  
Things



## ASELSAN Academy Graduate Education Program

The ASELSAN Academy Graduate Education Program was implemented in order to increase the number of qualified and specialized personnel needed by the industry, which has been a long discussed issue and for one which a solution has long been sought in our country, and to find a solution through an innovative approach for the development of technology and knowledge through thesis studies in the field where an industrial organization operates.

Several universities were brought together through the ASELSAN Academy, which started its activities in the autumn semester of the 2017-2018 academic year, under the coordination of Council of Higher Education (YÖK), and a cooperation model was created under a single program. The ASELSAN Academy Model allows the applicant (the ASELSAN employee), who applies for the graduate program and fulfills the necessary conditions, to take courses and carry out thesis study according to the projects in which they are taking part or will take part in. Thus, the candidate realizes the goal-oriented work as part of their task. ASELSAN also trains personnel who are specialized in their fields. ASELSAN can use the results that will emerge in the thesis study in its projects and can easily reach innovative solutions that increase its competitive advantage.

## The Council of Higher Education (YÖK) Protocol

On 1 August 2017, the ASELSAN Academy Graduate Education Program cooperation protocol was signed between the YÖK under the Presidency of the Higher Education Council and ASELSAN. The ASELSAN Academy bears the distinction of being the first model applied in this respect in the world and in Turkey. Under the ASELSAN Academy Model, the coordination with the YÖK paved the way for several universities to come together and for them to be incorporated into the cooperation model under a single program, which was followed by the establishment of cooperation between universities.

Under this model, an industrial organization (ASELSAN) became the external campus of more than one university for the first time. Thus, ASELSAN employees were given the opportunity to continue postgraduate training in the fields where they work without leaving ASELSAN. The program is conducted according to the Graduate Education Regulations and rules (student admission requirements, compulsory courses, program constraints, etc.), which are determined by the Graduate School of Natural and Applied Sciences of the universities that are included in the program. The student will then be awarded a Master's degree or doctoral degree from the relevant university.

## The Main Objectives of the Program

The main objective of the program is to enable ASELSAN staff to take courses related to the projects on which they work at ASELSAN, and to conduct postgraduate thesis studies. With this joint program personnel will be able to conduct research and development studies at master and doctoral level among hi-tech project topics in accordance with ASELSAN's mission and vision. Assignment of personnel with an academic background and research experience in R&D projects will enable the development of innovative and critical technologies at ASELSAN.

Another aim of the program is to enhance the collaboration between academia and industry and provide an environment where universities can carry out projects together with industry.

Implemented with the mission of increasing ASELSAN personnel's knowledge of the Company's field of activity, contributing to the applied academic development of the other stakeholders (universities, R&D centers, institutions, subcontractors, etc.) that operate in our country, the ASELSAN Academy has become a new and innovative model of tremendous importance for Turkey which commands very high expectations.





## Highlights in 2017

**ASELSAN visited the Anıtkabir with more than 5,000 employees on its 42<sup>nd</sup> anniversary.**



### **THE ASELSAN FAMILY PAID ITS RESPECTS TO ATATÜRK**

ASELSAN visited Anıtkabir with more than 5,000 employees on its 42<sup>nd</sup> anniversary.

The ASELSAN Chairman of the Board of Directors Prof. Dr. İbrahim Özkol observed a moment of silence in respect along with managers and employees at the Anıtkabir. Leaving a wreath on the mausoleum of the Great Leader Atatürk, the Chairman İbrahim Özkol signed the special book of Anıtkabir after the homage.

The Chairman of the Board of Directors of ASELSAN, Dr. İbrahim Özkol, wrote the following in the book: “The Great Leader Atatürk, as the ASELSAN family, we are proudly in the high presence of you on this day, when we celebrate the 42<sup>nd</sup> anniversary of our establishment. Established with the contributions of our supreme state and donors, ASELSAN has become the world’s 57<sup>th</sup> largest defense industry company and the most valuable company of the Stock Exchange İstanbul, with more than 5,000 employees, who came from the bosom of our nation.

Since its establishment, ASELSAN has progressed confidently towards its goal of becoming a national technology company which maintains its sustainable growth with the values it creates in global markets, preferred for its competitive power, is trusted as a strategic partner, is conscious of the environment and humanity.

As we proceed in the pursuit of technology in order to be the ASELSAN of the Great Turkish Nation and the Heroic Turkish Army, the truest guide is knowledge and science for everything in the world, for civilization, for life, for success; May God bless your soul.”



### THE LEADERS OF R&D

According to the results of the R&D Centers Performance Index for 2016 prepared by the Ministry of Industry and Technology, ASELSAN was ranked third in the overall rankings of R&D Centers. The CEO, Dr. Faik Eken, received the award on behalf of ASELSAN.

ASELSAN was also awarded with the first prize in the field of Defense and Aviation. Deputy General Manager Dr. Mehmet Çelik, who is responsible for Technology and Strategy, received the award on behalf of ASELSAN.

During the 6<sup>th</sup> Private Sector R&D and Design Centers Summit, which also included the participation of the Minister of Science, Industry and Technology Dr. Faruk Özlü, a total of 25 R&D units were awarded as technology producers. Faruk Özlü and the accompanying delegation visited the ASELSAN booth and received information from the authorities.

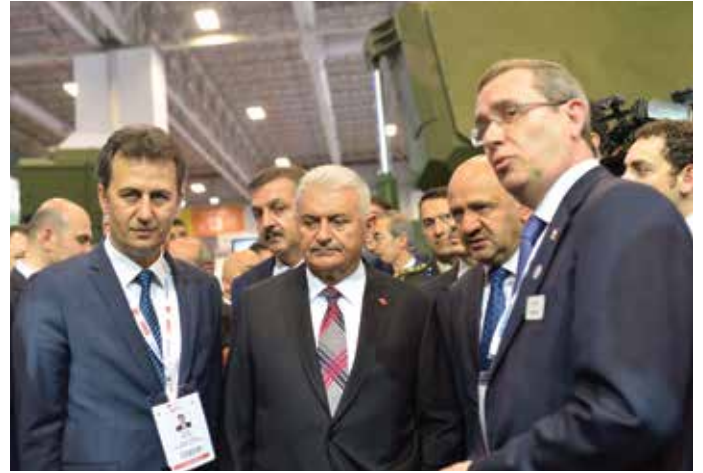


### ASELSAN WAS THE LARGEST PARTICIPANT AT THE IDEF, THE INTERNATIONAL DEFENSE INDUSTRY FAIR.

The ASELSAN booth was the largest booth in an IDEF fair, with a total exhibition area of 4,901 m<sup>2</sup>, including 4,161 m<sup>2</sup> of enclosed space and an open area of 740 m<sup>2</sup>.

#### More than 300 Products and Systems

ASELSAN introduced a total of more than 300 products and systems at its booth located in the 12<sup>th</sup> Hall of the TÜYAP Fair and Convention Center, where the fair was held. These products and systems include marine systems, air systems, air defense systems, border and coastal security systems, communication systems, electronic warfare systems, electro-optical systems and weapons systems scenario centers.



Meeting the defense and security systems needs of numerous of domestic customers, primarily the Turkish Armed Forces, the General Directorate of Security and the Gendarmerie General Command, ASELSAN exhibited unique system solutions at the IDEF. The systems produced by the Company are used by more than 60 countries abroad, as well as the domestic customers. Customers, many of which came to Turkey visit the IDEF, found the defense industry products that met their requirements at the ASELSAN booth. ASELSAN, which is an organization of the Turkish Armed Forces Foundation, introduced unique system solutions for all three areas, including on land, air and sea.

Another novelty at the ASELSAN booth this year was the Supplier Corner. Our suppliers who work or want to work with ASELSAN were welcomed at the Supplier's Corner this year. The delegation visited the ASELSAN booth and received information from the officials.



## Highlights in 2017

### RADIO EXPORTS TO UKRAINE

Under the attendance of our President Recep Tayyip Erdoğan and the President of Ukraine Petro Porosenko, signatures were completed by our Chairman Prof. Dr. İbrahim Özkol and the Ukrainian State Foreign Trade Company Spets Techno Export (STE) Deputy Director Vladislav Belbas in Kiev.

A contract was signed between ASELSAN and the Ukraine STE company with the aim of meeting the military communication needs of the Ukrainian Armed Forces. The contract involves the export of state-of-the-art ASELSAN Software Based Military Radio family products, software based architecture and electronic protection measures that provide high survival ability against various waveforms and threats. These products are among the reputable products in international arena.

ASELSAN Military Radio products are exported to about 20 countries, and our customers continue to use the products in all these countries with high level of satisfaction. These radios are also produced locally in three countries thanks to technology transfer.

Under the attendance of our President Recep Tayyip Erdoğan and the President of Ukraine Petro Porosenko, signatures were completed by our Chairman Prof. Dr. İbrahim Özkol and the Ukrainian State Foreign Trade Company Spets Techno Export (STE) Deputy Director Vladislav Belbas in Kiev.

Within the framework of the Turkish and Ukrainian defense cooperation, the signed contract constitutes a very important step towards the preparation of ground for cooperation that will be made in other defense projects in the future.



## GRADUATE EDUCATION PROGRAM SIGNED BETWEEN THE ASELSAN ACADEMY AND THE YÖK

Under the Presidency of the Higher Education Council, “the ASELSAN Academy Graduate Education Program” cooperation protocol was signed between the YÖK and ASELSAN by the YÖK President Prof. Dr. M. A. Yekta Saraç, the ASELSAN Chairman of the Board of Directors Prof. Dr. İbrahim Özkol and the ASELSAN CEO Dr. Faik Eken, on behalf of ASELSAN.

The YÖK President, Prof. Dr. M. A. Yekta Saraç, who spoke at the signing ceremony, said that Turkey’s primary goal of becoming one of the world’s largest economies in the global competitive environment in 2023 was R&D-driven growth.

Saraç added that under the protocol, it would be possible for an employee working at ASELSAN to study a doctoral degree at one of Turkey’s universities, which are successful in their fields, in order to further increase the qualifications of ASELSAN human resources in terms of knowledge and science.

## Personnel working at ASELSAN will be able to study a thesis within the scope of the projects they are working on.

Within the scope of the project, personnel working at ASELSAN will be provided the opportunity to study a Master’s degree or work on a doctoral thesis and research subjects in the field of the defense industry at Gazi University, ODTÜ (Middle Eastern Technical University) or the Gebze Technical and İstanbul Technical Universities, in accordance with the mission and vision of ASELSAN.

The nationalization and successful completion of critical technologies in the field of defense industry will gain pace with the appointment of personnel with academic qualifications in defense projects. The ASELSAN Academy Program will boost the competitive power of both ASELSAN and the nation of Turkey by enabling the development of critical technologies. The ASELSAN personnel participating in the program will gain a postgraduate degree by carrying out the projects on which they work, within the scope of their industrial thesis. University faculty members with academic experience will contribute to education and technology with their industrial experiences by being directly involved with industry projects.



The ASELSAN Academy Graduate Education Program cooperation protocol between the YÖK and ASELSAN was signed by the YÖK President Prof. Dr. M. A. Yekta Saraç, the ASELSAN Chairman of the Board of Directors Prof. Dr. İbrahim Özkol and the ASELSAN CEO Dr. Faik Eken, on behalf of ASELSAN.





**ASELSAN, which rise up three ranks in the field of Engineering/IT within the scope of Universum Ideal Employers study, rounded off the year 2017 in first place.**



### **ASELSAN, THE FIRST CHOICE FOR YOUNG PEOPLE**

ASELSAN, which rise up three ranks in the field of Engineering/IT within the scope of Universum Ideal Employers Study, rounded off the year 2017 in first place.

This year, the Universum Ideal Employer Survey, a comprehensive survey of young people, was held for the fifth time in Turkey with the participation of 44,260 young people. The survey, which provides important feedback from Turkey's youth, reflecting the realities and the future of work life, is considered to be the most comprehensive survey that has been conducted regarding Generation Y in the country to date.

The Universum Ideal Employers Survey is based on the measurement of forty basic employer brand elements, which include processes regarding career and company selection by Generation Y. These forty elements, which are classified under the headings of recognition and image, employees and corporate culture, wage and promotion opportunities, and the nature of job, differ between countries. However, they provide information regarding the factors that shape the work life of Generation Y in the world. Engineering/IT students tend to prefer companies which are best at R&D and innovation, with those companies open to creativity and innovation emerging as the most popular choice for young people.

ASELSAN receives an average of 20,000 job applications per year. The advanced technology and R&D work that promotes professional development, the attractive benefits provided and the ideal working environment all play a part in the high level of applications. ASELSAN, whose ranking in the survey raised three ranks when compared to the previous year, rose to first place this year ahead of global competitors such as Apple and Google. ASELSAN stands out ahead of global competitors by providing macro advantages in responding to young people's expectations and directing the work life of the future.



### **THE CONTINUED RISE OF ASELSAN**

ASELSAN, which entered the top 100 list of the world's defense industry companies in 2006 with a ranking in 97<sup>th</sup> place, has maintained a steady upward trend. After reaching a rank of 58<sup>th</sup> last year, ASELSAN stepped one place forward to reach 57<sup>th</sup> rank this year, with its turnover of more than USD 1 billion.

The "Defense News Top 100", which is published by the Defense News magazine by taking the previous year's defense sales figures as a basis every year, is regarded as the world's most prestigious defense industry list.

**THE AGREEMENT FOR THE FIRST DOMESTIC BASE STATION ANTENNA WAS JOINTLY SIGNED BY TURKCELL, TURK TELEKOM, AND VODAFONE. THE FIRST DOMESTIC BASE STATION ANTENNA TO BE USED IN THE 4.5G NETWORK WAS DEVELOPED BY ASELSAN.**

The “5G and Beyond Technologies Conference” was held in Ankara with the participation of ASELSAN’s companies working on the new generation mobile communication technologies and specialists from some of the most prestigious universities and research centers in Turkey and Europe.

The conference included the initial public unveiling of the first Domestic Base Station Antenna, work on which continues with the support of the Ministry of Transport, Maritime operations and Communications, the Information Technologies Authority (ITA) and the mobile operators - Turkcell, Türk Telekom and Vodafone made the first public appearance.

During the signing ceremony at the conference, held in the presence of the Minister of Transport, Maritime operations and Communications, Ahmet Arslan, ASELSAN signed a cooperation agreement with Turkcell, Türk Telekom and Vodafone for the use of the first Domestic Base Station Antenna.

Laboratory tests of the Domestic Base Station Antenna, which was designed by ASELSAN and for which the first prototypes have been produced by the Company, were completed. The



antenna, which was developed by ASELSAN in this field as a unique item of apparatus and patented, is phased-array with multi input and output, and can simultaneously broadcast in 2G, 3G, 4G and 4.5G technologies.

**STRATEGIC PRODUCT SUPPORT PROGRAM PROTOCOL SIGNED BETWEEN ASELSAN AND KOSGEB (Small and Medium Scale Enterprises Development and Promotion Administration)**

The Strategic Product Support Program was held in Ankara with the participation of the Minister of Science, Industry and Technology Dr. Faruk ÖZLÜ, the Minister of Transport, Maritime and Communications Mr. Ahmet ARSLAN, Deputy



Undersecretary of Defense Industry Mr. Mustafa Murat ŞEKER, the Head of Information Technologies and Communications Authority Dr. Ömer Fatih SAYAN and the KOSGEB President Prof. Dr. Cevahir UZKURT.

ASELSAN signed a protocol under the “Strategic Product Support Program” with the Small and Medium Scale Enterprises Development and Promotion Administration Presidency (KOSGEB). The Minister of Science, Industry and Technology Dr. Faruk ÖZLÜ, the KOSGEB President Prof. Dr. Cevahir UZKURT and on behalf of ASELSAN, the Corporate Services Deputy General Manager Mr. Hezarfen ORUÇ and the Central Supply Director Mr. Ali Rıza KILIÇ signed the protocol, which was formed to support the domestication of strategic products which are currently mainly imported, by developing businesses production abilities.

KOSGEB will award 500 enterprises grants of up to TL 5 million, and 70% of which is non-recourse. Project applications will be received periodically under the program. The project has a maximum duration of 36 months, and an additional extension of up to 6 months may be granted at the decision of the board.

Following the SME Technology Product Investment Support Programs, ASELSAN, which undertook a new support program for strategic products, continues to pioneer the provision of financial support for sub-contractors in the field of strategic products production through KOSGEB.



The ASELSAN Supplier Portal Project, which is the most important component of the digitization project in the ASELSAN procurement processes, was the latest addition to ASELSAN's long list of existing awards.

### ANOTHER AWARD FOR THE ASELSAN SUPPLIER PORTAL

The ASELSAN Supplier Portal Project, which is the most important component of the digitization project in the ASELSAN procurement processes, was the latest addition to ASELSAN's long list of existing awards. The ASELSAN Supplier Portal, which previously won the Bronze Quality Award in the Business Transformation category by SAP, won another award in the field.

One of the most important non-governmental organizations in the procurement field, the Procurement Professionals and Managers Association of Turkey (TÜSAYDER) selected the ASELSAN Supplier Portal as the "Best Procurement 4.0 Project" at the Seventh Procurement and Supply Management Summit. ASELSAN shared its first prize with the Turkcell Procurement Transformation Project. During the summit, ASELSAN was represented with a total of 12 participants from the Central Supply Directorship, the MGEO (Microelectronics, Guidance and Electro-Optics) Sector Presidency, the REWS (Radar and Electronic Warfare Systems) Sector Presidency and the TSEA (Transportation, Security, Energy and Automation Systems) Sector Presidency.



Central Procurement Director Mr Ali Rıza Kılıç receives the prize on behalf of ASELSAN.



### OUR ROADS ARE SAFER THANKS TO THE ASELSAN DIGITAL TACHOGRAPH.

Digital tachograph equipment, which can only be produced in three countries in the world, was developed by ASELSAN and was produced in Turkey. The digital tachographs produced domestically and nationally began to be used in vehicles.

Throughout the EU, the digital tachograph is required to be placed in all trucks, light trucks and vehicles carrying nine or more passengers. The EU also requires this equipment to be installed in all buses and trucks coming from Turkey.

The regulation was issued for the use of this equipment in similar vehicles in Turkey. When taking into account Turkey, the EU countries and other countries carrying out road transportation aimed at the EU, a market of over a million tachograph per year emerges for digital tachograph. Upon the realization of the project, exit of foreign exchange amounting to about Euros one billion will be prevented.



### THE “DESIGN TURKEY 2017 GOOD DESIGN” AWARD TO 3700 HANDHELD RADIO

Our 3700 Handheld Radio won the “Design Turkey 2017 Good Design” award in the category of electronic products at the Design Turkey Industrial Design Awards. There were about 1,800 applications for the awards, which were handed out for the sixth time this year.

The 3700 Handheld Radio was shaped by ASELSAN’s forty-year professional radio design capacity, meeting the stringent mechanical and electronic standards to the smallest dimensions, and was designed as a robust, reliable, stylish and easy to use device.

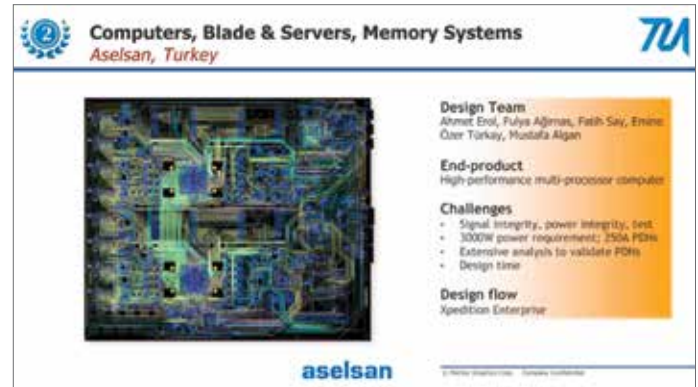
In the Design Turkey 2017 Award Ceremony held at the İstanbul Lütü Kırdar Convention and Exhibition Center, the award was handed to the ASELSAN team by our Minister for the Economy, Mr. Nihat Zeybekçi.

### ASELSAN GRANTED STATUS OF “FOREIGN TRADE CAPITAL COMPANY”

The Ministry for the Economy awarded our Company the status of Foreign Trade Capital Company. The decision taken by the Ministry was published in issue 30185 of the Official Gazette dated 19 September 2017, whereupon it entered into force. Accordingly, our Company was added to the list of foreign trade capital company status. Only 64 companies hold this status in Turkey.

The foreign trade capital company status provides companies with the following advantages:

- In order to provide export financing, it is possible to benefit from Eximbank loans without an intermediary bank, so that it is possible to obtain loans at lower interest rates.
- The company is given priority in assessments for the state exports aids.
- Even if the company is not the manufacturer, it can benefit from the tax amnesty application in terms of tax legislation, provided that the sales that they carry out are for export.
- In contrast with other companies, it is sufficient to show guarantee of 4% to benefit from the VAT refund originating from exports.
- Regarding customs legislation, the normal conditions such as having a certain number of employment, being a manufacturer, import and export performance criteria and some of the documents presented to the customs office are not required to obtain the approved person status for foreign trade firms.



### ELECTRONIC DESIGN AWARD TO ASELSAN

ASELSAN added a new bow to its string of successes in printed circuit board technology.

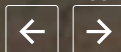
ASELSAN won second prize in the category of “Computers, Blades&Servers and Memory Systems” with its High Performance Multiprocessor Computer Card in the “PCB TECHNOLOGY LEADERSHIP AWARDS-2017” competition of Printed Circuit Board technology, held for the 27<sup>th</sup> time this year by Mentor Graphics.



# Communications and Information Technologies Business Sector

“  
ASELSAN is working to a mission of removing the Turkish Armed Forces' external dependency regarding electronic communications and equipment.”

44 - 63





COMMUNICATION SYSTEMS  
MILITARY COMMUNICATION SYSTEMS  
PUBLIC SAFETY COMMUNICATION  
SYSTEMS  
MOBILE COMMUNICATION SYSTEMS  
INFORMATION TECHNOLOGIES

SPACE TECHNOLOGIES  
SATELLITE GROUND SYSTEMS  
SATELLITE PAYLOADS  
CRYPTO AND INFORMATION SECURITY



## Communications and Information Technologies Business Sector



### ASELSAN

continues to be a global company that develops, manufactures, installs, markets the modern electronic devices and systems with unique designs, and carries out after-sales services for them.



### COMMUNICATION SYSTEMS

#### Military Communication Systems

##### Tactical Field Communication System

The TASMUS System is an integrated solution that fully meets the needs of the tactical area with its compliance with the network-centric communication concept, its powerful IP (Internet Protocol) infrastructure, its compatibility with other communication systems, increased band width and an architecture that is open to developments.

Within the scope of the contract signed with the Turkish Armed Forces (TAF), deliveries of the modernized TASMUS-G + were completed in seven different regions.

Deliveries for the exports of the portable communication solution, which was prepared with the GRC 5220 Tactical Broadband Ethernet Radio family that constitutes the TASMUS System infrastructure, were completed. Thanks to the resulting customer satisfaction, an additional export contract including the addition of TASMUS elements was signed.

##### Broadband Waveform

Within the scope of the ULAK project that was signed with the Undersecretariat of Defence Industry, the first version of the software was accepted for the development of the Broadband Waveform for the Software-Based V/UHF Radio Family.



“ ”

The Tactical Field Communication System meets all the communication requirements of 21<sup>st</sup> century armies in the tactical field in accordance with the concept of Network-Centric Communication.





Developed by ASELSAN to be used in aircraft, the 9681 V/UHF Airborne Radio, which offers a new generation digital infrastructure of high performance, provides airborne platforms with frequency hopping, encrypted and clear voice/data communications.

### Airborne Communication Systems

Deliveries of the communication systems within the scope of the ATAK, Anka-S, the Indeginous Helicopter and the HÜRKUŞ -B projects and the communication infrastructure equipment within the scope of the Medium Altitude Air Defense and Missile System Project are continuing. Along with these projects, an additional contract was signed for the helicopters of the Turkish National Police (the EGEMEN Project) within the framework of the ATAK Project and the necessary planning has been carried out for the delivery of the communication devices.

System engineering activities and platform and site survey studies are carried out in the Air and Tower Installation and Integration projects of Utility Helicopter, Airport Traffic Radar and Multiband Numerical Joint Digital Radio (MNJR).

Within the scope of the Airborne Platforms and Tower Modernization Export Contract, deliveries of V/UHF and HF air radios continued in line with the program. Included in the same project, modernization work on the flight control towers also got underway.

The “Installation of VHF/UHF Communication Antennae on Complex Platforms” Project, referred to as SAYP, was signed with Anadolu University.





ASELSAN's  
Naval  
Communication  
Systems were  
exported to  
Pakistan as well.



### Naval Communication Systems

Work continued on the design, material supply, manufacturing and testing activities for the Integrated Communication Systems of Underwater Rescue Mother Ship (MOSHIP), Rescue and Towing Ships (RATSHIP), Landing Ship Tank (LST), MILGEM 3-4, Landing Helicopter Dock (LHD), Logistic Support Vessel (LSV), Pakistan Offshore Supply Vessel (POSV), Testing and Training Ship (TTS) and New Type Submarine (NTS).

The acceptance tests pertaining to the MOSHIP/RATSHIP, POSV, LST and MILGEM-3 Integrated Communication Systems were successfully completed.



As the culmination of ASELSAN's unique radio design and production experience of over 40 years, Electronic Warfare Protected New Generation Radios are being developed by using the state-of-the-art technology in hardware and software infrastructure.

### MILITARY RADIO SYSTEMS

#### Software Based VHF/UHF Radio Family

Deliveries and installation of the Land Platform VHF/UHF Manpack/Vehicular/Fixed Radios, whose serial manufacture is continuing, are ongoing. Design activities continue for the Inter Communication System, which will be used in Land Forces Command tactical vehicles and included in the same contract with the VHF / UHF radios. The device deliveries were realized to the Ministry of National Defense within the scope of rolling out the radios across the Naval Forces Command.

A contract for the supply of the Electronic Warfare Protected Handheld Radio, the design work of which had been initiated previously for the Turkish Armed Forces, was signed.

The design process which had been initiated within the scope of the previously signed contract for the supply of the Naval Platform/Fixed Center VHF/UHF radios for the Turkish Armed Forces, continued.

Mass manufacturing activities in the production line, prepared within the scope of local manufacturing activities through license transfer, and for which capacity acceptance work was completed, is continuing in the Kingdom of Saudi Arabia. Local manufacturing activities related to the software based VHF/UHF radio contract in Pakistan are ongoing. Deliveries were realized pertaining to the supply contracts for the Digital Intercommunication Systems to be used in the VHF/UHF radio and tactical vehicles for the Ukrainian Armed Forces. The third contract was signed for the supply of the products within the same scope.



#### The Software Defined HF Radio Family

Deliveries and installations regarding the contracts for spreading the Land Platform HF radios continued. The design and integration work within the scope of the 5kW and 10kW HF Transmitter System Contract continued for the use of the Naval Forces Command.

The installation and integration process of the Naval Platform HF Radios with various output levels (150W, 400W, 1000W) continued on the platforms of the Naval Forces and Coast Guard Command.

The export of Software Defined HF radios to Pakistan continues. Deliveries of Software Defined HF Radios were completed in the scope of the supply contract signed with the Kingdom of Saudi Arabia. Our activities are continuing with user training and installation work for the radios delivered.



### Identification Systems

Serial production and integration of IFF Mode 5/S (Identification Friend or Foe) Systems; Transponder and Short/Medium Ranged Interrogator, which are indigenously designed and compatible with NATO STANAG 4193, continued to deliver to Turkish Land Forces platforms.

IFF Mode 5/S Transponder deliveries were executed within the scope of ANKA-S UAV (Unmanned Aerial Vehicle) program. Within the scope of the Utility Helicopter Program, a contract amendment was made for the procurement of the indigenous IFF Mode 5/S Transponder.

Battlefield Target Identification System (BTID), which is indigenously designed according to NATO STANAG 4579 requirements, is planned to be used primarily in ALTAY Tank Program and also for relevant land platforms of the Turkish Land Forces.

### Data Link Systems

Serial production activities of UMTAS/OMTAS (Long/ Medium Range Antitank Missiles) RF Data Link Systems are ongoing.

Design validation activities of Low Altitude Air Defense Missile System (HISAR-A) Data Link Subsystem were completed. During firing tests, communication with missile through the data link was observed all along the missile flight.

Activities are ongoing to develop the data link product family, which is configurable depending on different data rate, range and frequency band requirements, in order to meet the communication needs of different platforms in the intelligence, surveillance, reconnaissance and targeting operations.





### JEMUS is the largest Public Safety Communication System in use in our country.

#### PUBLIC SAFETY COMMUNICATION SYSTEMS

##### Gendarmerie Integrated Communication and Information System (JEMUS)

In the Gendarmerie Integrated Communication and Information System (JEMUS) Project, radio systems were established in 11 provinces within the scope of the sixth and seventh phases (the Erzurum, Giresun and Tokat Region Provinces).

The largest Public Safety Communication System established in Turkey, JEMUS, allows inquiries of criminals, lost items, driver's licenses, vehicle registration, license plates and gun licenses to be carried out through central databases. Rapid and effective security/intervention services can be provided to citizens through applications such as the 156 Gendarmerie Hotline, Messaging, Patrol Location, Geographical Information System and the Radio Call & Monitor, which are used in the Operational Centers located in the Provincial Gendarmerie Commands.

##### Turkish National Police (EGM) National Encrypted DMR Digital Radio System

Turkish National Police's Digital Radio System provides wide area encrypted communication in city centers and in regional traffic responsibility areas, as well as direct mode coverage in the districts. In addition to short message service and criminal inquiry applications, the DMR communication technology developed by ASELSAN offers important advantages with features such as software switching, vehicle tracking and communication recording.

Within the scope of the project, the systems were activated in 17 provinces upon completion of installations in Kilis and Osmaniye provinces.

##### TAF Secure Communication System (EHHAS) Expansion Project

The Contract for the Expansion of the Secure Cellular Communication System (EHHAS) installed in Ankara, Istanbul and Izmir provinces serving the General Staff and affiliated Land, Air and Naval Forces personnel was signed. The project will bring additional features such as widening the scope of coverage with additional base station installations, increasing the number of traffic channels for required base stations, and for the mobile communication vehicles, adding central control functions for the base stations providing a 24/7 service, as well as updating software and increasing the number of user terminals.



Gendarmerie Integrated Communication and Information System (JEMUS)



ASELSAN 3700 Series  
Handheld Radio



#### The Coastguard Digital Reliable Communication System (SAHMUS)

The fifth phase of the project was signed. Eight repeater centers will be established in the responsibility area of the Coastguard Black Sea Regional Command (the Eastern Black Sea Region) by utilizing the JEMUS infrastructure of the Coastguard Command. The switching system, based on existing hardware, will be updated with the Next Generation Software based IP system. With the aim of expanding the coverage area, one repeater center will be added in the Zonguldak, Edirne and Çanakkale provinces.

#### The 3700 Series Handheld Radio Development Project

Design work of the 3700 series handheld radios, which are the first member of the new professional radio family, was completed.

The 3700 series Handheld Radio can be configured to work under the APCO25 Phase-1, the DMR Trunk and Conventional systems, as well as being robust, reliable, stylish and easy to use, offering a color screen and a compact size. Designed to meet the needs of public security users and offered as either encrypted or non-encrypted, the device includes a range of modules for the GPS, Bluetooth, vibration and “mandown” features. It appeals to a wide range of users with its extremely light weight durability against harsh environmental conditions and IP67 feature. With these features, the ASELSAN 3700 series Handheld Radio was awarded the Design Turkey 2017 - Good Design Award.

The radios developed for users of public safety and emergency services by ASELSAN work in the VHF or UHF bandwidths. Designed with an ergonomic structure, the system allows users to execute their tasks easily, thanks to the easy-to-use graphical interfaces.

#### The Digital Encrypted (SK2) Radio Deliveries

SK2 deliveries were realized to the TAF Land, Naval Forces and Special Forces, and the Gendarmerie General Command.

#### Expansion of the İzmir Metropolitan Municipality Digital Communication System

New sites were added to the existing system. All municipal units belonging to the Metropolitan and town municipalities (including rail transport) are able to benefit from the digital communication system throughout the city. In addition, radio communication was provided in the exhibition halls and other closed areas of the İzmir Fair.

#### APCO and Digital Encrypted Radio Exports

Sales to the United States of America continued. Encrypted APCO radios were also delivered to the Pakistan Armed Forces. The deliveries under the Technology Transfer Contract signed with the Pakistan National Radio Telecommunications (NRTC) Company continued gaining pace. ASELSAN's communication solutions in Saudi Arabia has expanded together with other export efforts of ASELSAN APCO radio solutions.

Activities completed under the scope of the Technology Transfer Contract signed between ASELSAN and the Kazakhstan ASELSAN Engineering (KAE) Company for the manufacture of APCO radio devices within the KAE, and the first deliveries for these items were realized.

Within the scope of the framework agreement signed with the Everest PRC Company, collaborative works for the establishment of the Public Security Communication Systems belonging to the Ukraine Ministry of Internal Affairs were initiated.

#### The TETRA Base Station

Developmental work for the TETRA Base Station was completed within the scope of the ULAK project signed with the Undersecretariat of Defense Industry in order to develop solutions to meet the needs of Mission Critical Communications.

LTE-Advanced  
Macrocell Base  
Station

The LTE-Advanced Macrocell Base Station has been preferred by the three GSM operators operating in Turkey.

## MOBILE COMMUNICATION SYSTEMS

### Fourth Generation (4.5G/LTE-A) Communication System Development (ULAK) Project

The integration of LTE (Long Term Evolution) with narrowband systems (APCO25/DMR/TETRA) and TETRA Base Station development activities were completed, while the acceptance tests of the first version LTE-based Military Communication System were also successfully terminated. Developmental, integration and testing activities for the final version continued. Within the scope of the development activities for the Commercial and Public Safety LTE-Advanced Macrocell Base Station, laboratory tests of the launch version, whose software content was determined with the operators, was completed for all three operators. Activities for acceptance tests were carried out at the sites installed in Şile, İstanbul. In addition, the contracts for the sale of 250 base stations in different configurations for each operator were signed with Turkcell and Vodafone.



### Fifth generation (5G) and Next Generation Communication Technologies

ASELSAN aims to develop the 5G and the post 5G technologies by using the infrastructure and design experience that it has accumulated under the ULAK Project.

The 5G and Beyond Technology Conference, which reinforces ASELSAN's leading role in the country's next generation mobile communication technologies, was held with international participation from various European universities and research centers. During the conference, a perspective on the next generation communication technologies for the next decade was set out with the contributions of specialist academics and invited speakers.

The first domestic base station antenna, studies on which continues with the support of the Ministry of Transport, Maritime Affairs and Communications, the Information





Technologies Authority (BTK) and the mobile operators - Turkcell, Türk Telekom and Vodafone - was presented during the Conference. The cooperation agreement was signed between ASELSAN, Turkcell, Türk Telekom and Vodafone for the use of the first Domestic Base Station Antenna.

In April, the workshop for determining the ASELSAN 5G Road Map was organized with the participation of all relevant teams within ASELSAN. The ASELSAN 5G Technology Roadmap was established by evaluating the point the technology has reached, the current situation of the standards, and the strengths of ASELSAN.

A real-time beam forming and directing testing environment -which is highly important in refining millimeter-wave technologies in 5G- was developed jointly with the Keysight Company and was exhibited at the 2017 Mobile World Congress held in Barcelona attracting a considerable amount of interest.

ASELSAN participated in the IST-ET-096 Expeditionary 5G working group, which assesses the usability of the 5G Technologies in the military field. ASELSAN actively participated in the 5GTR Forum work that operates under the coordination of the Information Technologies and Communications Authority, and undertook the lead of the established 5G Physical Network Working Group.





ASELSAN STC-8250A digital tachograph

### The Digital Tachograph Device (DTD) Development Project

The Digital tachograph device that can only be produced by three countries in the world was developed by ASELSAN and produced in Turkey. The ASELSAN STC-8250A digital tachographs, which are manufactured domestically and hold an innovation award, began to be used in vehicles.

Compliant with the European Union (EEC 3821/85) norms, the type-approved ASELSAN Digital Tachograph Device is an on-board recorder device that automatically registers speeding information related to driver activities and driving time intervals (daily, weekly, monthly, etc.), security breaches, keeps records for at least one year and has high-level cryptographic security as well as protection against tampering.

The EU requires that all buses and trucks coming from Turkey have this equipment. In Turkey too, all vehicles entering this class will be required to install digital tachographs by 2020 depending on the year's model of the vehicle.

In the activities such as marketing, sales, after sales support and training regarding the device, a distributorship contract was signed with the Takosan Automobile Indicators Industry and Trade Inc., which is a long established and experienced company in the automotive sector and in the analogue/ electronic tachograph fields. Order for 6,000 devices was received and 2,000 devices were delivered in the first delivery batch.



Solutions that are suitable for the advantages of modern life according to the requirements of the user, but also safe at the same time are produced with ASELSAN Information Technology Systems.

## INFORMATION TECHNOLOGIES

### Spatial Address Recording System (MAKS) Data Generation and Deployment Project

In the MAKS Project, which has been started in 2016 with data generating process in 10 cities, 29 more cities have been taken into action later on. In the mentioned provinces, more than 11 million pieces of numerical data were produced. System acceptance activities were carried out at the authorized administrations (Municipalities, Organized Industrial Zones, etc.) in Bilecik and İzmir provinces, whose field activities were completed. As soon as acceptance process is completed in a province, processes that are related with address data are carried out by using Maks interfaces. In addition to these progresses, second workshop of Project was organized in 2017 May in Antalya.

### The New Mobile System (TAYAS)

TAYAS (abbreviation for tactical local area network system in Turkish) is developed as a solution to local area network communication needs of Turkish Land Forces in the tactical field. The system consists of SW and HW installed in local area, operates in cabled and wireless mode and provides a connection for tactical command control and information systems to strategic communication systems such as TAFICS (Turkish Armed Forces Integrated Communication System), tactical communication systems such as TASMUS (tactical area communication system of the Turkish Land Forces) and satellite systems such as TÜRKSAT. Secure wireless communication is provided by use of a "National Secret" encryption algorithm. For this purpose, an encrypted wireless network access device (KKAC), an encrypted terminal wireless network device (TKABC) and a dedicated wireless network management SW are being designed and developed by ASELSAN, using in house and indigenous resources. The wireless network devices will be certified "National Secret" by the Turkish certification authority.

The first phase of the project is completed as IT infrastructure and cabled communication systems belonging to six military units (Communication Electronics and Information Systems (CEIS) Support Command (Balgat, ANKARA), the CEIS School (Mamak, ANKARA), the 7<sup>th</sup> Army Corps (DİYARBAKIR), the 20<sup>th</sup> Armored Brigade (ŞANLIURFA), the 5<sup>th</sup> Armored Brigade (GAZİANTEP) and the 6<sup>th</sup> Mechanized Infantry Division (ADANA)) are delivered, installed and accepted. Second phase of the project is progressing as factory acceptance and delivery of as IT infrastructure and cabled communication systems belonging to seven more military units is completed and on site installation





The 112 Project

The National Router

ASELSAN, which manufactures communication network components with national resources, has been developing a National Router that is also compliant with military standards. Within the scope of the project, models are being developed Core and Distribution/End points. The National Router is both IPv4 and IPv6 compliant and offers a wide array of complementary protocol supports. The Core National Router has a switching speed of up to 48 GBits; the Distribution/End National Router has a switching speed of up to 32 GBits. The mechanical design of the device, the prototype designs of the digital card and other cards were completed and the prototype production was completed.



The 112 Project

Under 112 Projects title there are 3 different projects which still continue. Firstly, within the scope of the contract covering the thirteen provinces with the Ministry of Interior, acceptance test processes of twelve provinces were completed. With the acceptance of these twelve provinces, more twenty five provinces have been put in use during the 112 Project.

Second project is New Generation 112 Emergency Call Center Project. Under this Project, test and acceptance processes of eight provinces were completed. Lastly, a new contract for "New Generation 112 Emergency Call Center Stage Two" Project that includes twelve provinces was signed with Ministry of Interior. First deliveries were completed. The constructions of the buildings by the Ministry of Interior are being waited for installation and configuration operations in twelve provinces.



112 Emergency Call Center

**ASELSAN also carries out comprehensive studies on military and civilian satellites and useful loads to be integrated into satellite systems.**

## **SPACE TECHNOLOGIES SATELLITE GROUND SYSTEMS**

### **ASELSAN Satellite Communication Terminal Solutions**

ASELSAN offers unique Satellite Communication Terminal solutions that serve in different frequency bands for various platforms (Land, Naval, Air) in line with customer needs.

The Stabilized Satellite Communication Terminals, which provide reliable and uninterrupted communication on air, sea and land platforms while in movement, are designed and manufactured as being compact, light and in accordance with military standards. In addition, Portable and Fixed Satellite Communication Terminal solutions are also included in the ASELSAN product family.

### **The Turkish Armed Forces X-Band Satellite Communication System - the Ground Segment (TUMSİS)**

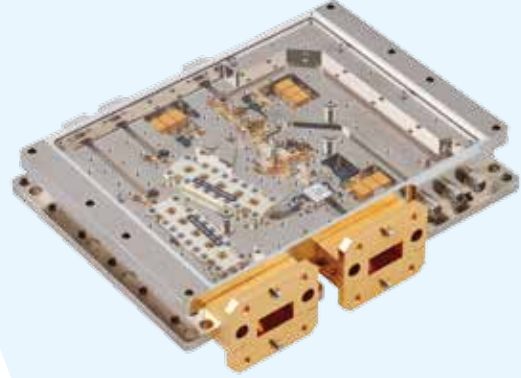
The TAF X-Band Satellite Communication System (TUMSİS) Project includes the design, manufacture, integration, infrastructure activities, installation on relevant platforms, verification, testing and acceptance activities of the X-Band Satellite Communication Main and Spare Control Centers, the Ship, the New Type Manpack, Portable, Transportable and the Mobile Vehicle Terminals, which will work together with the X-Band Satellite Communication System Payload. The critical design phase for the project has been completed, while the development, manufacture and material supply activities for the subsystems are continuing.

### **Ku-Band Satellite Communication System Project**

A satellite communication control center and satellite terminal will be delivered within the scope of the Ku-Band Satellite Communication System Project, which will provide voice, fax, data and image services to the Turkish Armed Forces. Within the scope of the project, the installation, integration, testing and acceptance activities were realized within the scope of the Main and Spare Network Control Centers, the Flyaway Satellite Communication Terminal and the Shipborne Satellite Communication Terminal. The installation, integration, testing and acceptance activities of Shipborne Satellite Communication Terminals are continuing.

### **Project to Supply Military Satellite Communication System for the Kılıç Type Patrol Boat (KASUMSİS)**

The KASUMSİS Project Contract includes the stabilized satellite communication network terminal that will be integrated into the Kılıç Type Patrol Boats at three axes and its Network control centers, with which it will communicate. The Critical Design Phase in the project has been completed successfully and the development, manufacture and supply of material and testing activities for subsystems are continuing.



### **Airborne Ku-Band Satellite Communication Terminal Development Project**

ASELSAN has initiated the Airborne Ku-Band Satellite Communication Terminal Development Project. With its in-house resources, ASELSAN continues its design work of the satellite communication terminal, which will serve as a solution for Unmanned Aerial Vehicles (UAV) and airborne platforms.

### **GÖKTÜRK-1 Discovery and Surveillance Satellite Project**

Within the scope of the GÖKTÜRK-1 Discovery and Surveillance Project, ASELSAN is responsible for providing the S/X Band Antenna System, Switch and Support Subsystem belonging to the Fixed and Mobile Ground Stations, User Interface Software with Image Processing and Meteorological Data System. ASELSAN has continued to provide support for testing and maintenance activities within the scope of the systems for which it is responsible, and completed the relevant training.



Backed by its unique accumulation of high-tech knowledge with land and maritime satellite communication solutions, ASELSAN also develops systems for air elements, which have an increasing priority in the battlefield.

### SATELLITE PAYLOAD

#### TÜRKSAT 6A National Communication Satellite

ASELSAN has continued system and equipment level design activities within 2017 in the scope of locally developed indigenous Ku-band Satellite Communications Payload. ASELSAN is designing and developing Ku-band Receiver, Payload Interface Unit (PIU), INET, ONET and Turkey coverage Antenna components of the Payload under the Program. Critical Design Reviews for the equipment were carried out and the detailed design phase was

completed. In addition, the Engineering Models of the equipment were manufactured and the functionalities and the compliance to the requirements were demonstrated.

The design and manufacture of the Thermal Structural Qualification Models (STQM) of the Ku-Band Communication Payload Equipment were completed for the qualification of the TÜRKSAT6A Satellite Thermal and Structural Subsystems, and the equipment was delivered to TUSAŞ (Turkish Aerospace Industries - TAI).

The manufacture of the Payload Panel Container, which meets the necessary humidity and cleaning conditions and which will be used for the transportation of the Payload to TUSAŞ-USET (Space Systems Integration and Testing) Center was completed and made ready for use.

#### TUMSİS X-Band Payload

In order to meet the Turkish Armed Forces (TAF) Satellite Communication needs, ASELSAN is responsible for the design, manufacture, functional and environmental tests of the X-Band Satellite Communication Payload by utilizing national test infrastructure, the transportation of this payload to the satellite platform manufacturer's facilities, providing technical support for the integration activities of the Payload to the satellite platform manufacturer and carrying out In-Orbit Tests of the Payload.





ASELSAN is currently conducting design activities of X-Band Frequency Down-Converter (DOCON), Channel Amplifier (CAMP) and Harmonic Filter in this Program. The System Requirements Review and Preliminary Design Review phases for the TAFs Satellite Communication System (TUMSIS) X-Band Payload Project were completed in accordance with the project schedule.

#### GÖKTÜRK-3 SAR Satellite

During the first phase of the GÖKTÜRK-3 Project, activities for the development of the SAR Payload Subsystem, Communication Subsystem and Fixed/Mobile Ground Stations were carried out by ASELSAN. Technical and contractual studies have been performed for the 2<sup>nd</sup> phase of the Project which will cover all processes including launch stage. Different solutions for the SAR Payload with Active Phased Array Antenna, which is being developed by ASELSAN, were formed by using ready platforms of domestic and/or foreign platform providers, and technical and budgetary studies were carried out for each solution.

#### EHF On-Board Processing Satellite Payload

Activities for the engineering model of the EHF On-Board Processing Satellite Payload were successfully completed, and activities for the flight model have been continued.

#### ASELSAT CubeSat Development

Under this Program, ASELSAN works with the Aerospace Engineering Department of Istanbul Technical University (ITU) and Mechatronics Engineering Department of Atılım University as subcontractors.

The preliminary design phase for the CubeSat platform that is being developed by ITU Aerospace Engineering team was completed, and the critical design phase activities have been continued.

The critical design phase activities of the National Reaction Wheel, which is being developed by Atılım University, have been continued in line with the project management plan.

TÜRKSAT6A  
Satellite Ku-Band  
Communication  
Payload  
Equipment



Under the umbrella of Encryption and Information Security Systems, ASELSAN develops national encryption devices that meet various mission requirements, and the state-of-the-art products and systems that provide information security for individual and mass communication elements.

## ENCRYPTION AND INFORMATION SECURITY

### IP Encryption Devices

The design of two separate hardware items, including rack and mobile type IP Encryption Devices with 1 Gigabit/s interface was completed. The necessary software development work was completed in order to enhance the performance of these devices and to enrich the remote secure management features.

Within the scope of TASMUS G + project, the 2064 IPKC V2 IP Encryption Device, which is a rack type version, was produced and customer acceptance tests were successfully completed; the devices were delivered to the Land Forces Command subsequently. The Mini IP Encryption Device, which is a version of the New Generation IP Encryption Device developed for mobile applications, was produced under the Ku-band Satellite Communication System project. The customer acceptance tests were successfully completed and the devices were delivered within this year. Within the scope of the national secure video conferencing infrastructure contract signed with the Information Technology Department at the Ministry of the Interior, the deliveries of the 2064 Mini IP Encryption devices and the Data-Audio-Video Communication Security Solution Project were completed.

### Link Encryption Devices

Within the scope of the TASMUS G + project, the production of the DKC-E Link IP Encryption Device, a dual-port rack-type version, was completed and the customer acceptance procedures were accomplished; the devices were then delivered to the Land Forces Command. The export version of Link Encryption Device has been successfully delivered to the land forces of a friendly/allied country.

The decision was taken to develop the 10 Gigabit Link Encryption Device in order to meet the high speed communication security needs arising because of the developments in technology; prototype development work for the device was carried out in 2017.

#### **Virtual Air Gap System (VAG- SAHAB)**

The new version of the SAHAB system was delivered. In this version, additional protocol support and capabilities were integrated within the scope of the Secure Network Gate System Project of the TAFs, which will provide secure data sharing and voice communication in network transitions with different security levels, and which will be positioned in the TAFs TAFICS sub-structure. The new version of the SAHAB System was delivered within the scope of The Undersecretariat for Defence Industry's Electronic Personnel Information Management System and the Coastguard.

#### **Secure Satellite Phone**

The factory acceptance procedures of the Secure Satellite Phones, which are developed under the contract signed with the Ministry of National Defense in line with the necessity to meet the General Staff's needs for secure national satellite communication, have been completed.

#### **Secure USB Memory Device**

Development activities continued for the Secure USB Memory Device that has storage capacity options of up to 128 GB, USB 3.0 support and high speed read/write capability.

#### **The EKADAS-II Integration Project**

Within the scope of the National Encryption Key Distribution System Prototype Development Project (TÜBİTAK BİLGEM's SAVTAG Project) being developed in order to distribute the keys of the devices produced by ASELSAN through the EKADAS-II system, design and integration work of the EPM module continued. The EPM module is being developed with regard to the contract signed between ASELSAN and TÜBİTAK.

#### **The GÜVEN Project**

Within the scope of the GÜVEN National Encryption Processor Development Project (GÜVEN), signed with TÜBİTAK BİLGEM, ASELSAN participated in the project evaluation meetings in accordance with the contract including the procurement of services in the system engineering and the testing phases, and the relevant comments were communicated.



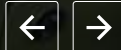


# Defense System Technologies Business Sector

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In the field of Defense Systems Technologies, ASELSAN carries out work for high-tech product solutions in the fields of Ground Systems, Remote Controlled Weapon Systems, Command Control and Information Systems, Tank Systems, Air and Missile Defense Systems, Air Defense Artillery and Smart Ammunition Systems, Air Defense Command Control Systems, Naval Combat Systems, Underwater/Above Water Systems, Torpedo and Underwater Systems.

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NAVAL SYSTEMS  
AIR AND MISSILE DEFENSE SYSTEMS  
LAND SYSTEMS

COMMAND CONTROL, COMMUNICATION  
AND COMPUTER SYSTEMS  
WEAPON AND WEAPON FIRE CONTROL  
SYSTEMS

## The Defense Systems Technologies Business Sector

ASELSAN is involved in the design, development, production and system integration of combat systems aimed at assault boats, patrol boats, corvettes, frigates, landing ship tanks, rescue and seismic research vessels and submarines.

### NAVAL SYSTEMS

Naval Combat and Mission Systems are being developed, procured, and integrated into surface and underwater platforms in order to meet the needs of the Turkish Naval Forces, Coastguard Command, other public institutions and friendly armed forces.

#### Surface Platform Solutions

ASELSAN develops combat and mission systems for the needs of surface platforms. ASELSAN offers turnkey solutions in domestic and international markets for various surface platforms such as research ships, rescue and backup vessels, training boats, coast guard boats, patrol boats, fast patrol boats, corvettes and frigates.

#### Coast Guard and Patrol Boats Solutions

ASELSAN has served as the main contractor for the combat system solution of 10 SERHET Ship Class boats for a foreign end-user. The VATOZ® Mission Management System was used as main component of the Combat System in the project, enabling the integration of various guided missiles. Project was completed successfully with the live firing tests of the weapons using VATOZ® solution. Within the scope of 6 High Speed Patrol Projects for the same end-user, all boats were successfully delivered.



“ ”

Integrated combat and mission systems are designed and developed by utilizing ASELSAN in-house technologies, know-how and systems for surface and underwater platforms in order to meet the needs of the Turkish Naval Forces, as well as Coastguard Command and other public institutions.



ASELSAN carries out work in almost all areas of military naval technology in order to advance the modernization process and enhance the effectiveness of the deterrents offered by of the Turkish Naval Forces Command, and also to acquire a place in the world market with competitive products.

In the Test and Training Ship (TTS) Project, the Mission Systems contract was signed between STM (Savunma Teknolojileri Mühendislik ve Ticaret AŞ) and ASELSAN, and the Ship Systems Supply contract was signed between STM and the ASELSAN-HAVELSAN Business Partnership.

A contract was signed between the ASELSAN-HAVELSAN Business Partnership and the Turkish Naval Forces Command to modernize the battle management systems of the Barbaros Class Frigates.

### Combatants

In the MİLGEM Combat Systems Supply project, the development, supply, integration and testing activities for the integrated combat system, satellite communications system, navigation systems, electro-optical systems, the laser warning system, the electronic warfare system, radars, sonar systems, the torpedo countermeasure system, guided missile systems and the gunfire control systems of the ADA Class ships were carried out within the scope of air defense, surface and underwater warfare, and delivered to the Turkish Naval Forces Command.







The first MILGEM ship, the TCG HEYBELİADA, was delivered to the Turkish Naval Forces Command in December 2011 and the second MILGEM ship, the TCG BÜYÜKADA was delivered to the Turkish Naval Forces Command in September 2013, with both ships entering service. Work is underway on the construction of the third and fourth ships of the MILGEM, under the BURGAZADA and KINALIADA Combat Systems.

#### **Amphibious Vessels**

In the 2 Amphibious Ships (LST- Landing Ship Tank) Projects to meet the requirements of the Naval Forces Command, ASELSAN provides the development, supply, adaptation and integration of systems for three-dimensional Search Radar, Electronic Support, Integrated Communications, Stabilized Machine Gun Platform (STAMP), Laser Warning and Gyro Compass Systems. The first LST ship was delivered to the Naval Forces Command with provisional acceptance in April 2017.

The combat system of the Multipurpose Landing Helicopter Dock (LHD) Project carried out by the Undersecretariat for Defense Industry (SSM) is supplied by ASELSAN to meet the requirements of the Naval Forces Command. Within the scope of the combat system, the development, supply and integration of the 25 mm Remote Commanded Weapon System, LPI Radar, Three Dimensional Search and Tracking Radar, Navigation Radars, Precision Approach Radar, Air



## The Defense Systems Technologies Business Sector

Traffic Control Radar, Electronic Warfare Suite with Electronic Support, Torpedo Countermeasure System, Internal and External Communication System, Satellite Communication System, Identification, Friend or Foe (IFF) Systems, Underwater Telephones, Sounder, Gyro System, Laser Warning System, Infrared Search and Tracking System, Electro-Optical Director, Digital Map and Digital Track Table, the TACAN (Tactical Air Navigation) and Navigation Assistants Systems will be realized.

### Auxiliary Ships

ASELSAN provides the weapon (Stabilized Gun System - STOP) and communication switching system within the scope of the Offshore Supply Vessel Project aimed at the needs of the Pakistan Naval Forces. Installation, commissioning and harbor acceptance test activities were completed.

The sea acceptance tests of the Oruç Reis Seismic Research Ship of the General Directorate of Mineral Research and Exploration (MTA) were successfully completed and the ship was brought into service on June 23, 2017 with provisional acceptance. ASELSAN is the main integrator of the scientific research equipment and systems. The ship was brought into service on June 23, 2017 with provisional acceptance.

One Hydrographic and Oceanographic Research vessel and one Towing ship system were delivered to the end user within the scope of overseas sales.

In the two Logistic Support Ship (LDG) Projects required by the Naval Forces Command, ASELSAN will undertake procurement/development and integration activities for the Integrated Communications System, the 12.7 mm STAMP System, the ANS510-D Gyro System and the platform level EMI/EMC activities.

The sea acceptance tests of the TCG ALEMDAR - Rescue Main Ship, which was built for the Turkish Naval Forces Command, were successfully executed and provisionally accepted and brought into service on 28 January 2017. ASELSAN is the main integrator of the project's mission system with underwater acoustical systems, navigation systems, integrated communication systems and a data control system.

The sea acceptance tests of the TCG İŞİN - Rescue Main Ship, which was built for the Turkish Naval Forces Command, were successfully executed and the ship was provisionally accepted and brought into service on 21 July 2017. The harbor acceptance tests of the project's other ship, the TCG-AKIN, were successfully carried out. ASELSAN is the main integrator of the project's mission system with underwater acoustical systems, navigation systems, integrated communication systems and the data control system.

**ASELSAN offers solutions for various surface platforms such as research ships, rescue and backup vessels, training boats, coastguard boats, patrol boats, fast patrol boats, corvettes and frigates, and for underwater platforms like submarines.**

### Torpedo and Under Water Systems

ASELSAN operates in a wide range of underwater fields such as acoustic systems, torpedoes, torpedo countermeasures systems, sonar systems and acoustic sensor technologies, with its technological know-how and infrastructure in the area of military electronic systems.

### Submarine and Sonar Systems

Within the scope of the New Type Air Independent Submarine Project, the development, production and testing activities of the Integrated Communication System, X-Band Satellite Communication System, Alarm Announcement System and Electronic Support Measure System, which will be provided by ASELSAN, have been continued.

Factory Acceptance Tests of the ASELSAN Intercept Sonar System (ASIST), which is developed for the AY Class Submarines, and its installation into submarines were completed successfully.

Studies to develop the Passive Directional Sonobuoy (ASELBUOY) continued and sea trials were carried out during the period. The Mine Detection Sonar System (MATESS), which was developed with the Company's in-house resources, has started to be integrated into a Mine Hunting Ship of the Engin Class.

Within the scope of the MİLGEM Project, the factory acceptance tests of (FAT) were completed for Hull Mounted Sonar and Underwater Telephone which were supplied and FAT of ASELSAN KULAÇ echo-sounder system were completed too.

### Torpedo and Torpedo Countermeasure Systems

Factory acceptance tests of the Launcher System prototype, which allows acoustic jammer and decoy units to be launched in the Preveze and Gür Class submarines, were completed. Work on the international sales of the ZARGANA system and the ZOKA Decoy family, which are the export models of the torpedo countermeasure system for submarines, have been carried out.





Performance tests of the HIZIR Torpedo Countermeasure System, which was developed with the Company's in-house resources to defend surface vessels against torpedo attacks, were carried out in the marine environment. Factory acceptance tests of the HIZIR system were completed within the scope of the MİLGEM project.

Developmental studies of the Hard-Kill Torpedo against Torpedoes (TORK), which will support self-defense operations of platforms against torpedo attacks, continued with the TÜBİTAK 1501 program support. Various field tests were conducted with a test prototype. In the Underwater Ad-Hoc Acoustic Network Project (AKUSTİKA) which is initiated with the Company's in-house resources and also supported by TÜBİTAK 1511 program, the field tests regarding the acoustic communication of underwater acoustic vehicles continued.



Launcher System  
for Submarines

ASELSAN also offers solutions for the integration of the systems that it develops into marine platforms and management systems.

### Navigation and Platform Management Systems

Subsystem development studies are being carried out in order to integrate modern navigation and platform management systems into sea platforms.

### Navigation Systems

Development studies continued for the ASELSAN MİTOS™ Electronic Chart Display System product family. After the LHD vessel, the ASELSAN MİTOS™ WECDIS (Warship Electronic Chart Display and Information System) was sold to the Testing and Training Ship (TTS).

METEOR Meteorological Measurement System, which has been operational in Ada Class Corvettes, is being modified per LHD and TTS needs.

ASELSAN continued to develop the indigenous and national Electromagnetic Log System (MİLPARS) with its in-house resources.

### Platform Management Systems

Concept development continued for the A-PLAYS ASELSAN Smart Platform Management Systems. The ASELSAN SİLYON Data Control System was successfully delivered to the TCG Işın and the MTA Oruç Reis vessels, after having been delivered to the TCG Alemdar. The harbor acceptance test was successfully completed for the TCG Akın.

### Propulsion and Drive Systems

Within the scope of the Dynamic Positioning System (DİKONS™), for which development studies are ongoing with ASELSAN's in-house resources, TEYDEB support was obtained from TÜBİTAK.

Dynamic  
Positioning  
System  
(DİKONS™)







KORKUT Self  
Propelled Low  
Altitude Air  
Defense Gun  
System

ASELSAN's Air Defense System solutions, which were initiated with the Stinger Joint Production Program and continued with the Pedestal Mounted Stinger (PMS) Project, are now working successfully in the inventories of the Turkish Armed Forces and armies throughout the world.

## AIR AND MISSILE DEFENSE SYSTEMS

With more than thirty years of experience of air defense and having produced Turkey's first air defense system, ASELSAN develops unique air and missile defense systems. The fact that ASELSAN develops and produces the sensor, command control, firing control and communication devices of critical importance by itself is an important advantage for it in the field of air defense. With experience in systems engineering, system level analysis and modeling and system development, ASELSAN is also ready to undertake important tasks in Turkey's ballistic missile defense system solution.

### ATOM 35 mm Air Burst Ammunition

ATOM 35mm Air Burst Ammunition developed by ASELSAN is a smart ammunition having a base fuze. The effectiveness of the barreled guns is increased noticeably with the use of Air Burst Ammunition and they become an important option for small and high-speed targets. Together with the ability of precise time counting and the capability of being programmed during firing by taking muzzle velocity into consideration; ATOM 35mm Air Burst Ammunition provides high hit probability against various types of air and land targets.

### Air Defense Fire Control System (FCS) and Modernized Towed Guns

FCS Platoon offers a state-of-the-art, low-altitude air defense solution for effective air defense of critical facilities and fixed military units to tackle modern air threats, such as air-to-surface missiles, cruise missiles and unmanned aerial vehicles. The FCS Platoon consists of a Fire Control System (FCS), two 35mm Modernized Towed Guns (MTG) and a Low Altitude Air Defense Missile Launch System. FCS Platoon can work with the Air Defense Early Warning and Command Control System (HERIKKS) in an integrated manner, and can also carry out the functions of target detection, tracking and prevention autonomously in platoon level.

### Contract for Serial Production of Fire Control System, Modernized Towed Guns and 35 mm Air Burst Ammunition

In order to meet the requirements of the Turkish Army and Air Force serial production contract for the production of significant amount of Modernized Towed Guns (MTG), Fire Control System (FCS) and Air Burst Ammunition was signed in December 2017.

### KORKUT Self Propelled Air Defense Gun System

KORKUT Platoons consist of the three Gun Systems (GS) and a Command Post (CP). Each KORKUT platoon can operate with Air Defense Early Warning and Command Control System (HERIKKS) in an integrated manner, and can also perform target detection, tracking and prevention functions autonomously. KORKUT System and 35 mm Air Burst Ammunition offer an effective air defense solution against modern air threats, such as cruise missiles, air-to-surface missiles and unmanned aerial vehicles.

### KORKUT Systems Serial Production

Serial production of the KORKUT systems is being continued under the contract signed in 2016 for the requirements of Turkish Army.

## The Defense Systems Technologies Business Sector

### 40 mm High Velocity Smart Grenade

40 mm High Velocity Smart Grenade having a pre-fragmented shell filled with high explosive is a time programmable air burst ammunition which detonates in midair. It is effective against threats behind cover, wall, inside a bunker or in a room with the fragment damage caused by the air burst effect.

The ammunition has a nose fuze which is capable of being programmed to the explosion time while leaving the barrel. It has a built-in self-destruct function and it can be fired from any Automatic Grenade Launcher after the integration of Programming Kit.

### Electromagnetic Launch System Development Studies

Electromagnetic Launch (EML) technology is a groundbreaking technological field that creates an alternative to the propulsion systems using rocket motors and weapon systems based on firing ammunition from the barrel with gun powder. Thanks to the use of the EMF in weapon system design, much higher barrel exit velocities can be achieved than in conventional barrel gun weapons, and the ammunition can be fired for much longer ranges. ASELSAN continues its system and subsystem development studies with its in-house resources and the TÜBİTAK TEYDEB support in order to increase its achievements in this area.

### Short Range-Low Altitude and Medium Range- Medium Altitude Air Defense Missile Systems (HİSAR-A and HİSAR-O)

The Low and Medium Altitude Air Defense Missile Systems will fulfill the task of neutralizing threats at low and medium altitudes within the scope of point and zone air defense.

In the HİSAR-A Project, the System Requirement Definition (Phase 1), System Design (Phase 2) and the Subsystem Development and Testing (Phase 3) phases were successfully completed, and the System Integration and Testing (Phase 4) studies are currently in progress.

In the HİSAR-O Project, the System Requirement Definition (Phase 1) and the System Design (Phase 2) phases were successfully completed, and the Subsystem Development and Testing (Phase 3) studies are currently in progress.

During the firing test campaign in July, firing tests of the HİSAR-A Guided Test Missile through the Self-Propelled Autonomous Low Altitude Air Defense Missile

IGLA-1 and  
IGLA-S Missile  
Launch System



35 mm  
Modernized  
Towed Gun



System (AİHSFS), the HİSAR-A Guided Test Missile and the HİSAR-O Control Test Missile through the Missile Launch System were executed successfully.

### IGLA-1 and IGLA-S Missile Launch System

The IGLA-1 Missile Launch System, which is the Low Altitude Air Defence System using the IGLA-1 launcher, and which was developed by ASELSAN with national resources, won the acclaim of officers from the Kazakhstan Army by successfully shooting all targets in the firing test held in Kazakhstan on 27 September 2017. With the firing activity, both the cooling gas feeding equipment, which are developed with national resources and the launcher have been qualified.

The live firing tests of the IGLA-S Missile Launch System, equipped with the architecture and capabilities similar to the Pedestal Mounted Stinger (PMS) systems, was carried out with four successful missile launches at the Şile Firing Range in Istanbul between 2 and 6 October, 2017 with the participation of domestic and foreign delegations. Within the scope of the tests,



Low and Medium  
Altitude Air  
Defense Missile  
System







Unmanned Aerial Vehicle Detection/ Destruction Search and Reporting System.

one KALKAN Radar and HERİKKS were deployed, in addition to the IGLA-S Missile Launch System integrated into the Land Rover vehicle produced by Otokar.

### Anti-tank Missile Launch System Development Studies

ASELSAN developed a remote controlled and stabilized anti-tank missile system that will provide a high level of effectiveness against land targets in all kinds of weather conditions by day or night, thanks to its computer-controlled firing control capabilities. Software development studies were carried out within the context of command control and firing control subsystems for demonstration of capability, and system integration studies have been carried out. A prototype system was produced in 2017 and live firing tests are planned to be carried out in order to qualify the system.

### MİLGEM RAM and HARPOON Supply Project

Within the scope of the MİLGEM Combat System Supply Project, the RAM Point Defense Guided Missile Weapon System and the Harpoon Missile System were first integrated into the TCG HEYBELİADA and TCG BÜYÜKADA vessels, and they recorded a full hit in the firing tests made to date. The work of integration into the TCG BURGAZADA vessel, which is being built within the scope of the project, continues in accordance with the plans. The factory acceptance tests of the systems were successfully carried out in 2017.

### Long Range Air and Missile Defense Systems

In the R&D project, in which studies are carried out for the development of the Long Range Air and Missile Defense System with ASELSAN's in-house resources and through a domestic effort, technologies and developments in this field continued to be followed up, and studies continued into the conceptual design of the system, the system effectiveness analysis, which will be used extensively throughout the requirements determination, the design, development and testing activities and the development of the modeling and simulation infrastructure. Negotiations and work have been carried out within the scope of cooperation possibilities with domestic and foreign companies.

### The Air Defense Systems against the Mini/Micro UAV (Unmanned Aerial Vehicle) Threats

In order to neutralize mini and micro UAV threats, ASELSAN developed the defense system named as the Unmanned Aerial Vehicle Detection/Destruction Search and Reporting System.

The system solution consists of radar, electro-optical subsystem, Jammer subsystem and command and control systems. It was installed at four different critical facilities located in Turkey. Within the scope of domestic and international needs, system development and production work is continuing intensively.

**ASELSAN actively participating in the NATO BMD SE&I (Ballistic Missile Defense System Engineering and Integration) Project.**

In the project, of which the Leidos Company is the main contractor, work has been carried out with ten companies from Germany, the United States, the United Kingdom, France, the Netherlands, Italy, Canada and Turkey. The Leidos team has worked to bring in the NATO BFS capabilities, which will also provide the NATO BFS architecture simplification and maintenance, and to improve the Ballistic Missile Defense (BMD) systems aimed at the NATO Command and Control and Communications (C3) system. Conducted at the NCIA facilities stationed in The Hague in the Netherlands, the work bears importance in terms of being the first work in which ASELSAN's experience in the BMD field will be utilized in the NATO BMD activities.

**LAND SYSTEMS**

ASELSAN continued work on the design, development, modernization, production and logistic support activities of the Land Systems, Main Battle Tank Systems, Fire Control Systems and Command Control Communication and Computer systems. With our extensive, unique and proven product range and more than 30 years of experience on Land Systems, we are able to rapidly offer solutions tailored to the needs of the Turkish Armed Forces, General Command of Gendarmerie, Turkish National Police and the armed forces of friendly/allied foreign countries.

SARP Remote Controlled  
Weapon System



Artillery, Howitzers,  
Mortars and Rocket  
Launcher Fire  
Direction Systems

ASELSAN has developed a number of sub-systems that enable firing support to be implemented in full compliance with other battlefield functional areas, and infrastructure that provide coordinated operation of these systems, in addition to the automation of the command, control and technical fire control functions of the fire support as well as target detection.

### COMMAND CONTROL, COMMUNICATION AND COMPUTER SYSTEMS

ASELSAN offers its users Fire Support, Reconnaissance/ Surveillance and Intelligence, Integrated Battlefield Management, Electronic Warfare, Strategic Operational and Tactical Level Command Control Information Systems and Tactical Communication Systems in its wide product range with the use of modern technologies. ASELSAN provides command and control hardware, software and communication systems that allow the vehicles, which are in the inventory of the Land Forces Command, the General Command of Gendarmerie and the Turkish National Police to function in an integrated manner into the top command control system.

#### Fire Support Command and Control Systems

The Fire Support Automation System enables the fire support to be executed in the battlefield in full compliance with other battlefield functional areas with the automation of the command, control and communication functions of the fire support.

The efforts to equip other troops under the Land Forces Command with the Fire Support Automation Systems are continuing.

#### Battalion Task Force Battle Management System (BATUR)

Development continued on the Battle Management System (BATUR), which operates in full compliance with the Tank Command Control Communications Information System (TKKMBS).

The development of the Command Control and Communication Systems of the anti-tank weapon carrier vehicles to be brought into the Land Forces Command inventory was completed, and production of systems has already been started.



The BATUR system, which is also included in the Network Supported Battlefield Command Control Systems solution, continues to be developed in line with functional and integration needs.

#### **Soldier Command Control Information System (CENKER)**

CENKER is an integrated information system that aims to increase the Branch/Team's effectiveness, operational compatibility, situational awareness and holistic war capability at the target. With the equipment in their possession, each staff member of the team can share information such as their position, status, etc. as well as images and emergency situation messages within the team. In the area of technological developments, efforts continued to increase the easy use of the system and to improve the integration features within the Network Supported Battlefield Command Control Systems solution.

#### **Network Enabled Battlefield Command and Control Systems**

Work continued on the integration of the following systems and components under a common command control architecture; systems that are in the Land Forces' Command Inventory and that were developed by ASELSAN; the maneuver, intelligence, electronic warfare, fire support and air defense functional area command control information systems, aerial exploration systems, tactical communication systems, command site elements and mobile elements assigned in the tactical field.

#### **Military Mission Computer Systems**

The military mission computers, military panel computers, military handheld computers, monitors and keyboards and respective cards, which can be used by integrating them into the platforms in military systems, or can be handheld, and that are suitable for high performance operation in the extreme conditions of the battlefield, were developed and produced. The Friendly Force Tracking System Terminal, which is a vehicle computer developed for tracking of the position of wheeled and tracked vehicles in the Land Forces Command's inventory, was mass-produced and integrated into the vehicle platforms.

#### **Artillery, Howitzers, Mortars and Rocket Launcher Fire Direction Systems**

The design, production and delivery activities of the Fire Direction Systems that enable the Artillery, Howitzer, Mortar and Rocket Launcher unions to perform their missions in a faster and more precise manner by providing the automation of the technical fire direction process were carried out.

#### **Air Defense Early Warning and Command and Control Systems (HERİKKS)**

In order to roll out the HERİKKS to all troops of the Land Forces Command and to acquire new capabilities, the HERİKKS-VI contract was signed in December 2016, and work got underway. In addition to the existing Tactical Data Links, the HERİKKS-VI contract will pave the way for communication capabilities with the Link-16 and the JREAP Tactical Data Links, and therefore enable the HERİKKS to work with the Air Force Systems at higher levels. The HERİKKS is designed to execute the command control of new generation air defense systems such as KORKUT, AİC, HİSAR-A and HİSAR-O, which are being developed and planned to enter the inventory in the coming period. System design activities continued in 2017.

#### **Combat Support Systems**

Thanks to the capabilities brought into modern military vehicles and all kinds of platforms with domestic and national products developed by ASELSAN, our security forces have been able to adapt to the more challenging and variable war conditions of the current period.

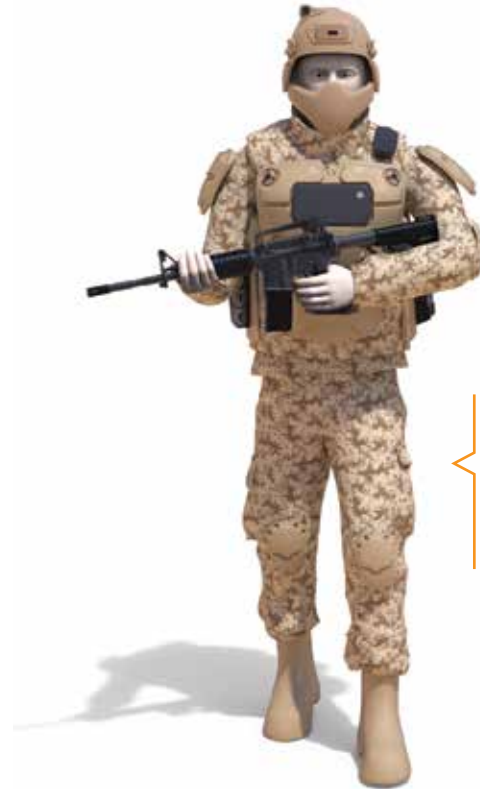
#### **Reconnaissance Surveillance Systems**

The Electro Optical System allows ASELSAN Reconnaissance Surveillance Systems to detect, diagnose and identify elements detected from a long distance by radar. With the integration of Command Control Systems, location information pertaining to the targets can be transferred to the command center via computers and radios. Thanks to the high-tech communication systems, it has the ability to transfer a target's image to the command center with high quality.

Demonstration and field testing activities of the ASELSAN Reconnaissance Surveillance Systems were carried out abroad. The order was received for a prototype system from abroad.

#### **Vehicle Tracking System**

The Battlefield Fuel Tankers (AKTAN), produced by BMC, will be followed by the Vehicle Tracking System developed by ASELSAN in line with the needs of the Turkish Armed Forces. With the AKTAN Vehicle Tracking System, information such as the tanker's position and fuel status can be followed from military headquarters and command centers in accordance with the NATO Friendly Force Information (NFFI) protocol. The position can be viewed through the map option offered in the AKTAN system. The delivery of the first batch of the systems was completed in 2017.



Soldier  
Command  
Control  
Information  
System  
(CENKER)

In line with the defense requirements for land and sea platforms and fixed facilities, ASELSAN offers cost effective state-of-the-art solutions for the development and integration of stabilized weapon stations in different calibers.

### WEAPON AND WEAPON FIRE CONTROL SYSTEMS

ASELSAN develops and produces weapon- and weapon-fire control systems of different caliber and types which can be used on different platforms for land, air and naval battles, which are offered to armies throughout the world.

#### Remote Controlled Weapon Systems (RCWS)

ASELSAN Remote Controlled Weapon Systems (RCWS) are in service of 15 countries including Turkey. The production and deliveries of the Remote Controlled Weapon Systems - Stabilized Machine Gun System (STAMP), 25 mm Stabilized Artillery System (STOP) and 30 mm Stabilized Naval Gun System (MUHAFIZ) - which are developed for marine platforms, continued within the scope of orders received from Turkey and abroad.

Developmental activities for the new generation of the lightweight and more capable 12.7 mm STAMP (STAMP-2) system continued. STAMP-2 system is designed to obtain a competitive advantage from a technological perspective with features such as its User Interface, which has an advanced graphical interface, an Integrated Training Simulator, the Precision Stabilized Electro-Optical Suit with independent motion capability on two axes, the ammunition feeding facility from under the deck, the feature that is NATO compatible and able to support weapons of Russian origin, and with an improvement in automatic target tracking and firing performance.

For the new version of the STOP system, development activities have been continuing for the User Interface with an advanced graphical interface, an Integrated Training Simulator, and the Precision Stabilized Electro-Optical Suit with an independent motion capability on two axes.

30 mm  
Stabilized Naval  
Gun System  
(MUHAFIZ)



Production and delivery of the 40 mm and 76 mm Naval Gun Fire Control Systems, within the scope of the orders have continued. Development activities for the 5/54 Naval Gun Fire Control System have got underway.

Mass production and delivery of the SARP Remote Controlled Weapon System, which is developed for use as a close defense weapon against land- and air- based threats to armored vehicles or at fixed facilities, has continued, meeting the needs of the Land Forces Command, Air Force Command, Turkish National Police and General Command of the Gendarmerie.

The export of the SARP-NSV system, which is a version of the SARP system and that can be fitted with weapons of Russian origin, was carried out.

The mass production and deliveries of the SARP-DUAL System in Turkey continued. The SARP-DUAL system allows the user to select a weapon via the control unit under operational requirements, and into which two co-axial weapons can be integrated at the same time to meet the needs of the user. The SARP-DUAL systems were also exported to meet the requirements of the Qatar Armed Forces.

The qualification activities of the NEFER Unmanned Turret System, on which there is a 7.62 mm co-axial weapon with 25/30 mm automatic cannons, on which anti-tank missiles of either western or eastern origin can be fitted, were completed. Developed for land vehicles and equipped with an independent electro-optical system, the NEFER System has become an important option for both countries which use NATO weapons and countries which keep weapons of Russian origin in their inventories.

#### **155 mm FIRTINA Self-Propelled Howitzer Fire Control System**

Following activities carried out in 2017, the first stage firing qualification tests of the new generation FIRTINA Howitzer were completed successfully.

The effectiveness of the new generation FIRTINA, which will be equipped with the systems developed by ASELSAN, in the battlefield was increased. With its new turret and additional equipment, the new generation FIRTINA howitzers gained a wide array of additional abilities that will place them ahead of their competitors. In this context, the turret and barrel guidance system was made completely electrical and servo controlled, and many items of the equipment are designed and developed according to advanced technology. The projectile feeding function has been made fully automatic, from the magazine to the barrel. It was integrated into the SARP weapon system to meet the close protection needs of the howitzer.

155 mm FIRTINA  
Self-Propelled  
Howitzer Fire  
Control System





### Light Towed Air Transportable Howitzer Fire Control System

The system has been developed as part the BORAN Light Towed Air Transportable Howitzer development project, in order to meet demand for artillery weapons with a high hit accuracy and tactical flexibility, as required by constantly changing and ever more challenging combat conditions. The weapon is light weight with modern equipment, and transportable by helicopter.

### Modernization of the 155 mm Towed Howitzer

Modernization activities were carried out to add new features to the 155 mm Towed Howitzer in order to increase its means and capabilities.

Work has been carried out to increase the effectiveness, reliability and the speed of task execution of the PANTER Howitzers by adding new features to the existing models and by integrating them with the 6x6 vehicle platform. The prototype weapon system was prepared and the PANTER Howitzer on the vehicle was verified with firing tests.

### Multi Barrel Rocket Launcher Weapon Management Systems

The Multi-Barrel Rocket Launcher Weapon Management Systems provide to the transition, deployment, firing preparation and firing control operations of multi-barrel rocket launchers. The design, production and delivery activities were carried out within the scope of the contracts signed for the sale of the Weapon Management Systems, both in Turkey and abroad.

### ALKAR 120 mm Automatic Mortar System

The ALKAR 120 mm Automatic Mortar Weapon System is able to load ammunition automatically, can calculate the firing command by computer and can be directed automatically according to the firing command. It can be integrated into a wide range of vehicles with the recoil mechanism that was originally developed by ASELSAN.



ALKAR 120 mm  
Automatic Mortar System

Activities continued for the use of the ALKAR System on the vehicle, into which the barrels as grooved/smoothbore of different origins can be fitted.

#### **81 mm Mortar Pointing and Orientation System**

For more effective, faster and reliable use of 81 mm mortars, firing tests of the system were carried out in the user units. The system allows the mortar to be pointed precisely in a very short space of time, firing commands to be calculated with the system computer at the same time and the barrel to be directed with the help of the screen display.

#### **60 mm Mortar Sight Shooting System**

The system has been developed for more effective and reliable use of the 60 mm mortars, and the firing demonstrations of the system were successfully carried out.

#### **ALTAY MBT Fire Control and Electronic Systems**

Within the scope of the ALTAY Project, in which ASELSAN is the main supplier of Electronic, Electro-Mechanical and Electro-Optical systems, all deliveries of Tank Fire Control System, Electric Gun and Turret Drive System, Tank Command Control Communication and Information System, Tank Driver's Sight System, Tank Laser Warning System, Remote Controlled Weapon System and Battlefield Target Identification System were accomplished. Qualification and acceptance tests of these systems were completed successfully on prototype tanks. The technical data package prepared within the scope of the project was submitted to the Undersecretariat for Defense Industries, and the project is expected to be completed after the completion of the examination period.

At the same time, preparations for the ALTAY Project's serial production phase have got underway, with ASELSAN submitting its proposals to the companies which are candidates to be a main contractor, and the proposal evaluation process is continuing.

#### **Main Battle Tank Modernization**

ASELSAN formulates new solutions aimed at light tanks and main battle tanks, based on its experience and competence in system development, integration and modernization in the field of MBT and weapon systems, and establishes solution partnerships.

The solutions developed for various MBTs are presented to international markets. In this context, ASELSAN continued to work on the modernization of the T-72 Tank with its subsidiary in Kazakhstan, the KAE Company. The business development, promotion and demonstration activities for the modernization of the M60, Leopard-1 and Leopard-2 tanks were carried out within the framework of international cooperation.

#### **FIRAT - M60T Modernization**

The modernization of the M60T tanks was carried out by ASELSAN within the scope of the FIRAT Project, which was initiated to improve the protection level of the Main Battle Tanks participating in Operation Euphrates Shield against anti-tank threats and terrorist elements, and to bring additional capabilities to existing systems. The M60T tanks, whose system integration is carried out in Military Bases located along the South-East border, are used directly in operations.

#### **The National IFF Interrogator Integration into the Pedestal Mounted Air Defense (PMADS) Systems**

Work continues apace on the nationalization of the IFF (Identification, Friend or Foe) Interrogators, which are in the PMAD (Pedestal Mounted Air Defense) systems of the Land Forces Command inventory. Integration validation activities are continuing successfully.

#### **Ammunition Transfer Systems**

All deliveries under the main contract were completed in the Ammunition Transfer System (ATS) project, which is used for the POYRAZ Ammunition Resupply Vehicle. An additional procurement contract was signed in the project, and production activities got underway.



  
ALTAY Tank



# Microelectronics, Guidance and Electro-Optics Business Sector

“  
High-tech product groups including Microelectronics, Avionics, Electro-Optics, Guided and Unmanned Systems, which are developed within ASELSAN to meet the requirements of the modern battlefield, have been working successfully in the armed forces throughout the world, primarily in the Turkish Armed Forces.”





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**ELECTRO OPTIC SYSTEMS**  
**GUIDANCE AND UNMANNED SYSTEMS**  
**AVIONIC SYSTEMS**

## The Microelectronics, Guidance and Electro-Optics Business Sector



CATS Electro-Optical  
Reconnaissance,  
Surveillance and  
Targeting System

ASELSAN produces and develops thermal systems, daytime vision systems, night vision systems, laser systems, electro-optic countermeasure systems and multi-sensor electro-optical systems.

### ELECTRO-OPTIC SYSTEMS

Within the scope of the Electro-Optic System solutions, work was carried on the development of thermal vision, daytime vision, image enhancing night vision, laser, electro-optic countermeasures and multi-sensor electro-optic systems as well as basic technologies used in these systems as land, air, sea, space platforms and portable systems.

#### Targeting Systems

The third prototype of the ASELPD Electro-Optic Reconnaissance, Surveillance and Targeting System, which is developed for fighter aircraft platforms, was completed and delivered. Serial production of the ASELPD system is ongoing and deliveries have been carried out within the framework of domestic and foreign contracts. Proposals were submitted to meet the needs of various customers abroad.

Deliveries continued for the CATS Electro-Optical Reconnaissance, Surveillance and Targeting Systems.

Deliveries of the ASEFLIR-300T Electro-Optical Reconnaissance, Surveillance and Targeting System were realized within the scope of the ATAK Project. Deliveries of the ASEFLIR-300T System aimed at the modernization of the Cobra Helicopter continued within the scope of an international contract.







With their unique designs and effective algorithms, ASELSAN's electro-optic systems provide users with a superior performance in all kinds of battlefield situations.

The newly designed ATMACA and FINCH Reconnaissance and Surveillance Systems are deployed on unmanned platforms. Developmental work continued for the KUZGUN Reconnaissance Surveillance and Targeting System, which is designed for unmanned platforms.

Deliveries were carried out to the Laser Warning Receiver System (LIAS) within the electro-optic countermeasure system family. Sensors of the Missile Warning System, another electro-optic countermeasure system, were produced within the scope of an international contract.

### Reconnaissance Systems

The ATS-70 Electro-Optic System, which was developed and qualified in 2016, was delivered in large quantities to the Turkish National Police, the Land Forces Command and the General Command of Gendarmerie in conjunction with sales of the SARP System in 2017. The system continues to be produced in large quantities within the scope of both domestic and international sales.



EXPLORER







VIPER - Laser  
Designator  
System

Deliveries of the VIPER - Laser Designator System, whose coordinate finding performance was enhanced by improving the existing features for the Land Forces Command Artillery Corps requirements, were successfully completed. The Laser Designator System contract for the General Command of Gendarmerie requirement was signed in 2017, and the first batch of deliveries was successfully completed.

In order to meet domestic and foreign customers' need for high performance thermal imaging that can be deployed on various platforms, the designs of the EYE-LR Thermal Camera Family were completed in 2017, and the systems / devices were qualified. The contract was signed for the supply of EYE-LR Thermal Camera to meet an international customer's need for missile sighting. Sales contracts were signed for the EYE-LR Thermal Camera System Family, to meet the needs of the Naval Forces Command and the Air Force Command, and deliveries began. The new generation EYE-LR Vehicle Thermal Camera System, which is designed to meet the electro-optic sensor system needs of military vehicles, was delivered under the contract signed with an international customer.





## The Microelectronics, Guidance and Electro-Optics Business Sector

The delivery of the electro-optic unit consisting of ZEBRA Multi Sensor Security Cameras and over 110,000 electro-optical camera modules was successfully completed within the scope of the Urban Security Management System (USMS) and Plate Recognition System (PRS) Project, aimed at meeting the needs of the Turkish National Police.

Qualification tests of the ARYA Electro-Optic Multi Sensor System, whose design was completed within the scope of the USMS Project, are ongoing. The mass production of the system will begin in 2018.

Production activities of the Falconeye-MW Electro-Optic Sensor Systems are continuing within the scope of the ATEŞ Mobile Border Security System Project signed in 2017.

Within the scope of the sales of the PERI EYE Thermal Camera product group, all deliveries to two different international platform manufacturers were successfully completed during 2017.

Within the scope of the SAGER STA Electro-Optic Sensor Systems Contract signed between the FNSS (FNSS Savunma Sistemleri A.Ş.) and ASELSAN to meet the Land Forces Command's requirement for Weapon Carrier Vehicles (WCV), two prototypes of the SAGER-STA Electro-Optic Sensor System for tracked anti-tank vehicles with KORNET-E Anti-Tank Guided Missiles were delivered and serial production deliveries will continue.

Deliveries of the ATS-60 Electro -Optic System, including the cooled thermal camera system required by the SARP Remote Controlled Weapon Systems exported to Kazakhstan, were completed successfully.

Under the Altay Project Period-I Turkish Main Battleship Tank Electronics, the Electro-Optic Systems Procurement Contract, prototype tank system and sub-system qualification tests were successfully completed. The Altay Project is being prepared for the serial production phase.



YAMGÖZ-  
Close Range  
Surveillance  
System

Within the scope of the Modular Temporary Base Area (MTBA) Project, the Falconeye-MW Electro-Optic System, the DAS Camera System and the ATS-40/70 Gun Mounted Targeting System, which are included in the electro-optical system configuration, are being delivered. In this context, electro-optic system deliveries for the fifth stage of the MTBA were successfully completed and sixth stage deliveries of the MTBA are ongoing.

Within the scope of the Dragoneye Electro-Optical System Project, design work was completed and the prototype device was produced. The system will be ready for mass production after qualification tests have been carried out. A contract was signed with the Ministry of Defense (MoD) to supply hand-held thermal imaging devices needed by the Land Forces Command. Within the scope of the contract, deliveries of the Dragoneye product will be realized during 2018 and 2019.

The M60T Modernization Project Contract was signed by the Undersecretariat for Defence Industry to bring additional capabilities into existing systems in order to effectively protect the main battle tanks. Deliveries are ongoing within the scope of the contract for the system, which includes the Close Range Surveillance System (YAMGÖZ), Tank Driver Vision System (DVS), Tank Laser Warning System (TLWS) and ATS-70 equipment.



ARYA  
Electro-Optic  
Multi Sensor  
System



STA





PIRI Infrared Search and Tracking System

One prototype was delivered within the scope of the contract signed for the modification of the Thermal Sensing Unit and the Thermal Electronic Unit of the DNTSS (Day Night Thermal Sight System), which is in the Land Forces Command inventory.

#### Naval Systems

Harbor and sea acceptance tests of the ASELFLIR-300D and the Laser Warning System (LWS) for two ships were completed within the Landing Ship Tank (LST) Project.

Orders from the German Airbus DS Company were met in 2017 within the scope of the Submarine Periscope Thermal Camera Project. Another batch of orders has been received for international sales and one system delivery was realized in 2017. Deliveries will continue in 2018 in line with the project plan.

Acceptance tests of the ATS-60 Electro Optic Sensor System, which was integrated into the Kaan-19, the SAR and the 80-class boats to meet the needs of the Coastguard Command, were completed and the system was brought into use.

Deliveries of the Eye Thermal Camera, the GÜNGÖR Day Vision Camera and the GZM Laser Distance Measuring Device Systems intended for ASELSAN's platform production continued.

Deliveries of the electro-optic systems, which are produced within the scope of the Coastguard Radar System (SGRS) Project, were completed.

Field trials of the prototype systems, which are produced within the scope of the PIRI Infrared Search and Tracking System (PIRI IRST) Project and the SeaEye AHTAPOT System, were carried out with the participation of the Naval Forces Command personnel.



SeaEye AHTAPOT System

ASELSAN manufactures and develops thermal imager, enhancing night vision, day vision, laser range finder, laser designator and laser warning systems.



### Portable Tactical Systems

The remaining deliveries of the Guard, Sharpeye Thermal Hand-held Sights and Mini-Thermal Weapon Sight within the scope of the contract signed as extended over a period of years for the Thermal Hand-held Sight and Thermal Weapon Sight needs of the Naval Forces Command were realized in 2017.

Contracts were signed for the Sharpeye Thermal Hand-held Sight, the A100 Monocular Night Vision Sight and the Mini-Thermal Weapon Sight, and the deliveries were completed in 2017. Two different contracts were signed for the Mini Thermal Weapon Sight clip-on.

In 2017, a contract was signed for the project being carried out by the Land Forces Command for commando modernization. Deliveries of the 1x-4x, 1.5x-6x Optical Sights, Reflex Sight, the 3-12x Sniper Sight, the 35 mm Thermal Attachment,

the 60 mm Thermal Attachment and the A600 Night Vision Attachment devices will be carried out in 2018 and 2019.

Within the scope of the requirement of the Turkish National Police Special Operations Department, the tender for the 4x magnification day sighting was won. Deliveries are planned to be completed by the beginning of 2018.

Within the scope of the Van Kedisi Fusion Project, where night vision and thermal technologies are combined into a single product, different device configuration design activities including the hand-held sight, helmet mounted sight, sighting and clip-on were carried out. The device qualification is planned to be carried out in 2018.

Promotional activities were carried out for the products within the scope of the needs of the Turkish Armed Forces and the Turkish National Police.



The deliveries under the A100 Monocular Night Vision Sight procurement contract signed with the Philippines Ministry of Defense were completed in 2017.

Deliveries under the procurement contract for the BOA Thermal Weapon Sight signed with the Kingdom of Saudi Arabia were completed in 2017. Requests made by the Kingdom of Saudi Arabia for repairs of the same devices delivered in the previous years were met on site, ensuring customer satisfaction.

Within the scope of export targets, several contracts were signed with the Defense Ministries of a number of different countries for the Sharpeye Thermal Hand-held Sight, the Guard Thermal Hand-held Sight, the BOA Thermal Weapon Sight, the Mini-Thermal Weapon Sight product family, the Önder Thermal Sight, the A100 Monocular Night Vision Sight, the A300 series Night Vision Weapon Sight, the A600 Night Vision clip-on and Mini Thermal Weapon Sight clip-on and Sniper Rifle Scopes, and the contracts entered force.

## ASELSAN continues to grow together with its subsidiaries.

### Electro-Optical Product Programs

The joint venture company established in Kazakhstan continued its activities for the deliveries of Kazakhstan ASELSAN Engineering (KAE) LLP. Night vision kits and thermal camera deliveries were realized within the scope of the KAE Industrial Cooperation and Kit Supply Project. In addition, equipment deliveries under the Mini-TWS technology transfer contract signed in 2016 were completed. Moreover, new electro-optical products were introduced to the Kazakhstan Armed Forces through extensive demonstration activities held in Kazakhstan in September 2017. New technology transfer activities are also under consideration, in accordance with the requirements of the Kazakhstan Armed Forces.

Following demonstration activities carried out in 2017, thermal camera and sighting and electro-optical modernization needs were evaluated for various usage areas within the scope of the Industrial Cooperation and Kit Supply Project realized with ASELSAN MIDDLE EAST (AME) LTD, a joint venture company established in Jordan.

ASELSAN Hassas Optik (AHO) A.Ş., which was established in Sivas/Turkey in 2016, started production of optical materials and various day/night sight/sightings with the transfer of know-how realized by ASELSAN.



Mini TSD-Thermal clipon and A940 day vision sight



A600 Night Vision clipon and A940 day vision sight



KND 3-12 Sniper Rifle Scope



Microelectronic technologies are classified as a critical technology and are mainly owned by developed countries. Despite their entry barrier in terms of initial investment and technical difficulty, ASELSAN can develop these technologies and bring them up to the level of production.

### MICROELECTRONICS

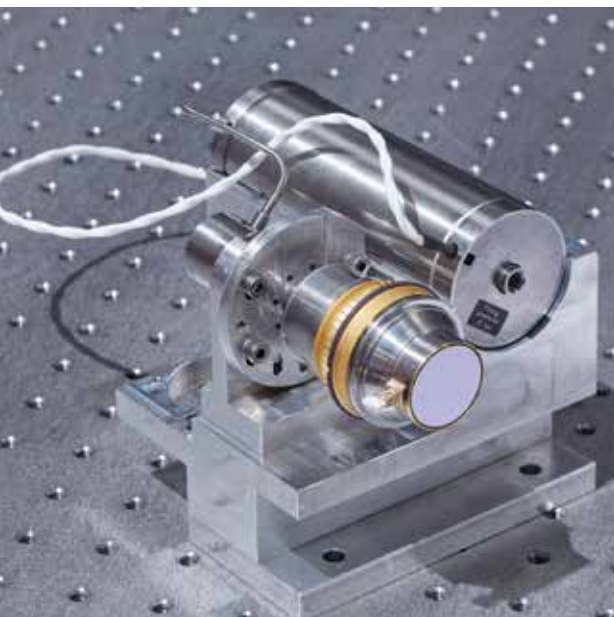
Product-oriented R&D activities carried out in the field of microelectronics enhance ASELSAN's technological depth and reduce its dependence on external resources.

#### Microelectronics Fields of Activity

ASELSAN continued the design and manufacturing activities for Cooled and Uncooled Infrared Photon Detectors, Uncooled Infrared Thermal Detectors (Microbolometers), Inertial Navigation Sensors, and Ultraviolet (UV) Image Intensifier Tubes, which are included in ASELSAN's product and system solutions.

#### Cooled Infrared Photon Detectors

ASELSAN developed the EYE-Q thermal camera by combining its Quantum Well Infrared Photodetector (QWIP) thermal imaging camera design and production capability, which it began mass production of at its facilities. The qualification activities of the EYE-Q Thermal Camera, which has applications



Cooled  
Infrared  
Photon  
Detector



in border security, coastal safety and critical facility security needs, were completed in 2017, and product sales of the camera are due to start in 2018.

In the molecular beam epitaxial growth (MBE) system, the  $320 \times 256$  format and  $30 \mu\text{m}$  pitch cooled infrared detector prototype was produced by using mercury cadmium telluride (MCT) material developed entirely by ASELSAN engineers, and the prototype was exhibited for the first time at the IDEF 2017 exhibition. The prototype of the MCT cooled infrared detector with a  $640 \times 512$  format and  $15 \mu\text{m}$  pitch, which is also used in many electro-optical systems such as ASELPD and CATS, was also successfully developed in August 2017 by continuing work after the IDEF.





## The Microelectronics, Guidance and Electro-Optics Business Sector

### Uncooled Infrared Thermal Detectors (Microbolometer)

The first bolometer type uncooled infrared detectors were developed by ASELSAN engineers entirely through domestic capabilities, and were produced successfully. The detectors were integrated into the ASELSAN Thermal Weapon Sight in 2017. Infrastructure studies for the mass production of the detectors were carried out at ASELSAN.



KILAVUZ Inertial  
Measurement Unit

### Image Intensifier Tubes

Tube production has been continuing in the production line established with the aim of manufacturing UV (Ultraviolet) Image Intensifier Tubes, which are an important subcomponent of Helicopter Missile Warning Systems. Developmental activities of next generation high photocathode sensitive tubes for the use of the UV tubes on different platforms continued in 2017.

### Inertial Measurement Units

The KILAVUZ Inertial Measurement Unit (IMU) is an ASELSAN product used inside domestically produced ammunition types, especially the Precision Guidance Kit (also known as HGK2). Within the scope of the project, a cooperation protocol was signed between ASELSAN and TÜBİTAK-SAGE at the IDEF 2017. ASELSAN completed the initial production of the IMUs, which is the critical unit of Navigation, Stabilization and Fire Control systems, in 2016. Exhibiting its products at the IDEF 2017 exhibition, ASELSAN continued development and integration activities of the IMU for platforms such as ASELPD, CATS, KORKUT, FIRTINA etc. under the KILAVUZ Project name.



## ASELSAN develops anti-tank and air defense missiles Infrared Seeking Warheads.

### GUIDANCE AND UNMANNED SYSTEMS

#### Missile Seeker Projects

Mid-Range Antitank Missile and Long-Range Antitank Missile (OMTAS/UMTAS) have been successfully qualified. Following the LRIP activities, the mass production contract was signed between ASELSAN and ROKETSAN. The project is in mass production stage.

Within the scope of the HISAR-A Low Altitude Air Defense Missile Infrared Seeker Design and Development Project, the seeker design verification activities (subsystem development and test phase) were successfully completed. The first seeker prototypes were delivered for missile firing tests. HISAR-O Medium Altitude Air Defense Missile Seeker Design and Development Project activities continue under the Design Verification Phase.



UMTAS/OMTAS-  
Missile Infrared  
Seeker

Within the scope of KARAOK Short-Range Antitank Missile Seeker Design and Development Project the preliminary design activities are on-going.





### Guidance Kits Projects

Within the scope of development and mass production activities of the Laser Guidance Kit Project; the mass production of LGK-82 which is used with MK-82 (500 lb) general purpose bombs has been continuing and the kits have been delivered to the Turkish Air Forces. The ground and flight tests of LGK-84, which is used with MK-84 (2000 lb) general purpose bombs, were successfully completed. As a part of certification activities the firing tests have been started.

The mass production of the Precision Guided Kit, HGK-2 which is used with MK-84 general purpose bombs, has been continuing and the kits have been delivered to the Turkish Air Forces. The Laser Seeker used with HGK-2 is in mass production phase. The Laser Seeker will bring higher hit precision to the general purpose bombs and allowing them to be used against moving targets. Within the scope of Miniature Bomb Design and Development Project the design verification activities are on-going.

### Unmanned Maritime Vehicle Projects

The ALBATROS Unmanned High Speed Surface Target Vessel Family development and trials were completed. Two different versions of ALBATROS, Target and Katamaran were successfully used in live firing tests of the Turkish Navy.

In order to meet the requirements of the Naval Forces Navigation Hydrography and Oceanography Department, a proposal was submitted for a New Type Semi-Autonomous MESAHA Vessel supply project.

ERTUĞRUL  
Bomb Disposal  
Robot

ASELSAN develops indigenous autonomy focused technological building blocks to be used in future's autonomous unmanned systems effectively.

### Unmanned Ground Vehicle Projects

The design Development and qualification of the new generation Bomb Disposal Robot ERTUĞRUL New Generation Bomb Destruction Robot, which has been developed within the scope of the Bomb Destruction Robot Project required by the Turkish National Police, was completed and the qualification tests were successfully carried out. Mass production of units has got underway started and customer deliveries are continuing.

NATO's standardization activities for the interoperability of unmanned vehicles continued. Work continued on developing automation kit for existing vehicles as part of process of converting the vehicles for unmanned operation.

Within the scope of R&D work on the Automatic Tractor Steering and Control System Development being carried out with the General Directorate of Agricultural Research and Policies (TAGEM) of the Ministry of Food, Agriculture and Livestock, the automatic steering system, which was integrated into a tractor, was verified through tests performed.



ASELSAN develops and produces autonomous and remote controlled unmanned vehicles, which will have a wider range of applications in the future.

#### Unmanned Aerial Systems

##### Mini Unmanned Aerial Systems (MUAS)

Within the scope of the joint production protocol signed between Jordan's KADDB (King Abdullah II Design and Development Bureau) and the AME (ASELSAN Middle East), developmental activities for Phase-1 of the development were successfully completed. Development of Image Processing Based Precision Agriculture Applications with Unmanned Aerial Vehicles for the General Directorate of Agricultural Researches and Policies of the Ministry of Food, Agriculture and Livestock (TAGEM), was successfully completed.

##### SERÇE Multi Rotor UAS

Development of the SERÇE Multi Rotor Unmanned Aerial Systems were completed and introduced to the Turkish Armed Forces, the General Command of Gendarmerie and the Turkish National Police. The SERÇE stands out with its high payload carrying capacity and wind resistance, along with its full autonomous usage features.



##### KARAGÖZ Aerostat Surveillance System

KARAGÖZ Aerostat Surveillance System Product Family, offers the most appropriate solutions based on the state-of-the-art technology developed to garner a wide range surveillance and intelligence information and provide early warning capability to critical facilities and fixed military units in accordance with mission requirements such as airborne persistent surveillance, critical facility security and regional communication.

The KARAGÖZ Product family is adapted for various tasks with different payload options such as an electro-optical camera, radar, communication relays and a long-range surveillance payload.



KARAGÖZ-Aerostat  
Surveillance System

SERÇE-Multi Rotor  
UAS



### Turkey's first avionics system manufacturer and integrator, ASELSAN has been operating in this field for more than 20 years.

#### AVIONIC SYSTEMS

ASELSAN continued manufacturing and delivery activities regarding the Gendarmerie Helicopter Modernization, ATAK, ANKA, TARP-EO/ IR Reconnaissance Systems, ARI and Sea Hawk-II programs as main avionics integrator. Avionic system development and integration activities has been continued for Turkish Utility Helicopter, Turkish Light Utility Helicopter and HÜRKUŞ-B New Generation Basic Trainer Aircraft Programs.

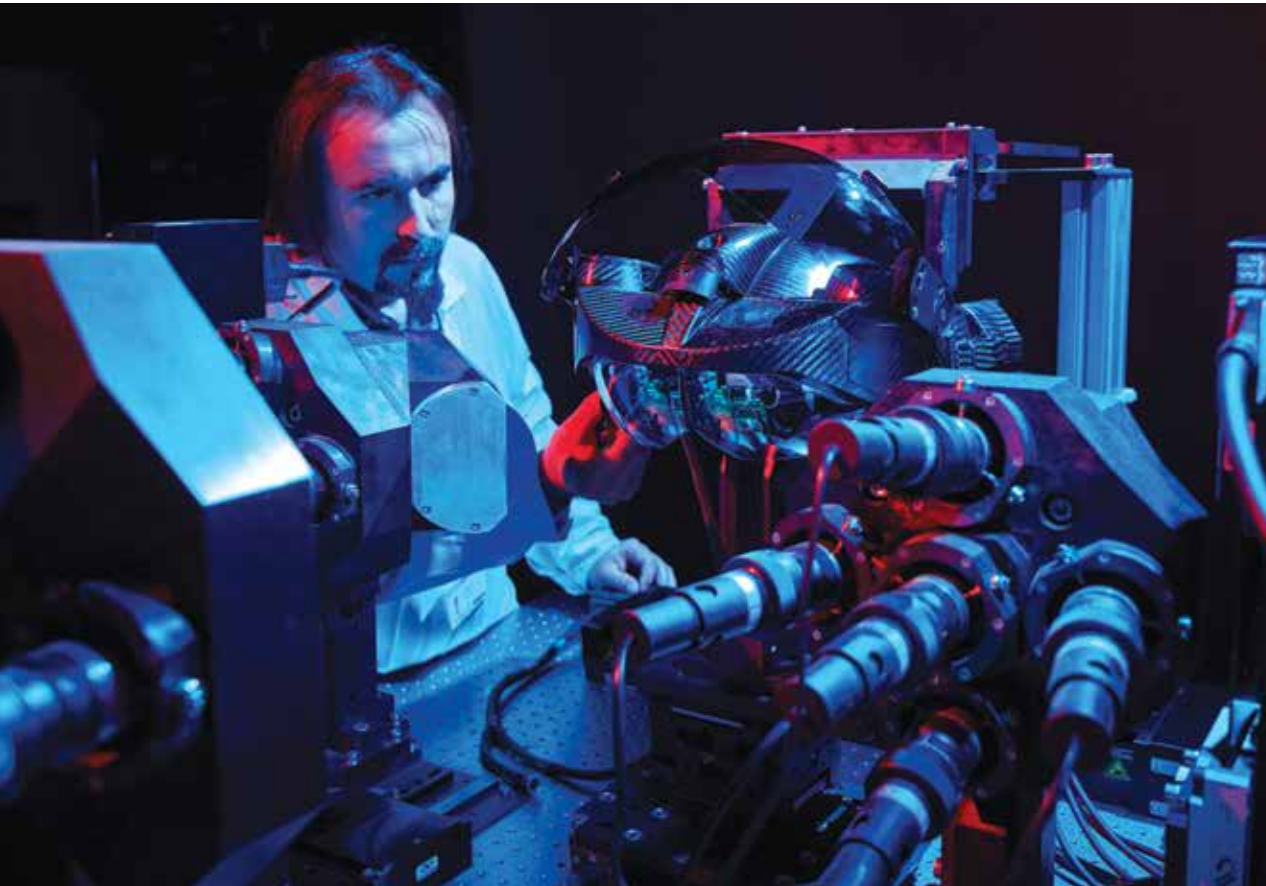
#### Helicopter Programs

ASELSAN is responsible for the development of hardware and software of Avionic Central Control Computer (ACCC) and the integration of all other avionic and weapon systems managed by ACCC for T-129 ATAK Helicopter Program. Besides, serial production, delivery of avionic systems and logistics support activities for the program has been performed.

Within the scope of T-129 ATAK Helicopter Program, deliveries of indigenously developed and manufactured avionics systems, primarily Avionic Central Control Computer, cockpit display and control systems, E/O detection and targeting sight, navigation, communication, electronic warfare and self-protection, mission and weapon management systems for nine (9) EDH Helicopters, twenty-nine (29) ATAK Phase-1 Helicopters and eleven (11) ATAK Phase-2 Helicopters were completed.

Nine (9) EDH and eighteen (18) ATAK Phase-1 Helicopters has been registered to the inventory of Turkish Land Forces. The acceptance test and qualification activities are still going on for eight (8) ATAK Phase-1 Helicopters. Within this context, ASELSAN provides Technical and Integrated Logistic Support services to TUSAS.

The design and integration of Helmet Integrated Cueing System (AVCI), which was specifically developed for T-129 ATAK Helicopter is completed. AVCI is the world's first hybrid (optic-inertial) head tracker capability helmet system, first time integrated on a specific helicopter platform. With high performance tracking capability, AVCI automatically aligns EO targeting and weapon systems to the pilots line of sight. The serial production and kit deliveries of AVCI has been continued.



AVCI Helmet  
Integrated  
Cueing  
System



Deliveries of the Smart Pod Electronic Kit (SPEK) for the T-129 ATAK Helicopter continued.

A contract has been signed for the modernization of two (2) AH-1W helicopters in Turkish Land Forces inventory, and the integration design phase is ongoing.

To the scope of the contract signed with Sikorsky for Turkish Utility Helicopter Program (TUHP), ASELSAN will execute the development, production and integration of critical avionic systems including mission, navigation, communication and electronic warfare systems. After integration of ASELSAN indigenous IMAS (Integrated Modular Avionics System) System, the helicopter S-70i will be renamed as T-70. Within the context of the Program, development activities are still running. Turkish and US Government approvals are completed for activation on 15 June 2016. Preliminary Design Phase was completed on 12 October 2017. Critical Design Phase activities are ongoing.

T-129 ATAK  
System  
Integration  
Laboratory



S-70A  
Blackhawk  
Modernization



## The Microelectronics, Guidance and Electro-Optics Business Sector



Within the scope of the Avionic Modernization of Gendarmerie Helicopter Program, ASELSAN is responsible for the avionic modernization of Sikorsky S-70, AB-205 and Mi-17 Helicopters currently existing in inventory of Turkish Gendarmerie. Integration activities for Mi-17 and AB-205 helicopters are completed and activities for S-70 helicopters are still running. Modernization of six (6) S-70 helicopters in Turkish Special Forces inventory has been started with the contract change in Avionic Modernization of Gendarmerie Helicopter Program.

ASELSAN signed an export contract with TUSAS for the modernization of fourteen (14) AH-1E Cobra Helicopters in 2015. This contract is a leading milestone in achieving progress in development and integration capabilities for ASELSAN export potential. Within the scope of the contract, existing avionics of the helicopter including mission computer, cockpit display systems, thermal sight system, weapon and navigation systems will be retrofitted by ASELSAN advanced avionics. Spare parts and ground support equipment will also be supplied. In June 2017, the scope of the contract has been broadened by additional four (4) of AH-1F Cobra Helicopters' modernizations. Serial production deliveries have been achieved in compliance with the contract since November 2016.

As part of the Light Utility Helicopter Program, executed by SSM, ASELSAN develops civil certified basic cockpit avionics, automatic flight control computer, health and usage monitoring computer, mission and flight management software. Besides development activities of the Program, currently existing ASELSAN avionic systems will be integrated to the helicopter as well.

In the scope of the frame contract, Procurement of Special Purpose Equipment and Services for Homeland Security, signed on June 4, 2007 between SSM and STM, ASELSAN has been awarded as subcontractor for two different contracts: Procurement of tablets for HTAWS (Helicopter Terrain Awareness and Warning System) and Development of HTAWS. These two contracts are signed on 15 August 2017 and 9 September 2017, respectively.

In the scope of the first contract, the HTAWS software loaded tablets are integrated into 200 helicopters, in inventory of End Users. In 2017, 189 HTAWS Tablets with HTAWS software were delivered for fifteen (15) different configuration helicopters of seven (7) different End Users. Integration activities on prototype helicopters are continuing. Serial integration schedule will be planned based on the availability of the End Users' helicopters.

In the scope of the second contract, newly developed HTAWS will be integrated to cockpit displays of 172 helicopters of Turkish Land Forces (S-70A Blackhawk, UH-1H/AB-205 and AS-532 Cougar). Development and procurement activities are proceeding.

Within the scope of the Sea Hawk- II Program, ASELSAN provides avionic systems for S-70B helicopters for Turkish Naval Forces. Inertial navigation and target detection systems has been delivered.



### Aircraft Programs

Logistic support under warranty period is continuing for the delivered and operational EO/IR reconnaissance systems as part of Turkish Airborne Reconnaissance Program (TARP).

As part of the ANKA Program, Flight Control Computer, Mission Computer and Electro-Optical Reconnaissance, Surveillance and Targeting System (CATS), Inertial Navigation System are indigenously developed and integrated by ASELSAN. The deliveries of systems are completed in compliant with the delivery schedules.

Under the scope of the New Generation Basic Trainer Aircraft (HÜRKUŞ-B), avionic equipments used on platform are integrated to ASELSAN developed cockpit displays and mission computer. Mission/Flight Management Software and Digital Map Software are also developed by ASELSAN. Qualification of developed items is accomplished. In addition to serial production deliveries, software development and certification activities are ongoing.

As part of the JSF Program, ASELSAN continued its activities with prime contractor companies Lockheed Martin, regarding the manufacturing of optics of EO targeting system and Northrop Grumman on manufacturing of sub-assemblies of integrated communication systems.

Activities aimed at fortifying infrastructure within the scope of the ELMAS Project, and the monitor module development activities related to LCD displays used in military cockpit displays and which are subject to export license, were completed and prototype production work is continuing.

### Navigation Systems

The Navigation necessity of Turkish Armed Forces has been supplied by integration of ANS-510 and ANS-310 indigenous ASELSAN navigation systems to various land, naval and airborne vehicles through different programs since 2010. Under formerly awarded Co-Production License Agreements with Northrop Grumman (NG), shipments of LN Series (LN-100, LN-260 and LN-270) navigation systems has been continuing.

As part of the land platforms, shipments of ANS-510K and ANS-310K navigation systems for SAKARYA Programs (5 units) and Fuel Tanker, AKTAN Program (2 units) has been started respectively. The first export shipment of tactical grade ANS-310K Navigation System has been accomplished to Qatar through integration of eight (8) AMAZON vehicle of BMC Company. Besides, production of ANS-510K for Fire Support and Automation (ADOP) and Air Defense System (KORKUT) is continuing.

Regarding naval platforms, two (2) ANS-510D Naval Navigation Systems have been delivered for MİLGEM Program.

Sixteen (16) and nineteen (19) ANS-510 Airborne Navigation Systems have been delivered to ATAK and ANKA platforms, respectively. In HÜRKUŞ-B Program, sixteen (16) ANS-511 Airborne Navigation Systems have been delivered. Four (4) Systems of LN-100G has been delivered for Turkish Gendarme Helicopter Program.

HÜRKUŞ-B  
System  
Integration  
Laboratory

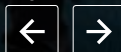




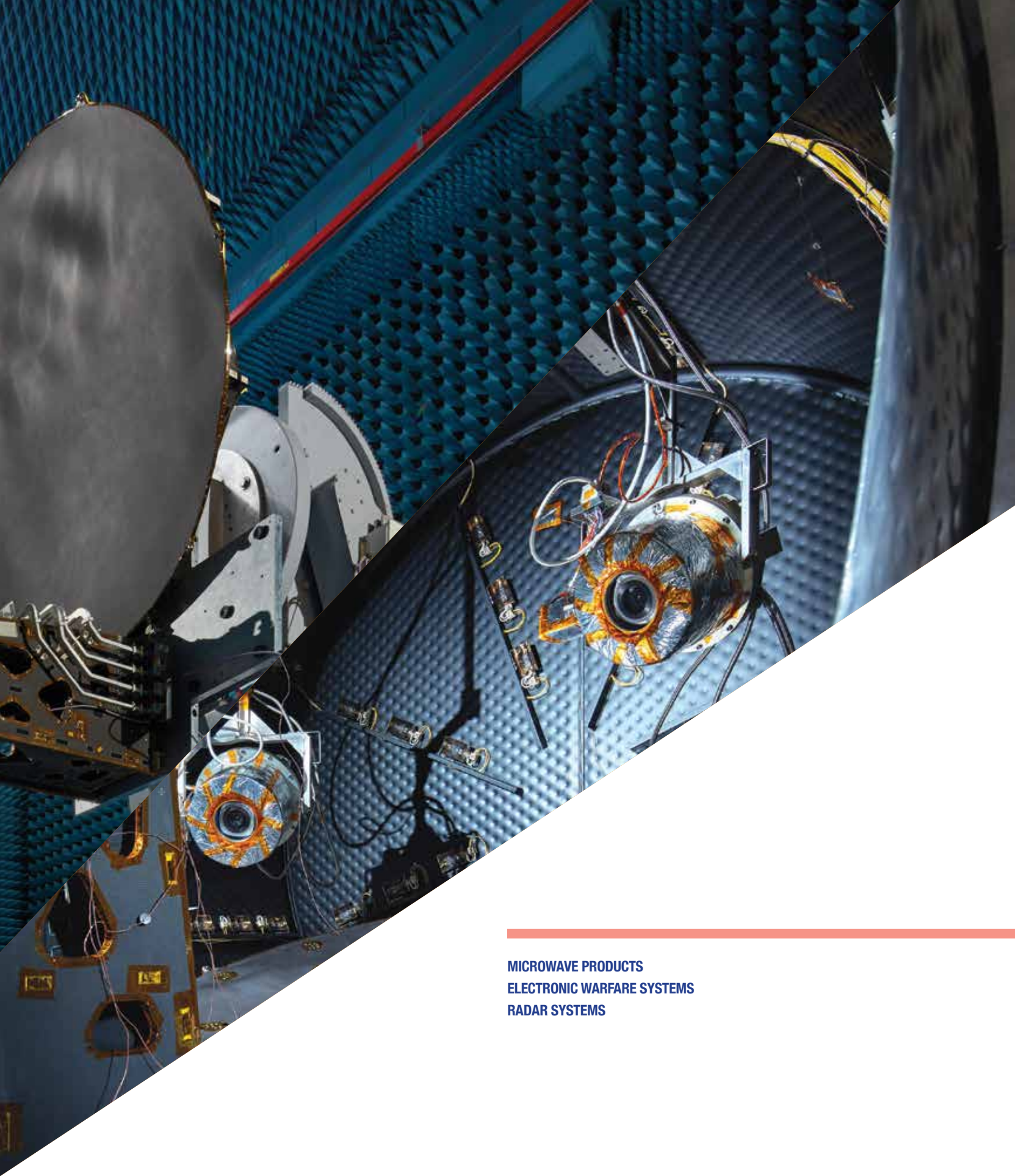
# Radar and Electronic Warfare Systems Business Sector

ASELSAN Radar & EW Business Sector (REHIS), is today a global provider of advanced Radar and EW Systems and technologically critical microwave modules and components. ASELSAN has been involved in the development of Electronic Warfare Systems since the 1980s and Radar Systems since the 1990s. ASELSAN's activities include advanced system design, hardware and software design, algorithm development, systems integration, manufacturing, verification, platform integration, qualification, acceptance testing and after-sales support for a wide variety of systems covering land, naval and airborne platforms.

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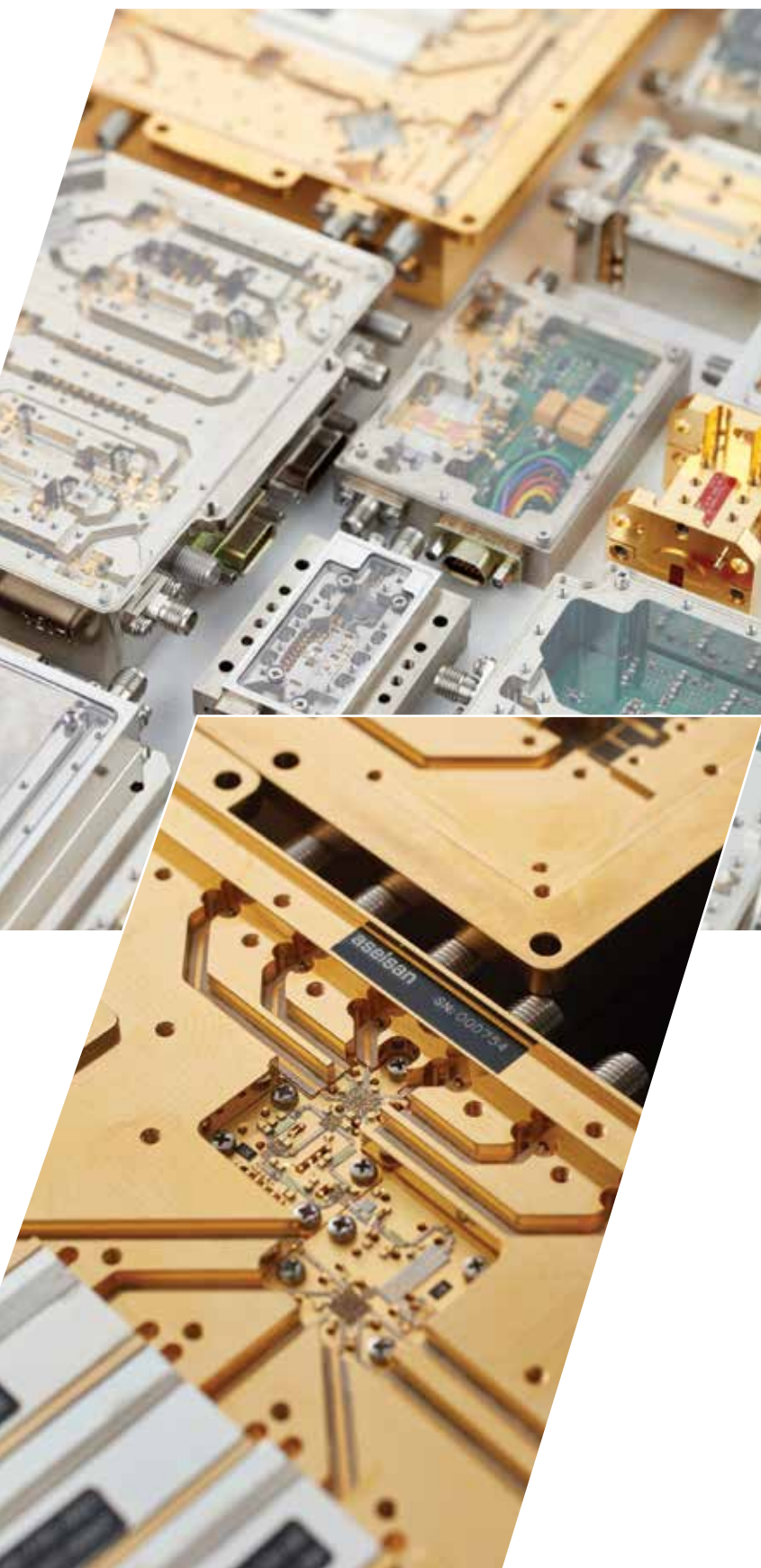


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**MICROWAVE PRODUCTS**  
**ELECTRONIC WARFARE SYSTEMS**  
**RADAR SYSTEMS**



## Radar and Electronic Warfare Systems Business Sector

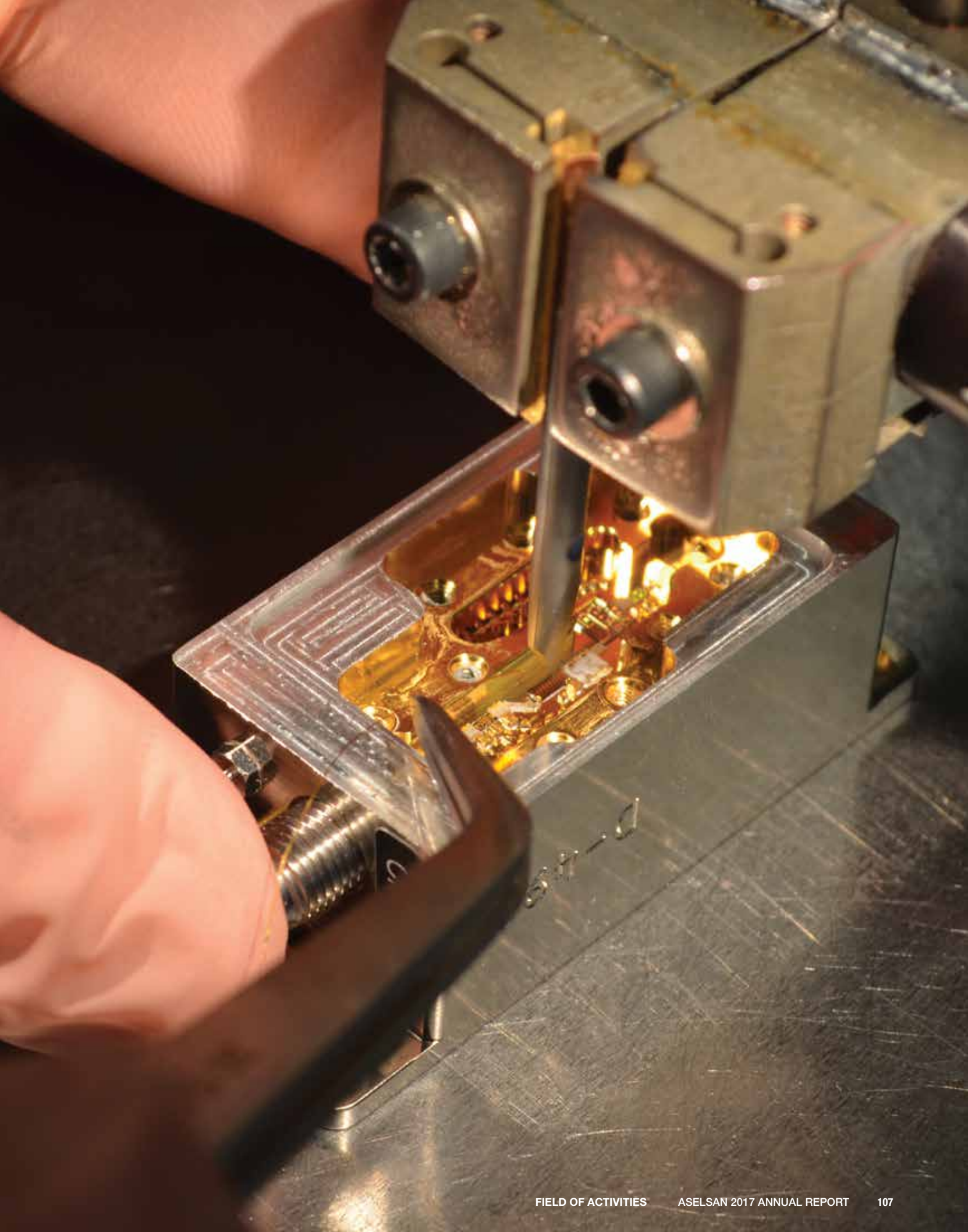


ASELSAN designs and manufactures microwave components and modules to be used specifically in technology critical areas and applications.

### MICROWAVE PRODUCTS BUSINESS LINE

Microwave Products Business Line designs and manufactures technologically critical and functionally dedicated microwave modules in accordance with the requirements of radar, electronic warfare, satellite and other systems developed by ASELSAN. The design and production activities consist of high performance transmitter, transmitter/receiver modules, front-end modules, frequency converters, power amplifier modules, Digital Frequency Discriminators (DFD), Detector Logarithmic Video Amplifiers (DLVA) and filter modules. In addition, monolithic microwave integrated circuits (MMIC) and thin-film based components for the mission critical radar, electronic warfare and satellite systems are developed in-house by Microwave Products Business Line.

Activities for the development and production of critical materials used in new generation modules and components are in progress.





## Radar and Electronic Warfare Systems Business Sector

### Battlefield Target Identification System (BTIS) Project

Microwave modules used in Interrogator and Transponder Units of Battlefield Target Identification System are designed and produced by Microwave Products Business Line. Qualification, Factory Acceptance Tests and Platform Verification Tests on ALTAY Battlefield Tank were successfully performed. Delivery of Customer Prototypes and Technical Data Package was completed.

The project is managed by Microwave Products Business Line and serial production proposal was submitted. Related production activities are planned primarily for ALTAY Battlefield Tank and other platforms.

### Gallium Nitride (GaN) Technologies

GaN-on-SiC based RF/microwave transistors and microwave monolithic integrated circuits provide system level advantages such as size, weight, power, and reliability due to their high power per area, easier matching, high breakdown voltage, radiation hardness for space applications. With the recent progress through last decade in GaN technology, more optimized solutions were obtained regarding the substrate size and cost, process and production methods. Costs were reduced to the levels that can be handled enabling GaN technology with an effective market penetration. In addition to that, GaN-on-Si based devices introduced a new branch in electronic devices industry with the high voltage resistance and downsizing capability in power electronics. It is considered that GaN devices will have massive share and deployment in the market and will become one of the driving forces in economic scale.

Regarding the future of GaN technology, Microwave Products Business Line has performed various research and development activities with Bilkent University through the last decade. Silicon Carbide (SiC) Based GaN Switch Integrated Circuits and Radio Frequency (RF) Power Transistor Development Projects, which were signed with The Undersecretariat for Defence Industries (SSM), have been



conducted with the collaboration of Bilkent University. SiC Based GaN Switch Project is completed and prototype development activities are in progress for GaN RF Power Transistor Project.

### Silicon Germanium (SiGe) Technologies

SiGe BiCMOS technology provides high performance RF and control circuits work simultaneously by integrating SiGe based Bipolar Transistors (HBTs) to Silicon based CMOS processes. HBTs have advantages of lower noise and higher gain in microwave and millimeter frequencies compared with the Silicon based RF devices, owing to the transistor design architecture and material properties.

Within the scope of Generation of the Standard Cell Library for the SiGeC BiCMOS Technology Project, which was signed with The Undersecretariat for Defence Industries (SSM), ASELSAN is in collaboration with TÜBİTAK-BİLGEM and Mikroelektronik Araştırma Geliştirme Tasarım ve Ticaret Ltd. company. Chip prototypes of active/passive RF and CMOS models are planned to be manufactured after the completion of Process Design Kit (PDK) for SiGeC BiCMOS Technology. Critical Design Phase activities of the project are in progress.

### X-Band Satellite Communication System Project

X-Band Satellite Communication System Project signed between The Undersecretariat for Defence Industries (SSM) and ASELSAN. Microwave Products Business Line is currently responsible for the design and production of microwave parts of manpack satellite ground stations within the project. The design activities are in progress.





Design and production activities of microwave components and modules are held in more than 2,000 m<sup>2</sup> clean room facilities.”



#### 4-channel Phased Array Unit for 5G Applications Project

“4-channel phased array unit for 5G Applications” project proposal within the scope of EUREKA International Collaboration Program was started in October 2016. Within the Project 28 GHz 4-channel multi-functional Power Amplifier MMIC, Phase Shifter MMIC and antenna involved low cost multi-layer package prototype will be developed and verified. The project is being executed with the partnership of VIPER-RF (UK) company. Design activities are in progress.

#### TESİD Innovativeness & Creativeness Award Candidacy

As a candidate, the process is considered to be evaluated by TESİD Award Executive Committee and assigned jury members visited ASELSAN Gölbaşı Facility in November 2017.

#### TESİD Innovation Creativity Award Nomination

An application was submitted to the Turkish Electronics Industry Association (TESİD) for consideration of the multilayer microwave ceramic circuit manufacturing process developed by ASELSAN's Microwave Products Group in the “Process” category of the 2017 round of the association's Innovation Creativity Awards. The submission was deemed to be worthy of candidate status and a delegation appointed by the TESİD Award Executive Committee visited the ASELSAN Gölbaşı complex in November last year.

#### Exhibitions

Microwave Products Business Line attended IMS 2017, which is the most popular fair of microwave business sector, in June 2017. During the show, ASELSAN's in-house developed and manufactured microwave modules had been presented to the visitor companies and all other attendants.

In November 2017, ASELSAN was one of the participants of 3<sup>rd</sup> Global SatShow organized in İstanbul. Microwave Products Business Line had the chance to exhibit microwave modules which can be used in space and satellite projects. Space qualification capability of Microwave Products Business Line attracted the visitors of the show attended by the experts of space and satellite business.

The effectiveness of ASELSAN-developed electronic warfare system solutions has been repeatedly demonstrated on land, naval, and airborne platforms and in the operational environment.

### ELECTRONIC WARFARE SYSTEMS BUSINESS LINE

Work has been carried out with the aim of equipping our platforms, which are used by Turkish Armed Forces and other institutions, with indigenous Land/Airborne/Naval Electronic Warfare systems equipped with state-of-the-art technology, in order to increase task survivability and situational awareness to the maximum level. In addition to Aselsan's domestic work, export oriented activities have been carried out in order to meet Aselsan's international customers' needs for electronic warfare systems. Product development activities were also carried out to reduce the size of existing systems in accordance with the developing technology and to improve their technical performance.

Along the contracts signed with the Undersecretariat for Defense Industries (SSM), Industrial Participation/Offset (IP/O) contracts are also signed with the Industrialization Department of the SSM. By working with Small and Medium Enterprises (SMEs) and supply industry companies in accordance with our strategic plans, work has been carried out intensively with domestic subcontractors on equipment such as power generators, air conditioning units, power distribution units, power amplifier modules, antenna adaptation units, power supplies, easy-to-install antenna mechanisms and masts within the scope of our IP/O commitments in order to procure all kinds of materials and services which can be produced domestically from domestic resources.

Within the scope of the Land Electronic Warfare Projects, the following new contracts have been signed with the Presidency of the Republic of Turkey, the Turkish Ministry of Defense, Undersecretariat for Defense Industries (SSM), STM Inc., the Turkish Naval Forces Command, the General Command of Gendarmerie, the Turkish Coast Guard Command, the Student Measurement, Selection and Placement Center (ÖSYM), Turkish Airlines, governorships and various foreign customers:

- VHF/UHF Electronic Support (ES) System Contract,
- Electronic Warfare Command, Control and Coordination System Contract,
- Manpack RCID Jammer System Project,
- İHASAVAR™ Anti-Drone RF Jammer System Contract,
- Modular Base Security System Project and Frequency Jammer (GERGEDAN) Contract.



The systems that were delivered during the year and were included in the inventory of the authorities requiring the equipment were as follows:

- VHF/UHF Monitoring/Direction Finding Systems,
- Mobile HF Direction Finding and Monitoring Systems,
- İHASAVAR™ Anti-Drone RF Jammer System,
- GERGEDAN Anti-Drone & RCIED Jammer System, within scope of Modular Base Security System Project and Frequency Jammer (GERGADAN) Contract,
- Jammer System for Ballistic Protected Personnel Vehicles (BPPV),
- Suitcase GSM/Wi-Fi Jammer System.

Development, test, production and integration activities are currently being carried out for the projects which are planned to be delivered in 2018 are listed below:

- Radar and Communication Jamming and Deception Simulators (RAKAS MUKAS) Project,
- AKKOR (Active Protection System) Project,
- PULAT (Active Protection System) Project,
- High Frequency Direction Finding and Monitoring (HF ES) System Project,
- Mobile V/UHF Electronic Attack (EA) System Project,
- Radar Electronic Support (ES)/Electronic Attack (EA) Systems Project.

In addition, proposals were submitted, including technical solution suggestions, to meet the needs of Aselsan's domestic and foreign customers, including the Vehicle Type Jammer System, Manpack Type Jammer System, Drone/Mini UAV Jammer/System, Mobile Electronic Jammer System and Radio Direction Finding System.

Field trials of MİRKET Pocket Receiver and Puhu Monitoring/Direction Finding Systems, which are developed by ASELSAN in order to detect Mini/Micro UAVs from long distances and determine their direction and locations, were successfully carried out with the participation of the authorities. Users of the system will gain early warning ability by using the MİRKET receivers together with the İHASAVAR System, which was developed as a Drone Countermeasure System.

Trademark applications were submitted for the İHASAVAR Anti Drone RF Jammer/Dissipation System, the Kovan Suitcase GSM Jammer System, the Kangal Portable RF Jammer/System, the Yarasa Portable HF Direction Finding and Monitoring System and the AKKOR Active Protection System, and trademarks were successfully approved and registered by the Turkish Patent Institute.



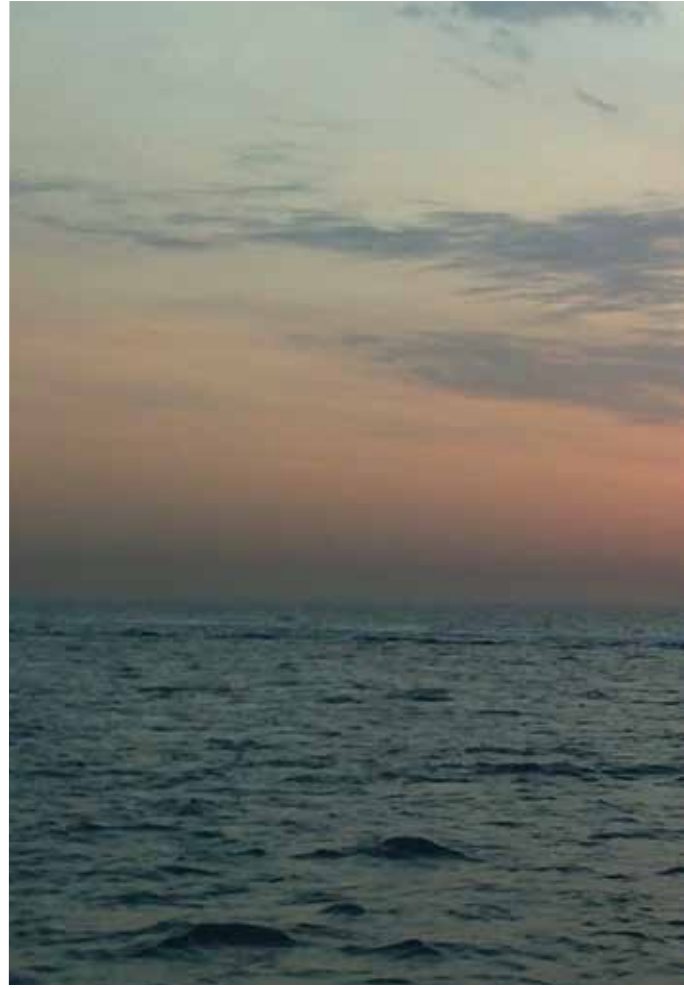


Constantly analysing battlefield electronic warfare requirements, ASELSAN develops Electronic Support (ES) and Electronic Attack (EA) system solutions to meet such requirements.

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Within the scope of Airborne Electronic Warfare Projects, various proposals were submitted to domestic/international users for the Electronic Warfare Self Protection (EWSP) System, the Communication Electronic Support System and the Radar Electronic Support System solutions. The activities continued in accordance with the plans for projects under the present contracts. Within the scope of the R&D projects realized with ASELSAN's own resources, concept development studies were carried out in order to miniaturize and increase the performance of Electronic Warfare systems components. ASELSAN took part in the 1007 R&D program activities supported by TÜBİTAK.

Within the scope of the HEWS RWR/RFJ/LWR/SCPU Procurement and Integration Contract, the HEWS mass production system deliveries continued and a total of 200 systems were delivered within the scope of mass production. In 2017, platform integration and testing activities were carried out on the S-70A-28D and S-70A-28 DSAR helicopters. Electronic Warfare Support Center (EWSC) Service Building construction activities were completed and building acceptance activities were initiated to complete the temporary acceptance procedures.

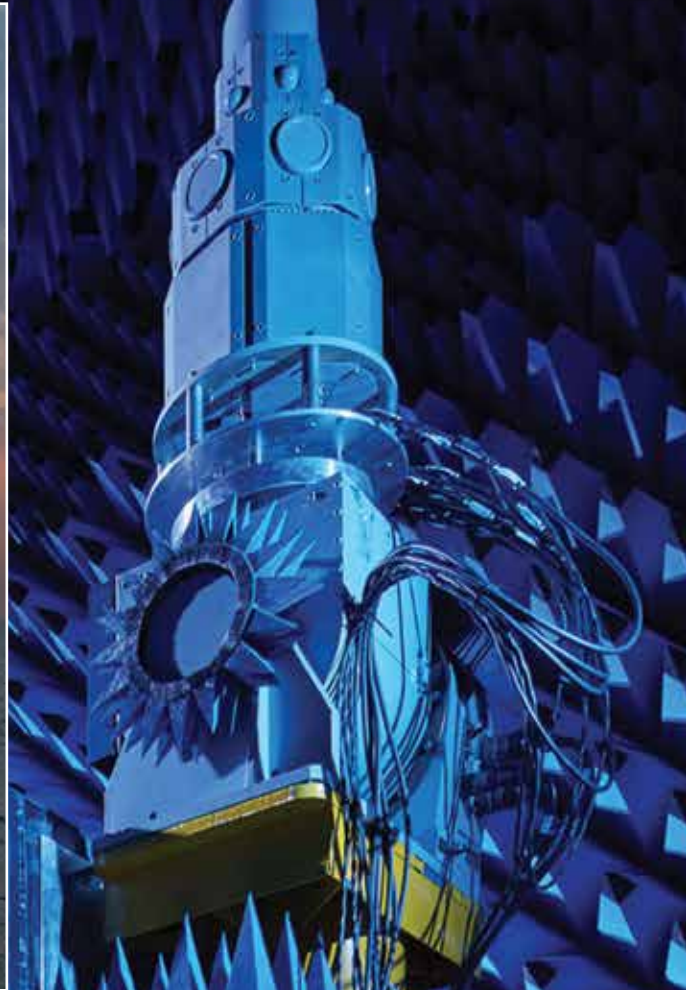


Deliveries of the Phase-2 systems, consisting of the Radar Warning Receiver, RF Jammer and Laser Warning Receiver subsystems which will be provided for ATAK Helicopters within the scope of the EWSPS were carried out. Missile Warning Sensors, which are to be integrated onto the platforms in order to protect areas underneath the platforms from missile attacks were delivered.

The delivery of documents and system production activities for the EWSPS were realized within the scope of the Utility Helicopter Project, and the system preliminary design review phase was completed.

EWSPS deliveries were realized under the contract signed to meet the electronic warfare needs of a Latin American country. In addition, integration and testing activities of the platforms were completed with activities carried out on-site in that country.







Sikorsky S70-A  
Helicopter EW  
Self Protection  
Systems

CMDS (Countermeasure Dispensing System) Support Center activities under the HEWS-CMDS/CFD (Chaff Flare Decoy) Project continued with ROKETSAN, and the acceptance of the new version of PCSIM software was completed. Work on the preparation of the Hardware in the Loop (HITL) installation also gained pace, in line with the progress of the construction of the Electronic Warfare Support Center (EWSC) Building, where the HITL Simulator will be installed. Dual Chaff ammunition production and qualification activities were carried out in collaboration with the Makine ve Kimya Endüstrisi Kurumu (MKEK).

Non-warranty maintenance repair work continued under the Maritime Patrol Aircraft Electronic Warfare Self Protection System (ASES-235M) Project, with all deliveries having been completed. In addition, necessary support was provided for the issues encountered during the certification process.

Under the A400M Project, mass production deliveries of the Processor Unit (MPB S3) and the Power Supply (PSU S3P) continued.

Within the scope of the Self Protection Electronic Warfare Systems (SPEWS-II) Project system suitability and performance tests were carried out for the Second Package F-16 Aircraft. Work has been carried out to render the SPEWS-II System active on more aircraft as a result of the positive results of these tests.

Under the existing contract between the Undersecretariat for Defense Industry and ASELSAN, modification & certification activities were carried out on the Bombardier CL-605

aircraft, on which the special task systems will be integrated and delivered. The mission system development, material procurement and prototype unit production/verification activities continued. The design process was completed within the scope of the Mission System, Airborne Platform Integration and Ground Support Systems, and the final Critical Design Document was approved by the procurement authority.

Integrated Logistics Support activities were carried out within the scope of the Peace Eagle Program (Electronic Support Measures (ESM) system contract for airborne warning and control aircraft).

Within the scope of the certification activities for aircraft modifications, the Design Organization was established within ASELSAN to obtain the Design Organization Approval (DOA) in accordance with EASA Part 21 (Airworthiness and Environmental Certification). ASELSAN participated in the related panels within the scope of the certification activities carried out.

Design and modeling studies for the National Combat Aircraft (TFX) Electronic Warfare Self Protection System and the Aircraft Radar Absorbing Composite Structure were carried out and business development activities continued in this scope.

Several proposals have been submitted to ASELSAN's domestic/foreign customers regarding the Self Protection System, the Electronic Intelligence (ELINT) and Communications Intelligence (COMINT) systems developed for the ATAK helicopter and the S-92 helicopter.



## ASELSAN develops integrated electronic warfare self protection systems for fixed and rotary-wing air platforms.

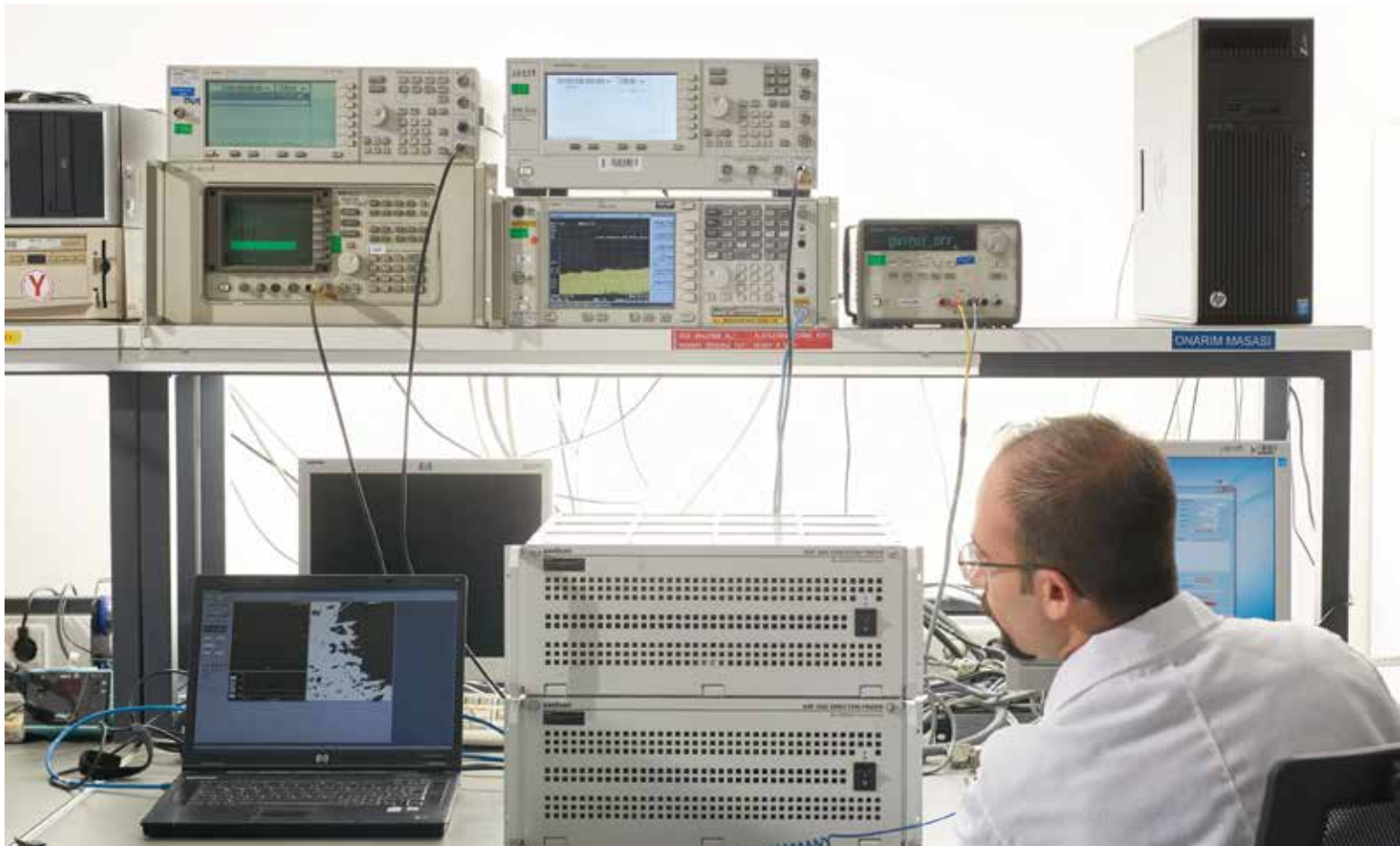
Procurement activities for the Directed Infrared Countermeasure System (DIRCM), to be integrated onto airborne platforms to eliminate the growing threat posed by infrared (IR) missiles were carried out.

Within the scope of the Naval Electronic Warfare Projects, the Harbor Acceptance Test (HAT) and Sea Acceptance Test (SAT) of the electronic support systems of platforms on the TCG BAYRAKTAR (February 2017) and TCG SANCAKTAR (September 2017) Landing Ship Tanks, which were built by the ADİK Shipyard and which entered the Naval Forces Command's inventory, were successfully completed.

The first Electronic Warfare Suite, which was realized through



domestic resources with the knowledge and experience of the Naval Forces Command and ASELSAN's extensive EW experience, was integrated into the TCG FATİH Platform (a YAVUZ Class Frigate) and was delivered in June 2017 following a series of challenging field performance tests. The Harbor and Sea Acceptance Tests of the EW system of the TCG





YILDIRIM, the second ship within the scope of the project, were successfully completed in December 2017.

Factory acceptance tests of the EW system produced for the TCG BURGAZADA, which is the third ship of the MILGEM platforms, were completed in November 2017.

The second and third ships' Electronic Support systems, which were designed and produced nationally within the scope of the New Type Submarine (Type-214) project, were delivered to the main contractor, HDW (Howaldtswerke-Deutsche Werft) Company in December 2017.

The RWR/GPS antenna and SDU procurement contract was signed with the Hensoldt Company, which won the tender for the periscope modernization of the AGOSTA90E submarines in Pakistan Navy's inventory. The units to be produced for the two platforms under the contract will be exported to Germany for the end user, Pakistan.

ASELSAN actively participated in a number of Electronic Warfare Experiments, Military Exercises and Fairs in 2017. ASELSAN participated in the International Winter Exercise organized by The Turkish Armed Forces (TAF) with the PUHU and YARASA Electronic Monitoring / Direction Finding Systems. Within the scope of the Winter Exercise, information about our Electronic Warfare Systems and ASELSAN's means/capabilities was given to participating domestic/foreign senior officials. In the NATO NEMO

2017 Naval Electronic Warfare Exercises, which were carried out under the auspices of the Naval Forces Command, ASELSAN took part in with the Radar Electronic Attack System AREAS-2NC, which was developed in cooperation with the Turkish Naval Forces Command, and the GERGEDAN and İHASAVAR Anti-Drone Countermeasure Systems and other ASELSAN designed Electronic Warfare systems in use with other Forces. Both domestic and international representatives demonstrated a high level of interest, particularly in the İHASAVAR system. The SPEWS-II System performed successfully in the Anatolian Eagle Exercise. Apart from these internationally conducted activities, ASELSAN participated in the TAF Joint EW Exercises with platforms carrying ASELSAN's EW systems and the effectiveness of the systems was once again tested in the real operation environment.

As part of international marketing and business development activities, ASELSAN products such as PUHU, İHASAVAR, GERGEDAN, KANGAL, KİRPİ and KOVAN were exhibited in international defence industry fairs. ASELSAN also participated in domestic R&D events such as the Turkey Innovation and Entrepreneurship Week, the Private Sector R&D and Design Centers Summit and the High Tech Port event with the İHASAVAR™ Anti-Drone RF Jammer System.

In the IDEF International Defense Industry Fair organized in May 2017, ASELSAN unveiled a number of products together with the other land electronic warfare products for promotion

With its high technology infrastructure, ASELSAN also realizes the integration of the solutions developed in the fields of Electronic Intelligence (ELINT), Communications Intelligence (COMINT), Radar Electronic Support and Attack, Battle Electronic Support and Attack, Preventive Electronic Warfare and Countermeasure Systems.

including the MEERKAT pocket receiver (which can be used for Early Warning, Location determination in the Swarm UAV concept, Indoor location determination, Spectrum Monitoring), and EJDERHA Disposable High Power Electromagnetic System, which was developed which was developed to neutralize the electronic circuits and devices in areas where enemy elements are present when the use of physical and electromagnetic interference is neither possible nor safe, such as inside buildings, behind walls or behind barriers.

Within the scope of Electronic Warfare Signature Management Technologies, ASELSAN's experience in the field of the EW has enabled the creation of indigenous products in the field of

Signature Management, applications to reduce the Radar Cross Section (RCS) of the platforms by deploying these products. Proposals for radar absorbing paint and composite, which will provide reduction in the RCS for the periscope and movable mast, to be used in Turkey's New Type Submarine Project, were submitted to the German HENSOLDT and the GABLER GmbH Companies. Contract negotiations were carried out with the HENSOLDT GmbH Company and an order was received for the application of radar absorbing material to the prototype periscopes and its testing.

In the context of the PREVEZE Class Submarine Modernization, proposals have also been submitted for the RCS reduction of the respective submarines.





With more than 25 years of experience in the field of radar, ASELSAN provides high-tech indigenous radar solutions for land, naval and air platforms through its advanced design, production, test infrastructures, engineering resources with high competency and through national solution partners.

### RADAR SYSTEMS BUSINESS LINE

In 2017, ASELSAN continued business development, concept definition, design, development, production, test and after sales support activities for various radar programs in cooperation with domestic solution partners and universities at ASELSAN Gölbaşı Radar and Electronic Warfare Center.

A variety of projects consisting of radar system development, concept-definition, design, manufacturing, platform integration, testing, delivery, and post-delivery support in line with these objectives continued to be carried out in 2017.

In 2017, serial productions of 3D Mobile Search Radar and Fire Control Radar were continued within the scope of KORKUT serial production contract between SSM and ASELSAN. Production, system integration and system level test activities of 3D Mobile Search Radar for HİSAR-A program and KALKAN Radar for HİSAR-O program were conducted.

In response to international requests, KALKAN and 3D Mobile Search Radar proposals were delivered and demonstration activities were performed. In addition, a 3D Mobile Search Radar was integrated onto a general purpose tactical vehicle and demonstrated in IDEF 2017.

MSB awarded a contract to ASELSAN to manufacture 21 new generation KALKAN Radars in December 2016. This new generation KALKAN Radar features an architecture which is scalable and adaptable for different applications. Some of the critical components, which were procured from abroad in the existing KALKAN Radar, have already been indigenously developed which is beneficial not only for minimizing the foreign dependency but also increasing the domestic share of the content.

In 2017, according to the “Early Warning Radar Systems Phase-1 Project” contract between SSM and ASELSAN, the Operational Concept and System Requirements phases of TEİRS (Transportable Early Warning Radar System) which features an Active Electronically Scanned Array (AESA) antenna have been completed and indigenous design and development activities, particularly for the indigenous T/R modules and AESA architecture, of the system were continued.





In 2017, ASELSAN spent intensive effort for the development of the concept demonstration prototype of the Multi-Function Active Phased Array Radar System (ÇAFRAD), which is an integrated radar suit that performs radar functions which are essential for effective air and surface warfare capability.

This Multi-Face, Multi-Function Radar Suite is comprised of Multi-Function Radar, Guided Missile Illuminator, Long Range Radar and long range non-rotating antenna IFF system. System Level Tests and Factory Acceptance Tests are targeted to be completed in 2018. In the final configuration of the Multi-Function Radar and the Illumination Radar, there will be thousands of GaN Power Amplifiers and Driver MMICs which will be manufactured at AB MikroNano Company.





## Radar and Electronic Warfare Systems Business Sector

SERHAT Radars that have already been produced and delivered to Turkish Armed Forces are still being used effectively and intensively. Extensive support has continued to be provided to Turkish Armed Forces for effective usage of SERHAT Radars; a very critical asset for protecting the areas under mortar threat, both at home and abroad and at various critical locations around the borders. A new contract has been signed with STM for two SERHAT Counter Mortar Radars which are going to be deployed in Batman Airport. As SERHAT Radar is receiving interest and demand from foreign countries due to its superior performance compared to its peer systems; ASELSAN continues to work on export opportunities to various countries.

ASELSAN continued to work on various applications of ACAR Surveillance Radar for domestic and international requests. Within this context, special algorithms were developed and integrated to ACAR radar for detecting naval targets in various maritime scenarios and also for detecting and tracking of mini and micro Unmanned Air Vehicles (UAVs) which are becoming a significant threat to both human lives and strategic infrastructures. Within this framework two different radars, originated from the architecture of the ACAR Radar, have been developed. ACAR-D Radar has been developed to detect and track the naval targets. ACAR-IHA has been developed for detecting and tracking mini and micro Unmanned Air Vehicles (UAVs). Within the context of the Contract awarded from OTOKAR A.Ş., who is the Prime Contractor for the “Socio-Economic Development by Increasing Border Surveillance Capacity through Clearing of Turkey’s East Borders from Mines” Project, 82 ACAR Radars were manufactured and delivered to the prime contractor. Within the context of the second phase of this Project, “Procurement of Mobile Surveillance Vehicles for Capacity Building on Border Surveillance of Turkey and EU Borders”, manufacturing operations are initiated for the delivery of 57 ACAR Radars to ASELSAN UGES Business Sector, the successful tenderer to be the prime for the second phase of the project.

Development activities of a new generation Imaging Radar with Ground Penetration capability (YENER) to detect and identify buried metal/plastic mines and handmade Improvised Explosives Devices (IEDs) by appropriate imaging within the scope of counter terrorism activities have continued. YENER, with its highly successful improved imaging algorithms can be used on both manned and unmanned vehicles.

Within the context of AKKOR Active Protection System Development Project, the development activities of the AESA Close-In Radar System are continued. The Radar is designed to detect and track RPG and Anti-Tank Guided Missiles (ATGM), which are fired from close-in distances, with high accuracy.

Within the scope of the Coastal Surveillance Radar System



Project, SERDAR-7M configuration was developed to meet the requirements of IALA V128 Advanced Standards. 6 Radars were manufactured and delivered, after completion of their Factory Acceptance Tests, to the prime contractor. Within YUNUS Project, port and sea acceptance tests of SERDAR-4M Radars at naval bases were successfully completed.



Within the scope of Landing Ship Tank (LST) Project, production and sea acceptance tests of the radar systems were completed in 2017. Factory acceptance tests for radar systems of MILGEM-3 were completed. Manufacturing of MILGEM-4 Radars was continued as planned. Within the scope of Multi-Function Amphibious Assault Ship (Landing Helicopter Dock - LHD) Project; ASELSAN continued the production and integration of radar systems to the platform and combat management system of the vessel. Air Defense System Mobile Search Radar and Fire Control Radar, which were developed and validated for KORKUT and AİC Systems, are successfully adapted for naval applications and validated through various performance tests.

Airborne radar business development activities have been carried out intensively in 2017 and within this scope, ASELSAN continued the conceptual design studies for the Multi-Function Nose AESA Radar which will be part of the Integrated RF System of the TF-X National Combat Aircraft Development Project.

Synthetic Aperture Radar Payload conceptual design studies have been conducted for the second phase of the GÖKTÜRK-3 SAR Satellite Project.

Serial production of 3 SARPER Synthetic Aperture Radars, the first national imaging and Ground Moving Target Indicator (GMTI) radar system developed for airborne platforms, have been completed and are ready for delivery/integration on TAI ANKA UAVs.

Radar Seekers are one of the most critical assets of guided missiles. In 2017, design, prototype production and validation activities including hardware in the loop tests for various radar seeker units, have been carried out. Feasibility studies were conducted for the serial production infrastructure.

With the experience and know-how gained through military radar system projects, ASELSAN continued to develop radar systems for civil applications. Efforts have been spent on developing an X-Band Weather Radar Radar, the first prototype of which will be ready in 2018.

Traffic Radar, which is aimed to be the main sensor of Traffic Enforcement Systems, had gone through various field and qualification tests successfully. Using the same hardware architecture, development of Miniature Perimeter Security Radar and Muzzle Velocity Radar were conducted.

Joint development of phased-array, scalable, Silicon-Germanium (SiGe) based integrated circuits, which can be used as transmitter and receiver modules in civil radar applications, with the US-based IBM Company was successfully completed in June 2017. These ICs are operating at millimeter-wave frequencies and being planned to be the main building blocks of several civil radar applications, such as border security and airport foreign object debris (FOD) radar. Packaging and antenna development activities are ongoing.



# Transportation, Security, Energy and Automation Systems Business Sector

ASELSAN aims to use its know-how and expertise in defense electronics in the fields of security, transportation, energy, automation and medical technologies, for which there is great need in Turkey. Several new projects were launched to address these needs.

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TRANSPORTATION SYSTEMS  
SECURITY SYSTEMS  
ENERGY SYSTEMS

TRAFFIC, AUTOMATION AND  
MEDICAL SYSTEMS



## Transportation, Security, Energy and Automation Systems (UGES) Business Sector



ASELSAN aims to become a leading solution provider in the fields of Transportation Systems, Security Systems, Energy Systems, Traffic & Automation Systems and Medical Technologies.

Within the scope of transportation, security, energy and automation projects, UGES Business Sector continues activities for technological solutions, hardware, software, device and system development, production, domestic and international sales and after-sales support for Rail Vehicle Systems, Electric and Hybrid Vehicle Systems, Rail Vehicle Signaling and Control Systems, Border Security Systems, Coastal Security Systems, Public Security Systems, Toll Collection Systems, Traffic Management and Automation Systems, Medical Technologies Systems, Power Management and Renewable Energy Systems.

### R&D Activities

Within the scope of the R&D and technological development studies for transportation and energy systems, in order to develop the building blocks by including the latest innovations in technology, the prototype development stage was reached in studies for the SiC Switching Element Based High Efficiency / High Power Density Power Converters and the Super-capacitor Based Energy Recovery System Development.

ASELSAN continues innovative R&D projects in GaN Based Power Switching Elements, the fault detection solutions for traction systems, Contactless Power Transfer Technologies under the university-industry collaboration programs. In these studies, the goal is to develop efficient, compact and lightweight systems that aim to distinguish themselves.

City Security  
Systems





Within the scope of R&D studies into critical sub-systems of transportation solutions, prototype system solutions have started to be trailed on metro, tram and bus platforms in the following projects, and the projects for locomotive and electric regional train trials have continued.

- Development of Traction System for Light Rail Vehicles,
- Train Control and Management System Development,
- Development of Traction Components for Tramway Vehicles,
- Development of Traction and Control System for Hybrid and Electric Vehicles,
- ERTMS (European Rail Traffic Management System) Level 1-2 On-Board Automatic Train Protection and Control System Development,
- Development of Acoustic Sensor System (MIDAS-R) for Railways.

In addition, the following studies have been carried out for systems that are aimed at the production, transmission, distribution and utilization of electricity in a safe, sustainable and efficient manner.

- Development of Power Quality Measurement and Analysis Devices for Low Voltage Distribution Systems,
- Development of Advanced Terminal Unit for Electric Transmission Networks,
- Development of Full Scale Power Converter Units for Wind Turbines,
- Development of Hybrid Energy Microgrid Systems,
- Development of High Efficiency Rear-Connected Solar Cell.

Within the scope of security systems, the Algorithm Development and Platform Optimization for Video Processing in Multi-Core Heterogeneous Platforms, Handmade Explosive (HME) Inspection System Prototype Development, Intelligent Distributed Acoustic Intrusion Detection System Development, Gun Shot Detection System Development studies have largely been completed; performance improvement and field trials are ongoing.

In the medical field, the studies have been started for the Development of Radiology (X-Ray) Imaging Systems, Magnetic Resonance (MR) Imaging System Development, War and Emergency Aid Smart Toll Gate (HAYAT) Development.

## Transportation is one of the areas of activity in which ASELSAN is specialized within UGES.

### TRANSPORTATION SYSTEMS

Activities in Transportation Systems area are carried out under three programs which are Rail Vehicles, Signaling Systems and Electric Vehicle Systems.

#### Railway Vehicle Systems

##### Traction Control Systems

Considered as the core of rail vehicles, the traction system, which had been imported, is now domestically produced with national design and development of hardwares, softwares and algorithms by ASELSAN.

The traction control system, which has modular architecture including new generation IGBT (Insulated Gate Bipolar Transistor) technology and the DSP (Digital Signal Processing) based control electronics, has been developed in accordance with the rail vehicle standards such as EN50155, EN50125, EN50163, EN50121, EN61287 and EN61377.

The developed systems have been integrated into Ankara Metro and Silkworm Tram, and the system has been put to use flawlessly during the operation tests. Due to modular structure of the developed system, it can easily be adapted to rail vehicles such as high-speed trains, regional electric train sets, main lines and shunting locomotives. Projects have been carried out with TÜLOMSAŞ and TÜVASAŞ to use the system in locomotives and on regional train platforms. Working together with TÜLOMSAŞ, the traction control system has been developed for hybrid shunting locomotives. A proposal was submitted for the traction chain procurement for the National Electric Train Set designed by TÜVASAŞ. The contract is expected to be signed in 2018.

##### Train Control and Management System

Considered as the brain of railway vehicles, the Train Control and Management System (TCMS) has been developed by ASELSAN to offer a high level of safety and reliability and to include innovative architecture, algorithms, hardware and software for high speed trains, regional trains and metro trains.

Within the scope of Train Control and Management System, and reliable computer hardware, software and control algorithms have been developed, which are considered as the most important components of railway transportation vehicles. Designed in a modular architecture, Train Control and



Management System (TCMS) computer offers and reliability, as required by recognized standards (IEC61508, EN50155) for rail vehicles. The computer has been developed through entirely original components with its architecture, control, safety and reliability algorithms, hardware and embedded software.

The modular computer system developed under this project can be configured to be used as the Central Control Unit (CCU), Automatic Train Operation System (ATO), Automatic Train Protection System (ATP), Human Machine Interface (HMI), or Signaling and similar critical computer systems. Furthermore, the developed modular computer system can be used in all vital computer systems required in all types of rail vehicles, such as high speed trains, regional trains, metro rail vehicles and tram vehicles.

The TCMS is used in Ankara Metro and the and the projects are ongoing with TÜLOMSAŞ (Türkiye Lokomotif ve Motor Sanayii A.Ş.) and TÜVASAŞ (Türkiye Vagon Sanayi A.Ş.) to develop the TCMS in locomotives and regional electric train sets. The train for control and management system required for hybrid shunting locomotives has also been developed by ASELSAN, for the project ongoing with TÜLOMSAŞ. In addition, a contract was signed between TÜVASAŞ and ASELSAN for the development of the National Electric Train Set, train control and monitoring system, which has been designed by ASELSAN.

### Energy Management Systems

Thanks to the energy management system, in which super capacitor and new generation batteries are used together, the regenerative energy spent by rail vehicles in the form of heat energy during braking can be efficiently stored and used efficiently when desired.

With its modular structure, which can be used in both the vehicle and the station, the Energy Management System (EMS) allows rail vehicles, particularly trams, to be operated without a catenary system, allowing energy savings of up to 30% on public railway lines.

ASELSAN has begun her activities to develop the energy management system which improves efficiency for rail vehicles and reduces costs. Thanks to this system, it will become possible to reduce the electricity consumption of rail vehicles and allow rail vehicles to be operated without a catenary system.

### Main Line and Metro Signaling System

To bring about the highly energy efficient, reliable and safe main line and urban rail vehicles systems of the future, hardware and software of the signaling protection systems which meet international standards are developed with state-of-the-art technology. ASELSAN's railway signaling studies are carried out for two main product families, including metro lines and main lines. ASELSAN continues its R&D activities for both product families in an eco-system involving customers, TÜBİTAK, universities and subcontractors that are competent in the field.



## Traction and Control System, Train Control Management System, Signalization Systems, Electric Vehicle Development work have been carried out.

ERTMS (European Railway Traffic Management System) based signaling systems are used for main lines, with the main customer being the Republic of Turkey State Railways. Within this scope, the TÜBİTAK TEYDEB project is carried out in order to develop on-board protection equipment for rail vehicles. CBTC (Communication Based Train Control) based signaling systems are used for metro lines, where the main customers are municipal enterprises (such as Metro Istanbul). In 2017, a cooperation protocol aimed at the development of National CBTC was signed between Metro Istanbul and TÜBİTAK to bid in the tender for the signalization modernization of the M1 metro line. Technical and administrative solution work is carried out together with the Metro Istanbul and TÜBİTAK in cooperation, where ASELSAN is the project technical manager.

Apart from above examples, the business development activities with Ministry of Transport, Maritime Affairs and Communication-General Directorate of Infrastructure Investments and with the other leading companies in the sector have been made for the possible cooperation studies.

### Railway Inspection and Security Systems

High-tech sensor, diagnosis and display system algorithms, software and hardware are developed in order to ensure the safe and increased the efficiency of railway lines.

Providing railway security against external attacks is possible by regular monitoring of the line and by warning operators of any extraordinary situations. With the different algorithms added to monitoring systems, regular monitoring and preventive examination of the line can be carried out. The MIDAS-R system, which is based on acoustic sensing and developed for these purposes, ensures that the line is maintained at a low cost and with a high level of efficiency.



Railway  
Signalization  
Systems



### Electric Vehicle Systems

Development, production and testing activities are carried out with the aim of providing Battery Management System, Traction System (Motor Inverter and Electric Motor), Vehicle Control and Management System, along with vehicle safety software and hardware (Advanced Driving Assistance Systems) - which are the basic critical components for electric vehicles - to vehicle manufacturers and organizations (OEMs and shipyards) in a cost effective manner.

The first prototypes of the electric traction system, which can be used in buses and utility vehicles, were produced and testing and integration activities have been carried out on prototype vehicles. In this context, the traction system of the Avenue EV vehicle, which is co-developed with TEMSA, was also provided by ASELSAN. Development activities for a range extender with an internal combustion engine, is forming the foundation for ASELSAN electric vehicle traction system product family and can also be used for military vehicles, are carried out together with domestic companies and universities, which are specialized in internal combustion engine and control.

Within the scope of the electric hybrid truck project, which has been jointly developed with Anadolu ISUZU, ASELSAN traction system components will be integrated the range extender solution.

ASELSAN is working on future electric traction systems with a comparable performance with internal combustion engine to be used in military land vehicles. The first prototype of such a hybrid electric traction system is under development with KATMERCİLER.

The design activities for electric public transportation vehicles, which are required by public institutions in Turkey, have been carried out at the level of joint feasibility studies with the authorities requiring them. Promotional activities have been carried out at municipalities, especially for electric buses that are needed by municipalities for public transportation.

Feasibility and preliminary design studies are carried out for the development of indigenous and high-tech products for electric propulsion systems which are gaining importance in marine vehicles.

With ASPIİLSAN and TÜBİTAK in particular, there are plans to remove the obstacles facing the rollout of electric vehicles by preparing for future battery technologies, ensuring longer range and shorter charging times.



ASELSAN develops Critical Infrastructure Security Systems for the detection and identification of all types of threats that may arise from sea or land as well as the provision of situational awareness, information management, management of countermeasure/response units, and the provision of communication networks inside and outside the critical infrastructure.

### SECURITY SYSTEMS

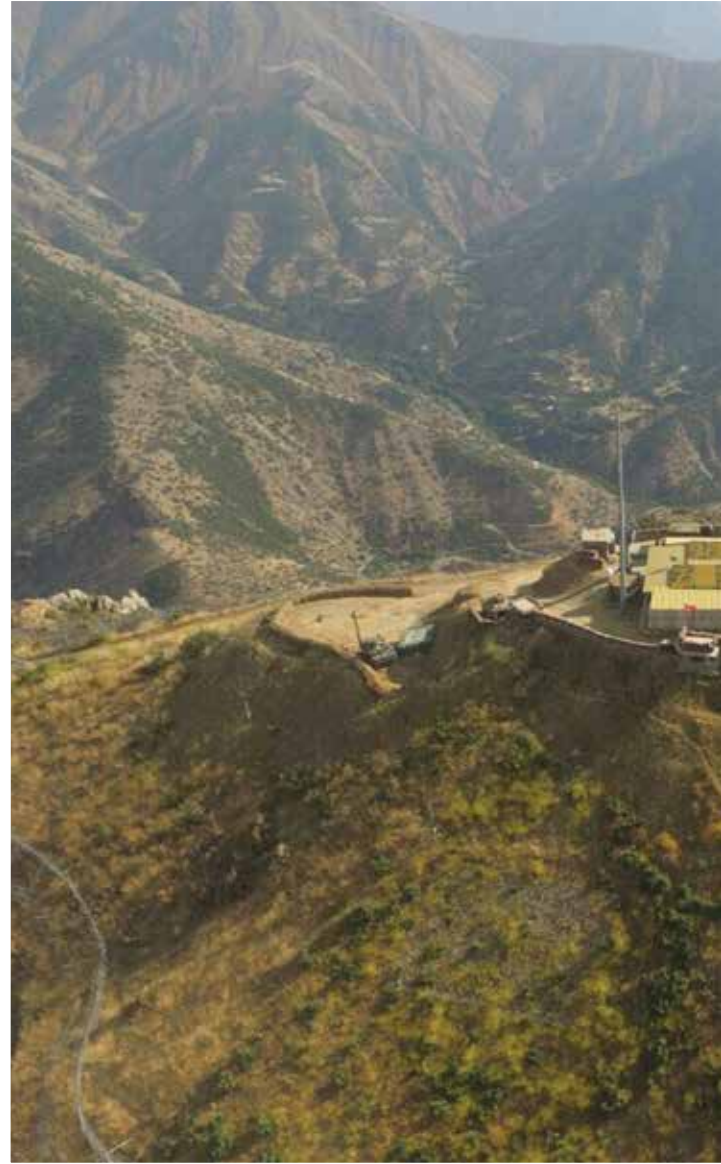
Activities in the field of Security Systems are carried out in Internal Security Systems, Coastal Security Systems and Public Security Systems and Security System programs.

#### Internal Security Systems

Within the scope of activities on Internal Security Systems, work continued on Land Border Security, Security Systems Integrated on Mobile Platform, Patrol and Base Security, Critical Infrastructure Security and Counter Systems for Mines and Improvised Explosive Devices (IED).

Business development activities were carried out in domestic/foreign markets in the fields of Land Border Security and Security Systems Integrated on a Mobile Platform.

As a result of the tender held throughout the European Union, the contract of the Surveillance System Integrated on Vehicle for Turkey's Western Border Security was signed with the Undersecretariat for Treasury and production activities of ATEŞ Mobile Security Systems were carried out.



Upon the request of the Undersecretariat for Defense Industry, work has got underway for the establishment of the Integrated Border Security System in the Hatay Province on the Syrian border. Developed within the scope of the views of the General Staff Communication Electronics and Information Systems Department, Mast Mounted Security System (MÜGAS) was installed on the Syrian border. The supply of Sheltered Surveillance and Security Management System contract was signed for the Qatar Armed Forces. Logistical support and maintenance activities for the Mobile Border Security Systems delivered for the Uruguay Border Security have been carried out as part of the services offered within the warranty period.

Business development activities were carried out in domestic/foreign markets in the field of Patrol and Base Security.



ASELSAN has been working on the development of border security systems for so many years.







By continuing the Modular Temporary Base Area (MTBA) Project work,

- The electronic system installation and infrastructure work in the base areas, as required by the Land Forces Command, was completed and the site acceptance has been successfully accomplished.
- In line with the new needs set out by the Land Forces Command and the General Command of Gendarmerie, work has continued on the establishment of the MTBA systems in the additional base areas (MTBA-7<sup>th</sup> Phase).
- The warranty period logistical support and maintenance activities in the delivered base areas have been carried out.

In the field of Critical Infrastructure Security, business development activities were carried out in domestic/foreign markets.

The DORUK Security System was installed to provide perimeter security of the surveillance points belonging to the Turkish National Police.

The order for the IP Based Perimeter Imaging Systems was received within the scope of the Barracks and Headquarters Physical Security System Project aimed at the perimeter safety of the Land Forces Command Critical Facilities, and the production activities are in progress.

The warranty period logistical support/maintenance activities have been carried out for the Improvement of the WS3 Security System of the İncirlik Nato Air Base project.

In the field of countermeasures for Improvised Explosive Devices (IED), in order to carry out safety for convoys -, development activities for the IED Inspection and Interrogation Systems and ÇAKI Interrogation Arm System Prototype have been carried out using ASELSAN's own resources.

The developed ÇAKI Interrogation Arm System has reached the contract signing stage for use in Explosive Device Discovery and Disposal Team (EDDD)/the Mine and Improvised Explosive Devices Detection and Disposal Team (MIEDD) Vehicles.

As well as the maintenance and expansion of existing projects, work is planned to continue in the fields of Internal Security Systems in line with domestic requirements, with business development activities in other markets such as Qatar, Turkmenistan and Saudi Arabia in international markets.

### Coastal Security Systems

Within the scope of the Coastal Security Systems, activities continued in the following areas.

- The Aksaz and Foça Naval Bases Underwater and Surface Surveillance and Detection system (YUNUS) Project
- The Development of Prototype Mobile Radar (MORAD) Vehicle Project,
- Mobile Coastal Security Systems,
- Coastlines and Coastal Critical Infrastructure Security Systems,
- Vessel Traffic Management Systems

ASELSAN generates solutions for uninterrupted and complete protection of marine base, harbor and coastal strips, which is of critical importance, by deploying state-of-the-art technology sensors.

The warranty period activities of the Aksaz and Foça Naval Bases Underwater and Surface Surveillance and Detection system (YUNUS) Project was carried out.

Work has continued within the scope of the Prototype Mobile Radar (MORAD) Vehicle Development Project carried out in line with the protocol signed with the Coast Guard Command. The project involves the installation of radar, electro-optical and other electronic equipment related to the communication systems and the establishment of a mobile security system in a vehicle that is in the inventory of Coast Guard Command. In the project, design change studies related to reducing the weight burden on the vehicle were completed and necessary modifications were carried out.



ASELSAN has developed a remote controlled counter system for mines and improvised explosive devices.



## Transportation, Security, Energy and Automation Systems (UGES) Business Sector



Work was carried out on the system solution to provide coastal security in Uruguay, consisting of electro-optics, radar, communication systems and a mobile coastal surveillance system, and the project design was realized to provide diagnosis, detection and coverage in accordance with the requirements of the customer. The proposal for the Uruguayan Coastal Surveillance System Project prepared as a result of these studies was submitted to the Uruguayan Naval Forces Command.

In line with the requirements of the Coastguard Command, ASELSAN submitted a proposal for the Radar System, Electro-Optic System and Security Management Software to the STM and HAVELSAN companies for the tender of the Çavuşadası Coastal Surveillance Station project that was opened by the Muğla Governorship.

Within the scope of Vessel Traffic Services Management Systems, business development activities were carried out within the scope of the Upgrade of the Turkish Straits Vessel Traffic Services Management Systems and Additional services Project. The proposal for the Radar System, Radio Direction Finder and Electro-Optical System was submitted to HAVELSAN for the tender announced by the General Directorate of Coastal Safety.

ASELSAN participated in the field survey activities within the scope of the Naval Security and Surveillance System Project for the Sultanate of Oman. ASELSAN submitted proposal for the Radar System, Electro-Optic System, Radio Direction Finder and Sonar System to HAVELSAN for the tender which was submitted.

### Public Safety and Security Technologies

Under the Public Security and Security Management Systems Programs, work continued in the areas of Public Security Management System (PSMS) and Plate Recognition System (PRS) Project, Public Security Solutions, Petroleum and Natural Gas Pipeline Security.

Installation work has been continuing within the scope of the Public Security Management System and Plate Recognition System Project, which was signed between the Undersecretariat for Defense Industries and ASELSAN in order to meet the needs of Turkish National Police for CCTV Recording and Surveillance Systems, the Plate Recognition System and the Thermal and Motion Sensitive Security Systems. Installation activities have so far been completed in 62 regions of the project, which is divided into a total of 105 regions. Installation activities in 34 of the remaining regions are still ongoing. Acceptance procedures in nine provinces have been completed. Within the scope of the project, the first additional package has been signed, which includes the Modernization of the Ankara City Public Security Management System (PSMS), Mobile Plate Recognition System, Plate Recognition System Modernization and the Thermal Camera Procurement along with additional requirements.

As part of the Public Security Management System, work on the Safe School Project contract has got underway. The project plans to secure 762 schools whose security is deemed to be at risk throughout the country. In the project, camera systems will be installed in schools, providing images to the Public Security Management System Center in the district where the school is located. The Undersecretariat for Defence Industry is the management authority of the project, which will be carried out within the scope of the needs of the Ministry of Education and Turkish National Police.



In the field of Public Security, ASELSAN conducts research on appropriate solutions for the emerging needs such as safe cities, social events, counterterrorism, aviation security, natural and artificial disasters, land transportation security, and the safety of critical infrastructures.

As part of the Public Security Management System, contracted work has been carried out for the Base Security Management System, which will be implemented to find solutions for the needs of the General Command of Gendarmerie. Within the scope of the project, images from the gendarmerie bases, control points and from cameras in the vehicles will be transferred to the General Command of Gendarmerie over wired and wireless communications. Technical and administrative negotiations are ongoing.

Contract negotiations for the establishment of the Public Security Management System in the Turkish Republic of Northern Cyprus (TRNC) have got underway. Within the scope of the project, the Public Safety Management System will be installed; the Plate Recognition System and different types of

cameras will be installed at a total of 161 points. The project will involve the rollout of Plate Recognition System Central Interrogation ability as well as the establishment of a fiber-optic corporate communication network of approximately 65 km. The project is aimed at bringing the skills of the Turkish Public Security Management System to the TRNC Police Force.

The Public Security Management System Smart Support Software Development Project, which is carried out under the support of TÜBİTAK, continues to be developed in line with the needs of the Turkish National Police. Within the scope of this project, the Video Analytics Product Family has been developed and high level analysis algorithm work built on video analysis capabilities is gathered under a single roof. In order to design a system infrastructure to meet the high computing needs such as Public Security Management System Smart Support Software, ASELSAN has participated in the ALMARVI (Algorithms and Design Methods and Many-core Execution Platforms for Low Power Massive Data Rate Video and Image Processing) project.

The project is the ARTEMIS project that is jointly supported by TÜBİTAK and the European Commission and it was carried out by a total of 16 partners from Turkey, the Netherlands, Finland and the Czech Republic. In this project, ASELSAN is responsible for designing the system infrastructure for high computing needs and developing parallel image processing algorithms. The project was completed in April 2017.

ASELSAN participated in the SECTOR (Secure European Common Information Space for Interoperability of First Responders and Police Authorities) project that was set up in order to establish an infrastructure to enable different institutions to work together in the event of a crisis.





### ASELSAN develops systems in order to provide security of pipelines passing through the country's lands, in parallel with Turkey's emergence as a safe route for petroleum and natural gas pipelines in recent years.

The project is a 7<sup>th</sup> Framework project supported by the European Commission and it was carried out with the work of 16 partners from ten different countries. In this project, ASELSAN is responsible for designing the architecture of the information space and interoperability of the infrastructure system. The system design was completed in 2016 under the leadership of ASELSAN. In April 2017, project outputs were shown via crisis management systems.

Developmental activities for ÇEHRE - Face Recognition System have been carried out for use in ASELSAN's security applications. In contrast with the systems on the market, in order to provide a service with high performance

simultaneously in public security applications nationwide throughout Turkey, the system was designed in a manner to carry out attribute inferences in the end hardware units by applying Distributed Architecture System Structure.

Activities continued within the scope of the security of petroleum and natural gas pipe lines. ASELSAN-HAVELSAN Business Partnership has been tasked to ensure the security of petroleum and natural gas pipelines in Turkey which are under BOTAŞ administration. Under the project, an integrated security system will be designed and manufactured for the security of petroleum and natural gas pipelines for the first time in Turkey. The project will be completed in three phases and work has already got underway for Phase-1. The system to be designed includes system solutions for the pipelines, for the security of various manned and unmanned stations on the lines and the terminals on the coast. This modular system solution is configured to be used in all pipelines when necessary. The system has a structure that allows integration with electro-optic solutions, land and maritime surveillance radars, unmanned vehicles and communication systems, which are developed by ASELSAN.

The solution prepared by the ASELSAN-HAVELSAN Business Partnership was approved by the Undersecretariat for Defense Industry and BOTAŞ officials, and the contract was signed in December 2016. The project schedule is expected to be initiated by the Undersecretariat for Defense Industry in order for activities to start within the scope of the project.



ÇEHRE-Face Recognition System

In order to ensure security of petroleum and natural gas pipe lines, MIDAS Multipurpose Intelligent Distributed Acoustic Sensor was developed by the participation of universities and domestic industry.

In addition to petroleum and natural gas pipelines, it is planned to contribute to provide border security by using MIDAS System on railway lines and border line. MIDAS, which can also be used to provide security for critical infrastructures, stands out as being advantageous over other systems in terms of ease of use and low cost. The installation was carried out in the Hatay border area, and calibration and optimization activities are continuing.

The Gun Shot Acoustic Detection System (SEDA), which was developed by using acoustic detection technology to detect the location of snipers, proved itself by demonstrating being highly successful in the firing tests performed.

Developed in three different product configurations to be used as fixed-standalone, on-vehicle and single-soldier wearable, SEDA is planned to be used primarily in domestic security applications and the base areas. Activities have been continuing intensively to add additional capabilities in a manner that meets the needs of domestic and foreign security requirements. SEDA integration activities were completed in the security vehicles developed by BMC Company.



Gun Shot Acoustic  
Detection System  
(SEDA)



ASELSAN carried out business and R&D activities in the areas of SCADA Systems, Energy Transmission/Distribution Management Systems, Microgrid Systems and Hybrid Energy Systems to develop the technologies and expertise necessary for implementing state-of-the-art Smart Power Grids.



### ENERGY SYSTEMS

ASELSAN's Energy Systems Program activities are being pursued with the goal of becoming a leading technology supplier of energy system solutions, by exploiting the Company's rooted and innovative engineering traditions. In order to meet the needs of all stakeholders in the global energy systems market with efficient, reliable, economic, high quality state-of-the-art products and services, ASELSAN has established a program for the R&D, design, production, integration and after sales support in the following areas:

- Energy Management and Smart Grid Systems and
- Renewable Energy Systems

#### Energy Management and Smart Grid Systems

In order to transmit electricity efficiently, effectively and in a flexible manner from generation sites to consumption points throughout Turkey, system solutions consisting of

critical hardware, algorithms and software are being developed for an Intelligent Transmission Grid Management System at the nationwide level. Accordingly, to reduce foreign technology dependency and to secure energy distribution and transmission capabilities with local technologies; the following activities have been carried out:

- Advanced Energy Measurement and Management Units and Power Quality Measurement Devices have been developed as smart grid power and control equipment. The "DEPAR Multi-Feeder Power Quality Analyser" is being developed under contract with Boğaziçi Elektrik Dağıtım A.Ş. (BEDAŞ). The prototype unit was introduced at the International İstanbul Smart Grids and Cities Congress and Fair (ICSG 2017). The first trials in the field were successfully completed in November 2017. The system will initially be deployed at a limited number of transformer centers in İstanbul.



DEPAR Power  
Quality Analyser and  
Measurement Device

- The development of a nationwide SCADA and Energy Management System, including but not limited to critical information security algorithms and software for power transmission and distribution has continued successfully. Design and development of ARTU - Advanced Remote Terminal Unit has been completed to a great extent. The algorithm and software development work has continued and preparation for the first trials on live systems have started. Preliminary work is being done for the ARTU qualification tests and certification process to be conducted in 2018. It is expected that ARTU will be utilized widely not only in power transmission and distribution systems but also in monitoring of renewable energy power plants.

### Renewable Energy Systems

Innovative design and development work is being pursued for systems in the renewable energy area. The systems developed will aid in securing the energy supply for efficient and uninterrupted electric energy generated from Turkey's rich solar and wind energy resources. The critical components are developed with maximum national resources to be competitive in the local market.

- In the area of wind energy, design, development and manufacturing of full scale power converters and grid connection algorithms have been completed. The system design has particularly taken into consideration the needs

of the Turkish wind industry. The first 300 kW full scale power converter system ordered by the Turkish wind turbine manufacturer Northel EMK was installed at the BUSKİ wind power plant in the province of Bursa. Work has begun on design for a larger full scale power converter.

- In the area of solar energy, the development of very high efficiency IBC c-Si photovoltaic cells and modules is currently in progress. The production process development of IBC PV cell has been completed at the METU-GÜNAM solar FV research center, and the installation of the R&D production line is continuing.
- Hybrid energy microgrid systems that aim to provide reliable, economic and clean energy from wind and solar have been developed for the military and civilian applications. The mobile hybrid energy system (GURU Mobil) integrated on a trailer was exhibited in IDEF 2017. The unit has been designed to minimize the use of diesel fuel in tactical applications. The transportable, cabinet integrated hybrid energy system that can provide energy (GURU Kompakt) for longer durations with limited diesel generator backup has also been developed and a prototype was manufactured. Serial production of this unit will begin in 2018.

GURU hybrid  
energy system





Developed by ASELSAN in accordance with the requirements of security institutions, Vehicle and License Plate Recognition Systems are used with great success in different regions of Turkey.

### TRAFFIC, AUTOMATION AND MEDICAL TECHNOLOGY SYSTEMS

Intensive work has been carried out in the fields of Toll Collection Systems, Traffic Management Systems, Plate Recognition Systems and Medical Technologies Systems.

#### Toll Collection Systems

The field of Toll Collection Systems was again one of the most intensive fields in 2017. Within the framework of Multilane Free Flow Electronic Toll Collection System (MLFF-ETC) contract executed with the General Directorate of Highways, the MLFF-ETC was installed in the Çamlıca station of the Ankara-Istanbul Highway, at the Mecidiye station located at the TEM-Northern Marmara Highway junction and on the Anatolian-Europe direction at the Fatih Sultan Mehmet Bridge in 2017. The MLFF-ETC, which was designed by ASELSAN, represents the latest technology in the field of toll collection and has been rolled out over our country's highway network through the projects carried out. The MLFF-ETC, which does not affect traffic on the highway during its operation, enables the collection of tolls from highways around large cities such as Istanbul and also



enables applications aimed at preventing traffic congestion in urban roads by introducing electronic road charging methods.

ASELSAN Toll Collection Systems are also used in Turkey's showcase Public Private Partnership (PPP) highway projects. The systems play an active role in contract specific reconciliation and audit processes between the enterprise and the state as well as meeting the stringent revenue collection requirements of the private highway enterprises at the highest level. Activities to install Toll Collection Systems on the newly opened road sections of the privately operated Yavuz Sultan Selim Bridge and the Northern Peripheral Road, Gebze-Izmir Highway, and Eurasia Tunnel have been continued in 2017.



MultiLane Free Flow Automatic Number Plate Recognition System.

The “corridor speed enforcement system” installed on the 2200 km long state operated highway is one of the largest scale electronic traffic enforcement system (TEDES) in the country. Work has been carried out with the Turkish National Police for the system to be used at a high level of effectiveness.

In the Republic of Macedonia, the Smart-Card and ETC toll collection system on the Corridor-10 highway was commissioned at the northmost toll plaza Romanovce. Activities at other stations are ongoing.

## AUTOMATION AND TRAFFIC MANAGEMENT SYSTEMS

### Vehicle and License Plate Recognition Systems

Within the scope of the Gendarmerie Integrated Communications and Information System (JEMUS) project, installation, acceptance and inspection activities continued in the Vehicle and License Plate Recognition System (A-PTS), which identifies vehicle license plates, their brand and color to a high degree of accuracy in free traffic flow conditions. In this context, the deliveries of gantry based fixed systems and mobile systems mounted on the vehicles are ongoing. The newly developed Mobile License Plate Recognition System meets a very important requirement by offering all the features of the fixed system in a practical way, such that it can work from the vehicle at the desired point at any time.

### Advanced Agriculture and Husbandry Automation Systems

Activities have been carried out to transform ASELSAN’s know-how in the fields of Unmanned Systems, Automation Systems and Communications Systems into a benefit in the agricultural field and farming. Within the scope of the R&D Support programs conducted by the Ministry of Food, Agriculture and Livestock, three separate development studies on the topics of the automatic steering in agricultural machinery, monitoring of the plant condition with an unmanned aerial vehicle and multispectral camera, and the farm management system, which

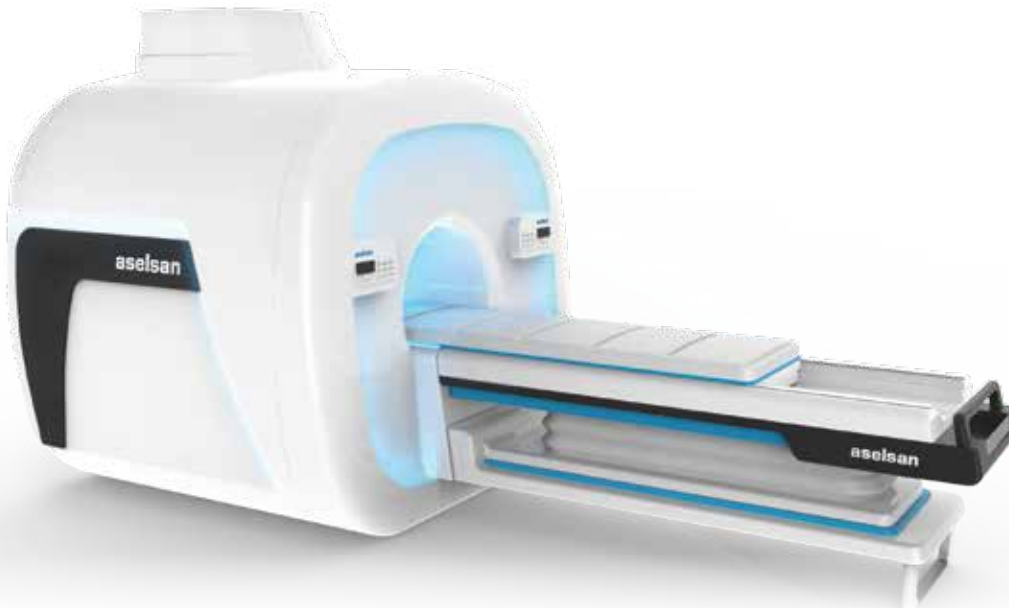
will enable precision agricultural practices to be carried in an integrated manner from agricultural machinery to farm level, were completed in 2017.

### Medical Technologies

ASELSAN has been working on projects and solutions to reduce dependency on foreign resources in the field of Medical Technologies and to increase local design and production capabilities. In this context, design activities continued in the development of the Magnetic Resonance Imaging System Project, which was launched in 2015 and is aimed to be developed with national means. Also in 2017, the company entered collaboration with the Bilkent National Magnetic Resonance Research Center (UMRAM) for the development of a Magnetic Resonance Imaging System (MRI) and design work in the project got underway.

In accordance with the Industry Cooperation Program regulation prepared under the leadership of the Ministry of Science, Industry and Technology, has activities have been carried out to take part in the localization of the medical technologies, which is on the agenda for procurement through the new tender structure, in which commitments on the topics of domestic production, technology transfer to the country, investment and exports are taken into account in addition to the supply price. In this regard, activities required to provide and present the information requested by the Steering Committee for Health Industries (SCHI) have been carried out.

Moreover, with the aim of developing identification, diagnosis, analysis and simulation systems aimed at the biological defense, which is a critical area of civil and military defense, with the national means and acquiring necessary technologies within this scope, research programs have continued for Bio-diagnosis and CBRN (Defense Systems against Chemical, Biologic, Radiologic and Nuclear Threats) systems.



Magnetic Resonance Imaging System Project





**2017 ANNUAL REPORT  
FINANCIAL INFORMATION**



ASELSAN is a company of Turkish Armed Forces Foundation.

# Financial Information for the Year 2017

## Prepared as per CMB Serial II, No:14.1

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# Consolidated Statement of Financial Position

## as of 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

		Audited	
	Note	31 December	31 December
	References	2017	2016
ASSETS			
Current Assets		5.798.135	5.062.438
Cash and Cash Equivalents	3	1.262.904	1.168.776
Trade Receivables	6	1.601.765	2.039.695
From Related Parties	5	460.841	311.655
From Third Parties		1.140.924	1.728.040
Other Receivables	7	112.761	84.712
From Related Parties	5	34	--
From Third Parties		112.727	84.712
Inventories	9	1.944.389	1.187.398
Prepaid Expenses	10	654.137	380.150
From Related Parties	5	92.555	59.062
From Third Parties		561.582	321.088
Other Current Assets	18	222.179	201.707
Non-Current Assets		5.120.082	3.535.423
Financial Investments	30	568.914	516.179
Trade Receivables	6	1.198.294	385.592
From Related Parties	5	828.846	36.187
From Third Parties		369.448	349.405
Other Receivables	7	661	295
From Third Parties		661	295
Equity Accounted Investments	8	83.324	57.387
Property, Plant and Equipment	11	1.090.843	967.522
Intangible Assets	12	868.997	697.131
Prepaid Expenses	10	442.731	393.699
From Related Parties	5	165.487	199.841
From Third Parties		277.244	193.858
Deferred Tax Assets	28	589.529	384.573
Other Non-Current Assets	18	276.789	133.045
TOTAL ASSETS		10.918.217	8.597.861

The accompanying notes are an integral part of the consolidated financial statements.

# Consolidated Statement of Financial Position

## as of 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	Note References	Audited	
		31 December 2017	31 December 2016
<b>LIABILITIES</b>			
<b>Current Liabilities</b>		<b>2.671.635</b>	<b>2.235.678</b>
Short-term Financial Liabilities	31	404.312	306.243
Short-term Portion of Long-term Financial Liabilities	31	67.624	65.665
Trade Payables	6	1.369.800	1.052.907
<i>To Related Parties</i>	5	195.946	79.170
<i>To Third Parties</i>		1.173.854	973.737
Employee Benefit Obligations	17	46.133	36.836
Other Payables	7	1.494	6.248
<i>To Related Parties</i>	5	65	69
<i>To Third Parties</i>		1.429	6.179
Government Grants and Incentives	13	41.643	28.268
Deferred Income	10	300.459	370.581
<i>To Related Parties</i>	5	144.197	17.456
<i>To Third Parties</i>		156.262	353.125
Corporate Tax Liability	28	717	427
Short-term Provisions		425.907	346.729
<i>For Employee Benefits</i>	17	42.301	43.362
<i>Other</i>	15	383.606	303.367
Other Current Liabilities	18	13.546	21.774
<b>Non-Current Liabilities</b>		<b>3.198.374</b>	<b>2.670.716</b>
Long-term Financial Liabilities	31	62.207	122.415
Trade Payables	6	1.262.015	253.144
<i>To Related Parties</i>	5	1.048.376	21.721
<i>To Third Parties</i>		213.639	231.423
Other Payables	7	105	45
<i>To Third Parties</i>		105	45
Deferred Income	10	1.642.766	2.091.979
<i>To Related Parties</i>	5	1.461.346	314.324
<i>To Third Parties</i>		181.420	1.777.655
Long-term Provisions		231.281	203.133
<i>Long-term Provisions for Employee Benefits</i>	17	168.742	150.997
<i>Other</i>	15	62.539	52.136
<b>TOTAL LIABILITIES</b>		<b>5.870.009</b>	<b>4.906.394</b>

The accompanying notes are an integral part of the consolidated financial statements.

# Consolidated Statement of Financial Position

## as of 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	Note References	Audited	
		31 December 2017	31 December 2016
<b>EQUITY</b>		<b>5.048.208</b>	<b>3.691.467</b>
<b>Equity Attributable to Equity Holders of the Parent</b>		<b>5.047.666</b>	<b>3.691.004</b>
Share Capital	19	1.000.000	1.000.000
Inflation Adjustments on Share Capital Differences	19	98.621	98.621
Other Comprehensive Income / (Expense) that will not be Reclassified to Profit or Loss		209.087	219.355
<i>Gain on Revaluation of Property</i>	27	207.431	216.072
<i>Gain/ Loss on Remeasurement of Defined Benefit Plans</i>	27	1.656	3.283
Other Cumulative Comprehensive Income / (Expense) will be Reclassified to Profit/Loss		540.690	486.030
<i>Gain on Revaluation of Available for Sale Financial Assets</i>	27	535.444	485.346
<i>Cumulative Translation Adjustments</i>	27	5.246	684
Restricted Reserves	19	124.062	94.159
Retained Earnings		1.687.436	997.648
Net Profit for the Year		1.387.770	795.191
<b>Non-Controlling Interests</b>		<b>542</b>	<b>463</b>
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>10.918.217</b>	<b>8.597.861</b>

The accompanying notes are an integral part of the consolidated financial statements.



# Consolidated Statement of Profit or Loss and Other Comprehensive Income for The Year Ended 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	Note References	Audited	
		1 January- 31 December 2017	1 January- 31 December 2016
<b>PROFIT OR LOSS</b>			
Revenue	20	5.360.279	3.768.116
Cost of Sales (-)	20	(4.005.346)	(2.845.098)
<b>GROSS PROFIT</b>		<b>1.354.933</b>	<b>923.018</b>
General Administrative Expenses (-)	22	(177.622)	(150.732)
Marketing Expenses (-)	22	(164.431)	(83.758)
Research and Development Expenses (-)	22	(97.300)	(82.603)
Other Operating Income	23	1.935.905	489.676
Other Operating Expenses (-)	23	(1.678.420)	(285.598)
<b>OPERATING PROFIT</b>		<b>1.173.065</b>	<b>810.003</b>
Income From Investing Activities	24	9.302	8.737
Shares of Profit of Equity Accounted Investees	8	9.302	213
<b>OPERATING PROFIT BEFORE FINANCIAL EXPENSE</b>		<b>1.191.669</b>	<b>818.953</b>
Financial Income	25	99.494	66.361
Financial Expense (-)	26	(120.140)	(151.291)
<b>PROFIT BEFORE TAX FROM CONTINUING OPERATIONS</b>		<b>1.171.023</b>	<b>734.023</b>
<b>Tax Income from Continuing Operations</b>		<b>216.826</b>	<b>61.178</b>
- Current Corporate Tax Expense (-)	28	(2.036)	(1.548)
- Deferred Tax Income	28	218.862	62.726
<b>PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS</b>		<b>1.387.849</b>	<b>795.201</b>
<b>Profit for the Period Attributable to</b>			
Non-Controlling Interest		79	10
Owners of the Company	29	1.387.770	795.191
		<b>1.387.849</b>	<b>795.201</b>
<b>Earnings for per 100 Shares (in full kuruş)</b>	<b>29</b>	<b>138,78</b>	<b>79,52</b>

The accompanying notes are an integral part of the consolidated financial statements.

# Consolidated Statement of Profit Or Loss and Other Comprehensive Income for The Year Ended 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	<u>Note References</u>	<u>Audited</u>	
		<u>1 January- 31 December 2017</u>	<u>1 January- 31 December 2016</u>
<b>PROFIT FOR THE YEAR</b>		<b>1.387.849</b>	<b>795.201</b>
<b>OTHER COMPREHENSIVE INCOME</b>			
<b>Items that will not be Reclassified Subsequently in Profit or Loss</b>		<b>(10.268)</b>	<b>18.207</b>
Gain on Revaluation of Property	27	3.034	--
Gain on Remeasurement of Defined Benefit Plans	17	(2.033)	22.759
Deferred Tax Expense	28	(11.269)	(4.552)
<b>Items that may be Reclassified Subsequently to Profit or Loss</b>		<b>54.660</b>	<b>79.323</b>
Gain on Revaluation of Available for Sale Financial Assets	27	52.735	82.678
Cumulative Translation Adjustments	27	4.562	779
Deferred Tax Expense	27-28	(2.637)	(4.134)
<b>OTHER COMPREHENSIVE INCOME</b>		<b>44.392</b>	<b>97.530</b>
<b>TOTAL COMPREHENSIVE INCOME</b>		<b>1.432.241</b>	<b>892.731</b>
<b>Total Comprehensive Income Attributable to</b>			
Non-Controlling Interest		79	10
Owners of the Company		1.432.162	892.721
		<b>1.432.241</b>	<b>892.731</b>

The accompanying notes are an integral part of the consolidated financial statements.

# Consolidated Statement of Changes in Equity for The Year Ended 31 December 2017

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	Share Capital	Inflation Adjustments on Share Capital Differences	Other Comprehensive Income / Expense that will not to be Reclassified Subsequently to Profit or Loss		Other Comprehensive Income / Expense that may not to be Reclassified Subsequently to Profit or Loss			Retained Earnings		Equity Attributable to Owners of the Company	Non-Controlling Interests	Total
			Gain on Revaluation of Property	Loss on Remeasurement of Defined Benefit Plans	Gain on Revaluation of Available for Sale Financial Assets	Cumulative Translation Adjustments	Restricted Reserves	Prior Years' Profit/Loss	Net Profit/Loss for the Year			
<b>Balance as of 1 January 2016 (Opening Balance)</b>	<b>500.000</b>	<b>100.321</b>	<b>216.072</b>	<b>(14.924)</b>	<b>406.802</b>	<b>(95)</b>	<b>86.943</b>	<b>1.332.234</b>	<b>212.930</b>	<b>2.840.283</b>	<b>453</b>	<b>2.840.736</b>
Transfers	--	--	--	--	--	--	7.216	163.714	(170.930)	--	--	--
Capital Increase	500.000	(1.700)	--	--	--	--	--	(498.300)	--	--	--	--
Total Comprehensive Income	--	--	--	18.207	78.544	779	--	--	795.191	<b>892.721</b>	10	<b>892.731</b>
Dividends	--	--	--	--	--	--	--	--	(42.000)	<b>(42.000)</b>	--	<b>(42.000)</b>
<b>Balance as of 31 December 2016 (Closing Balance)</b>	<b>1.000.000</b>	<b>98.621</b>	<b>216.072</b>	<b>3.283</b>	<b>485.346</b>	<b>684</b>	<b>94.159</b>	<b>997.648</b>	<b>795.191</b>	<b>3.691.004</b>	<b>463</b>	<b>3.691.467</b>
<b>Balance as of 1 January 2017 (Opening Balance)</b>	<b>1.000.000</b>	<b>98.621</b>	<b>216.072</b>	<b>3.283</b>	<b>485.346</b>	<b>684</b>	<b>94.159</b>	<b>997.648</b>	<b>795.191</b>	<b>3.691.004</b>	<b>463</b>	<b>3.691.467</b>
Transfers	--	--	--	--	--	--	29.903	689.788	(719.691)	--	--	--
Capital Increase	--	--	--	--	--	--	--	--	--	--	--	--
Total Comprehensive Income	--	--	(8.641)	(1.627)	50.098	4.562	--	--	1.387.770	<b>1.432.162</b>	79	<b>1.432.241</b>
Dividends	--	--	--	--	--	--	--	--	(75.500)	<b>(75.500)</b>	--	<b>(75.500)</b>
<b>Balance as of 31 December 2017 (Closing Balance)</b>	<b>1.000.000</b>	<b>98.621</b>	<b>207.431</b>	<b>1.656</b>	<b>535.444</b>	<b>5.246</b>	<b>124.062</b>	<b>1.687.436</b>	<b>1.387.770</b>	<b>5.047.666</b>	<b>542</b>	<b>5.048.208</b>

The accompanying notes are an integral part of the consolidated financial statements.



# Consolidated Statement of Cash Flows

(Amounts are expressed in thousands of Turkish Lira ("TL") and in thousands of "Foreign Currency" unless otherwise stated.)

	Note References	Audited	
		1 January- 31 December 2017	1 January- 31 December 2016
<b>A.Cash Flows from Operating Activities</b>		<b>652.285</b>	<b>980.527</b>
Profit		1.387.849	795.201
<b>Adjustments to Reconcile Profit</b>		<b>236.897</b>	<b>677.591</b>
- Adjustments for Depreciation and Amortization Expense	11-12	132.625	110.160
- Adjustments for Impairment Loss (Reversal of Impairment Loss)		5.642	4.411
Adjustments for Impairment Loss (Reversal of Impairment Loss) of Receivables	6	--	62
Adjustments for Impairment Loss (Reversal of Impairment Loss) of Inventories	9	5.642	4.349
-Adjustments for Provisions		218.477	290.486
Adjustments for (Reversal of) Provisions Related with Employee Benefits	17	31.375	44.824
Adjustments for (Reversal of) Lawsuit and/or Penalty Provisions	15	32.851	112.834
Adjustments for (Reversal of) Warranty Provisions	15	155.138	138.492
Adjustments for (Reversal of) Other Provisions	15	(889)	(5.664)
-Adjustments for Interest (Income) Expenses		(2.797)	(8.474)
Adjustments for Interest Income	23-25	(45.992)	(32.438)
Adjustments for Interest Expense	23-26	43.195	23.964
- Share of profit of Equity Accounted Investees	8	(9.302)	(213)
- Adjustments for Tax (Income)/Expenses	28	(216.826)	(61.178)
- Adjustments for Losses/(Gains) on Disposal of Non-Current Assets	12	111.313	27.238
- Adjustments for Stage of Completion of Construction or Service Contracts in Progress		35.761	338.914
-Other Adjustments for which Cash Effects are Investing or Financing Cash Flow		(19.559)	65.439
-Other Adjustments to Reconcile Profit (Loss)		(18.438)	(89.192)
<b>Changes in Working Capital</b>		<b>(857.533)</b>	<b>(363.676)</b>
- Decrease (Increase) in Trade Receivables		430.569	(1.135.344)
- Decrease (Increase) in Other Receivables Related with Operations		(28.415)	(36.477)
- Decrease (Increase) in Inventories		(561.552)	(149.986)
- Decrease (Increase) in Prepaid Expenses		(507.706)	(276.581)
- Increase (Decrease) in Trade Payables		478.024	324.047
- Increase (Decrease) in Employee Benefit Obligations		9.297	15.248
- Increase (Decrease) in Other Operating Payables		(4.692)	3.383
- Increase (Decrease) in Government Grants and Assistance		13.375	5.686
- Increase (Decrease) in Deferred Income		(519.335)	931.595
- Other Increase (Decrease) in Working Capital		(167.098)	(45.247)
<b>Cash Flows From Operations</b>		<b>767.213</b>	<b>1.109.116</b>
Payments Related with Provisions for Employee Benefits	17	(16.724)	(29.233)
Payments Related with Other Provisions	15	(96.458)	(95.602)
Income Taxes Refund (Paid)		(1.746)	(3.754)
<b>B.Cash Flows From Investing Activities</b>		<b>(557.999)</b>	<b>(359.443)</b>
Proceeds from Sales of Property, Plant, Equipment and Intangible Assets		1.279	786
Purchase of Property, Plant and Equipment	11	(211.714)	(123.362)
Purchase of Intangible Assets	12	(339.502)	(229.214)
Dividends Received	24	8.938	8.171
Other Cash Outflows		(16.998)	(15.824)
<b>C.Cash Flows From Financing Activities</b>		<b>(21.154)</b>	<b>(222.580)</b>
Proceeds from Borrowings		905.412	410.750
Repayments of Borrowings		(863.072)	(600.364)
Payments of Finance Lease Liabilities		--	(67)
Dividends Paid	19	(75.500)	(42.000)
Interest Paid	26	(15.508)	(7.510)
Interest Received		27.514	16.611
<b>NET INCREASE/DECREASE IN CASH AND CASH EQUIVALENTS BEFORE EFFECT OF EXCHANGE RATE CHANGES (A+B+C)</b>		<b>73.132</b>	<b>398.504</b>
<b>D. EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</b>		<b>20.727</b>	<b>89.237</b>
<b>NET INCREASE/DECREASE IN CASH AND CASH EQUIVALENTS (A+B+C+D)</b>		<b>93.859</b>	<b>487.741</b>
<b>E.CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD</b>		<b>1.167.894</b>	<b>680.153</b>
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD (A+B+C+D+E)</b>	<b>3</b>	<b>1.261.753</b>	<b>1.167.894</b>

The accompanying notes are an integral part of the consolidated financial statements.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 1. ORGANIZATION AND OPERATIONS OF THE GROUP

ASELSAN Elektronik Sanayi ve Ticaret Anonim Şirketi ("the Company") was established in order to engage principally in research, development, engineering, production, tests, assembly, integration and sales, after sales support, consultancy and trading activities, to provide and conduct all sorts of activities for project preparation, engineering, consultancy, service providing, training, contracting, construction, publishing, trading, operation and internet services regarding various software, equipment, system, tools, material and platforms in the fields of electrical, electronics, microwave, electro-optics, guidance, computer, data processing, encryption, security, mechanics, chemistry and related areas within the army, navy, air force and aerospace applications to all institutions, organizations, companies and individual consumers.

The Company was established at the end of 1975 as a corporation by Turkish Land Forces Foundation. The Company commenced its production activities in Macunköy Facilities in early 1979.

As of the reporting dates, the Company has been organized under five divisions under the Vice Presidential Sector with regard to investment and production requirements of projects. These divisions comprise The Communication and Information Technologies Vice Presidency "HBT", Radar, Electronic Warfare and Intelligence Systems Vice Presidency "REHİS", Defense Systems Technologies Vice Presidency "SST" and Microelectronics, Guidance & Electro-Optics Division Vice Presidency "MGEO" and Transportation, Security, Energy and Automation Systems Vice Presidency "UGES".

In addition to the Sector Vice Presidencies, the Company organization also includes the Financial Management Vice Presidency, Corporate Services Vice Presidency, Technology and Strategy Management Vice Presidency and Human Resources Management Vice Presidency making a total of nine vice presidencies.

The Company maintains engineering operations in Ankara, METU Teknokent; production and engineering operations in Macunköy, Akyurt and Gölbaşı. General Management is located in Ankara Macunköy. Furthermore SST and REHİS Sector Presidency management offices and Product Support Management of UGES Sector Presidency are located in Istanbul Teknopark.

Turkish Armed Forces Foundation ("TSKGV") is the main shareholder of the Company which holds 84,58 percent of the capital and maintains control of the Company. TSKGV was established on 17 June 1987 with the law number 3388, in order to manufacture or import guns, equipment and appliances needed for Turkish Armed Forces.

The Company is registered to Capital Markets Board of Turkey ("CMB") and its shares have been quoted in Borsa İstanbul Anonim Şirketi ("BİST") since 1990. As of 31 December 2017, 15,30 percent of the Company's shares are publicly traded (31 December 2016: 15,30 percent) (Note 19).

The Company's consolidated subsidiaries are ASELSAN Baku Şirketi ("ASELSAN Baku"), Mikroelektronik Ar-Ge Tasarım ve Ticaret Limited Şirketi ("Mikro AR-GE"), ASELSANNET Elektronik ve Haberleşme Sistemleri Sanayi Ticaret İnşaat ve Taahhüt Limited Şirketi ("ASELSANNET") and ASELSAN Malaysia Sdn. Bhd. (ASELSAN Malaysia). They are collectively referred as the "Group" in the accompanying notes.

The Company has two branch offices; Aselsan Elektronik Sanayi ve Ticaret Anonim Şirketi EP Co. ("ASELSAN South Africa") and ASELSAN Makedonya Corridor-10 Highway Toll Collection System Project ("ASELSAN Macedonia") located in South Africa and Macedonia, respectively. All of the branches are included in the consolidated financial statements.

The Company's trade registry address is Mehmet Akif Ersoy Mahallesi 296. Cadde No:16 06370 Yenimahalle/Ankara. The average number of personnel employed by the Group as of 31 December 2017 is 5.440 (31 December 2016: 5.275).

## 2. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

### 2.1 The Basis of Presentation

#### Statement of Compliance to TAS

The accompanying consolidated financial statements are prepared in accordance with the requirements of CMB Communiqué Serial II, No: 14.1 "Basis of Financial Reporting in Capital Markets" ("Communiqué"), which were published in the Official Gazette No: 28676 on 13 June 2013 and in accordance with the Turkish Accounting Standards and Interpretations ("TAS") that have been put into effect by the Public Oversight Accounting and Auditing Standards Authority ("POA").

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

In addition, the consolidated financial statements and its notes are presented in accordance with the requirements announced by the CMB's announcement on 7 June 2013.

The consolidated financial statements are prepared according to historical cost accounting except for the revaluation of land and financial instruments.

## Approval of the Consolidated Financial Statements

These consolidated financial statements have been approved for issue by the Board of Directors with the resolution number 975 on 20 February 2018. No authority other than General Assembly and legal entities has the right to amend the consolidated financial statements.

## Functional Currency

The individual financial statements of each Group entity are presented in the currency of the primary economic environment ("Functional Currency") in which the entity operates. The Company's reporting currency is Turkish Lira ("TL"). For the purpose of the consolidated financial statements, the results and financial position of each entity are expressed in TL, which is the functional, and presentation currency of the Company for the consolidated financial statements.

Amounts are expressed in thousands of TL or Foreign Currency unless otherwise stated.

Kuruş, Turkish Currency subunit and 1 TL is equal to 100 Kuruş.

## Preparation of Financial Statements in Hyperinflationary Periods

CMB, with its resolution dated 17 March 2005 numbered 11/367 declared that companies operating in Turkey which prepare their financial statements in accordance with CMB Accounting Standards, effective 1 January 2005, will not be subject to the application of inflationary accounting. Consequently, in the accompanying financial statements ("IAS/TAS 29") "Financial Reporting in Hyperinflationary Economies" has not been applied since 1 January 2005.

## Basis of Consolidation

### Subsidiaries:

The details of the subsidiaries of the Group are as follows:

Subsidiaries	Location	Functional Currency	Group's proportion of ownership and voting power held (%)		Principal Activity
			31 December 2017	31 December 2016	
AELSANNET	Turkey	TL	100	100	Communication systems
AELSAN Baku	Azerbaijan	AZN	100	100	Marketing and sales of the group products
Mikro AR-GE	Turkey	TL	85	85	Microelectronic R&D projects
AELSAN Malaysia	Malaysia	MYR	100	--	Remote controlled weapon systems



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The consolidated financial statements include the financial statements of the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns

The Company reassesses whether or not it controls an investee when if facts and circumstances arise there are changes to one or more of the three elements of control listed above.

Even though the Company has voting rights less than a majority, if it has ability to manage the operation of the investee unintentionally, then the Group assess that it has control over that investee. The Company considers all relevant facts and circumstances in assessing whether or not the Company's voting rights in an investee are sufficient to give it power, including:

- comparison of voting rights of the Company and the others,
- potential voting rights held by the Company, and others,
- rights arising from contractual arrangements; and
- any additional facts and circumstances that indicate the Company has, or does have, the current ability to direct the relevant activities at the time that decisions need to be made (including voting patterns at previous shareholders' meeting).

The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases. Income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Company gains control until the date when the Company ceases to control the subsidiary.

Each item of profit or loss and other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to align with the Group accounting policies into line with the Group's accounting policies.

All intragroup balances, equity, income and expenses, profits and losses and cash flows relating to transactions between members of the Group are eliminated during consolidation.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Joint Ventures:

The details of the Group's interests in joint ventures as of 31 December 2017 and 2016 are as follows:

Joint Ventures	Principal Activity	Country of incorporation and operation	Group's proportion of ownership and voting power held (%)	
			2017	2016
Hassas Optik Sanayi ve Ticaret Anonim Şirketi ("ASELSAN Optik")	Sensitive optic technologies	Turkey	50	50
Mikro Nano Teknolojileri Sanayi ve Ticaret Anonim Şirketi ("ASELSAN Bilkent")	Production of micro and nano sized devices which contains semi-conductive and similar technological materials	Turkey	50	50
International Golden Group ("IGG") ASELSAN Integrated Systems LLC ("IGG ASELSAN")	Production, integration, sales and technical maintenance service of high technology product	United Arab Emirates	49	49
Kazakhstan ASELSAN Engineering LLP ("ASELSAN Kazakhstan")	Production, sales and technical maintenance service of electronic and electro-optic devices and systems	Kazakhstan	49	49
ASELSAN Middle East PSC ("ASELSAN Jordan")	Production, sales and technical maintenance service of electronic and electro-optic devices and systems	Jordan	49	49
Saudi Arabian Defense Electronics Corporation ("SADEC LLC")	Production and sale of radar, electronics, warfare and electro-optic products	Saudi Arabia	50	50
YİTAL Mikroelektronik Sanayi ve Ticaret Anonim Şirketi ("YİTAL")	Production of micro and nano-sized devices containing semiconductor	Turkey	51	--

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

ASELSAN Optik has been established in March 2014 and it is owned by ASELSAN and Sivas Optik Malzemeleri Sanayi ve Ticaret Anonim Şirketi with 50 percent ownership each. The production of precision optical technology for ultraviolet, visible and near infrared bands get designed and produced abroad by ASELSAN fulfilled by the facility established in Sivas. Construction of optics production facility and setup of production machines have been completed in February 2016. Manufacturing plant has started mass production in March 2016.

ASELSAN Bilkent has been established in November 2014 and it is owned by ASELSAN and İhsan Doğramacı Bilkent University with 50 percent ownership each. Construction of the company's facility have been completed in January 2016. It has been established to produce all varieties of semi-conductive and micro and nano sized devices containing similar technological materials. The facility has opened in the fourth quarter of 2016.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

SADEC LLC corporation was established to manufacture and sell radar, electronic, warfare and electro-optic products in Saudi Arabia on 27 December 2016; 50 percent of the share belongs to the Company and 50 percent belongs to TAQNIA DST. It is planned that the necessary infrastructure and production facility investments of the company will be completed within two years.

The company titled "YİTAL" was established in 25 September 2017 in order to operate in the field of micro and nano-sized devices containing semiconductor and similar technological materials. 51 percent of the company belongs to ASELSAN whereas, TÜBİTAK and Undersecretariat For Defence Industries hold 29 percent and 20 percent stake respectively. YİTAL's establishment has been registered on 4 October 2017.

On 31 March 2017 SADEC LLC and on 31 December 2017 YİTAL were included in the consolidated financial statements by using the equity method.

## 2.2 Comparative Information and Restatement of Prior Period Term Consolidated Financial Statements

In order to determine the financial position and performance trends, the Group's consolidated financial statements are presented comparatively with the corresponding figures. For the purpose of having consistency with the current term's presentation of consolidated financial statements, comparative information is reclassified and significant differences are explained if necessary.

Accordingly, TL 7.089 insurance expense provision under "Other Short Term Provisions" in the consolidated balance sheet for the year ended 31 December 2016 is net off with "Prepaid Expenses" account.

## 2.3 Accounting Policies, Changes in Accounting Estimates and Errors

Significant changes in accounting policies and errors are applied retrospectively and prior period financial statements are restated, changes in accounting estimates are reflected to the financial in current period profit/loss.

When change in estimate in accounting policies are related with only one period, changes are applied on the current period but if the estimated changes are for the following periods, changes are applied both on the current and following periods prospectively.

## 2.4 New and Revised Turkish Accounting Standards

### Standards and Interpretations Issued But Not Yet Effective

#### *Standards issued but not yet effective and not early adopted*

New standards, interpretations and amendments to existing standards are not effective at reporting date but earlier application is permitted; however the Group has not early adopted are as follows. The Group will make the necessary changes if not indicated otherwise, which will be affecting the consolidated financial statements and disclosures, after the new standards and interpretations become in effect.

### TFRS 15 Revenue from Contracts with Customers

As issued in September 2016 by POA, the new standard replaces existing TFRS guidance and introduces a new control-based revenue recognition model for contracts with customers. In the new standard, total consideration measured will be the amount to which companies to be entitled, rather than fair value and new guidance have been introduced on separating performance obligations for goods and services in a contract and recognition of revenue over time. TFRS 15 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.

The Group is assessing the potential impact on its consolidated financial statements resulting from the application of TFRS 15.

### TFRS 9 Financial Instruments (2017 Version)

TFRS 9 Financial Instruments, has been published by POA in January 2017, replaces the existing guidance in TAS 39 Financial Instruments: Recognition and Measurement. It also carries forward the guidance on recognition, classification, measurement and derecognition of financial instruments from TAS 39 to TFRS 9. The last version of TFRS 9 includes a new expected credit loss model for calculating impairment on financial assets, and new general hedge accounting requirements and also includes guidance issued in previous versions of TFRS 9. The Standard is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The Group is assessing the potential impact on its consolidated financial statements resulting from the application of TFRS 9.

## **TFRS Interpretation 22 - Foreign Currency Transactions and Advance Consideration**

TFRS Interpretation 22 "Foreign Currency Transactions and Advance Consideration" has been published by POA in December 2017 to clarify the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency. The Interpretation covers foreign currency transactions when an entity recognizes a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration before the entity recognizes the related asset, expense or income. The date of the transaction, for the purpose of determining the exchange rate, is the date of initial recognition of the non-monetary prepayment asset or deferred income liability. If there are multiple payments or receipts in advance, a date of transaction is established for each payment or receipt. This Interpretation is effective for annual reporting periods beginning on or after 1 January 2018 with earlier application is permitted. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of TFRS Interpretation 22.

## **Amendments to TFRS 2 - Classification and Measurement of Share-based Payment Transactions**

POA has issued amendments to TFRS 2 Share-Based Payment in December 2017 to improving consistency and resolve some long-standing ambiguities in share-based payment accounting. The amendments cover three accounting areas: i) measurement of cash-settled share-based payments, ii) classification of share-based payments settled net of tax withholdings; and iii) accounting for modification of a share-based payment from cash-settled to equity-settled. Also, same approach has been adopted for the measurement of cash-settled share-based payments as equity-settled share-based payments. If certain conditions are met, share-based payments settled net of tax withholdings are accounted for as equity-settled share-based payments. The amendments are effective for periods beginning on or after 1 January 2018, with earlier application permitted. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of the amendments to TFRS 2.

## **TAS 40 - Transfers of Investment Property**

Amendments to IAS 40 - Transfers of Investment Property issued by POA in December 2017 have been made to clarify uncertainty about that provide evidence of transfer of /from investment property to other asset groups. A change in management's intentions for the use of property does not provide evidence of a change in intended use. Therefore, when an entity decides to dispose of an investment property without development, it continues to treat the property as an investment property until it is derecognized (eliminated from the statement of consolidated financial position) and does not reclassify it as inventory. Similarly, if an entity begins to redevelop an existing investment property for continued future use as investment property, the property remains an investment property and is not reclassified as owner-occupied property during the redevelopment. The amendment is effective for annual reporting periods beginning on or after 1 January 2018 with earlier application is permitted. The Group does not expect that application of these amendments to TAS 40 will have significant impact on its consolidated financial statements.

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## **Improvements to TFRSs**

POA has issued Annual Improvements to TFRSs - 2014-2016 Cycle for applicable standards. The amendments are effective as of 1 January 2018. Earlier application is permitted. The Group does not expect that application of these improvements to TFRSs will have significant impact on its consolidated financial statements.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## **Annual Improvements to IFRSs 2014-2016 Cycle**

### *TFRS 1 "First Time Adoption of International Financial Reporting Standards"*

TFRS 1 is amended to removing of the outdated short-term exemptions for first-time adopters within the context of 'Annual Improvements to TFRSs 2012-2014 Cycle' related to disclosures for financial instruments, employee benefits and consolidation of investment entities.

### *TAS 28 "Investments in Associates and Joint Ventures"*

The amendment enable when an investment in an associate or a joint venture is held by, or is held indirectly through, an entity that is a venture capital organization, or a mutual fund, unit trust and similar entities including investment-linked insurance funds, the entity may elect to measure that investment at fair value through profit or loss in accordance with TFRS 9.

## **Amendments to TFRS 9 - Prepayment features with negative compensation**

In December 2017, POA has issued amendments to TFRS 9 to clarify that financial assets containing prepayment features with negative compensation can now be measured at amortised cost or at fair value through other comprehensive income (FVOCI) if they meet the other relevant requirements of TFRS 9. Under TFRS 9, a prepayment option in a financial asset meets this criterion if the prepayment amount substantially represents unpaid amounts of principal and interest, which may include 'reasonable additional compensation' for early termination of the contract. The amendments are effective for periods beginning on or after 1 January 2019, with earlier application permitted. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of the amendments to TFRS 9.

## **Amendments to TAS 28- Long-term interests in Associates and Joint Ventures**

In December 2017, POA has issued amendments to TAS 28 to clarify that entities also apply TFRS 9 to other financial instruments in an associate or joint venture to which the equity method is not applied. These include long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture. An entity applies IFRS 9 to such long-term interests before it applies related paragraphs of TAS 28. In applying TFRS 9, the entity does not take account of any adjustments to the carrying amount of long-term interests that arise from applying TAS 28. The amendments are effective for periods beginning on or after 1 January 2019, with earlier application permitted. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of the amendments to TAS 28.

## **The new standards, amendments and interpretations that are issued by the International Accounting Standards Board (IASB) but not issued by POA**

The following standards, interpretations and amendments to existing IFRS standards are issued by the IASB but these standards, interpretations and amendments to existing IFRS standards are not yet adapted/issued to TFRS by the POA, thus they do not constitute part of TFRS. Such standards, interpretations and amendments that are issued by the IASB but not yet issued by the POA are referred to as IFRS or IAS. The Group will make the necessary changes to its consolidated financial statements after the new standards and interpretations are issued and become effective under TFRS.

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### **IFRS 16 Leases**

On 13 January 2016, IASB issued the new leasing standard which will replace IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC 15 Operating Leases - Incentives, and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease and consequently changes to IAS 40 Investment Properties. IFRS 16 Leases eliminates the current dual accounting model for lessees, which distinguishes between on-balance sheet finance leases and off-balance sheet operating leases. Instead, there is a single, on-balance sheet accounting model that is similar to current finance lease accounting. Lessor accounting remains similar to current practice. The standard is effective for annual periods beginning on or after 1 January 2019, with early adoption permitted provided that an entity also adopts IFRS 15 Revenue from Contracts with Customers. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of IFRS 16.

### **IFRS Interpretation 23 -Uncertainty over Income Tax Treatments**

On 17 June 2017, IASB issued IFRS Interpretation 23 Uncertainty over Income Tax Treatments to specify how to reflect uncertainty in accounting for income taxes. It may be unclear how tax law applies to a particular transaction or circumstance, or whether a taxation authority will accept a company's tax treatment. TAS 12 Income Taxes specifies how to account for current and deferred tax, but not how to reflect the effects of uncertainty. IFRS Interpretation 23 provides requirements that add to the requirements

in TAS 12 by specifying how to reflect the effects of uncertainty in accounting for income taxes. The Interpretation is effective from 1 January 2019 with earlier application is permitted. The Group is assessing the potential impact on its consolidated financial statements resulting from the application of IFRS Interpretation 23.

### **Annual Improvements to IFRSs 2015-2017 Cycle**

#### **Improvements to IFRSs**

IASB issued Annual Improvements to IFRSs - 2015-2017 Cycle. The amendments are effective as of 1 January 2019. Earlier application is permitted. The Group does not expect that application of these improvements to IFRSs will have significant impact on its consolidated financial statements.

### **IFRS 3 Business Combinations and IFRS 11 Joint Arrangements**

IFRS 3 and IFRS 11 are amended to clarify how a company accounts for increasing its interest in a joint operation that meets the definition of a business. If a party obtains control, then the transaction is a business combination achieved in stages and the acquiring party remeasures the previously held interest at fair value. If a party maintains (or obtains) joint control, then the previously held interest is not remeasured.

### **IAS 12 Income Taxes**

IAS 12 is amended to clarify that all income tax consequences of dividends (including payments on financial instruments classified as equity) are recognised consistently with the transactions that generated the distributable profits - i.e. in profit or loss, other comprehensive income (OCI) or equity.

### **IAS 23 Borrowing Costs**

IAS 23 is amended to clarify that the general borrowings pool used to calculate eligible borrowing costs excludes only borrowings that specifically finance qualifying assets that are still under development or construction. Borrowings that were intended to specifically finance qualifying assets that are now ready for their intended use or sale - or any non-qualifying assets - are included in that general pool.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## **IFRS 17 -Insurance Contracts**

On 18 May 2017, IASB issued IFRS 17 Insurance Contracts. This first truly international standard for insurance contracts will help investors and others better understand insurers' risk exposure, profitability and financial position. IFRS 17 replaces IFRS 4, which was brought in as an interim Standard in 2004. IFRS 4 has given companies dispensation to carry on accounting for insurance contracts using national accounting standards, resulting in a multitude of different approaches. As a consequence, it is difficult for investors to compare and contrast the financial performance of otherwise similar companies. IFRS 17 solves the comparison problems created by IFRS 4 by requiring all insurance contracts to be accounted for in a consistent manner, benefiting both investors and insurance companies. Insurance obligations will be accounted for using current values - instead of historical cost. The information will be updated regularly, providing more useful information to users of financial statements. IFRS 17 has an effective date of 1 January 2021 but companies can apply it earlier. The Group does not expect that application of IFRS 17 will have significant impact on its consolidated financial statements.

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## **2.5 Summary of Significant Accounting Policies**

### **Related Parties**

A related party is a person or entity that is related to the entity that is preparing its financial statements (referred to as the 'reporting entity').

(a) A person or a close member of that person's family is related to a reporting entity if that person:

- (i) has control or joint control over the reporting entity;
- (ii) has significant influence over the reporting entity;
- (iii) is a member of the key management personnel of the reporting entity or of a parent of the reporting entity.

(b) An entity is related to a reporting entity if any of the following conditions applies:

- (i) The entity and the reporting entity are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- (iii) Both entities are joint ventures of the same third party.
- (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- (v) The entity is a post-employment defined benefit plan for the benefit of employees of either the reporting entity or an entity related to the reporting entity. If the reporting entity is itself such a plan, the sponsoring employers are also related to the reporting entity.
- (vi) The entity is controlled or jointly controlled by a person identified in (a).
- (vii) A person identified in (a) (i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

Transaction with related party is a transfer of resources, services or liabilities between the reporting entity and the related party, disregarding it is with or without a value.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Revenue

Revenue is measured at the fair value of the collected or uncollected receivables. Estimated returns, discounts, and allowances are deducted from afore mentioned measurement.

### Sale of goods

Revenue from the sales of the Group's purchase orders and contracts is recognized when all the following conditions are satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the entity; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

### Rendering of services

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract. The stage of completion of the contract is determined as follows:

- Installation fees are recognized by reference to the stage of completion of the installation, determined as the proportion of the total time expected to install that has elapsed at the balance sheet date,
- Servicing fees included in the price of products sold are recognized by reference to the proportion of the total cost of providing the servicing for the product sold, taking into account historical trends in the number of services actually provided on past goods sold and
- Revenue from time and material contracts is recognized at the contractual rates as labor hours are delivered and direct expenses are incurred.

Revenue from construction contracts is recognized in accordance with the accounting policy outlined in the following pages.

### Dividend and interest revenue

Dividend income from investments is recognized when the shareholder's right to receive payment has been established (provided that it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably).

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

### Rental income

Rental income from properties is recognized on a straight-line basis over the term of the relevant lease.

## Inventories

Inventories are stated at the lower of cost and net realizable value. Inventories are valued on the basis of the project according to the weighted average method. Net realizable value represents the estimated selling price less all estimated costs of completion and costs necessary to realize sales. When the net realizable value of inventory is less than cost, the inventory is written down to the net realizable value and the expense is included in statement of profit or loss in the period the write-down or loss occurred. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realizable value because of changed economic circumstances, the amount of the write-down is reversed. The reversal amount is limited to the amount of the original write-down.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Property, Plant and Equipment

Land held for use in the production or supply of goods or services, or for administrative purposes, are stated in the consolidated statement of financial position at their revalued amounts, being the fair value at the date of revaluation, less any subsequent accumulated impairment losses.

Revaluations are performed with sufficient regularity such that the carrying amounts do not differ materially from those that would be determined using fair values at the end of each reporting period.

Any increase in the fair value arising on the revaluation of such land is recognized in gain on revaluation of property.

A decrease in the carrying amount arising on the revaluation of such land is recognized in profit or loss to the extent that it exceeds the balance in the accumulated in the equity, if any, held in the properties revaluation reserve relating to a previous revaluation of that asset.

On the subsequent sale or retirement of a revalued property, the attributable revaluation surplus remaining in the properties revaluation reserve inequity is transferred directly to retained earnings.

Land is not depreciated. Property, plant and equipment other than lands are carried at cost less accumulated depreciation and any accumulated impairment losses.

Properties in the course of construction for production, rental or administrative purposes, or for purposes not yet determined, are carried at cost, less any recognized impairment loss. Borrowing cost is capitalized when the assets took a substantial period of time to get ready for their intended use or sale.

These assets are classified to property, plant, and equipment when the assets are completed and ready for their intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is charged as to write off the cost of assets, other than land and properties under construction, over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. If the ownership of the finance lease is not obvious at the end of the leasing period, it is depreciated over their expected useful lives or, where shorter, the term of the relevant lease.

The gain or loss arising on the disposal or retirement of an item of fixed assets is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

The maintenance and repair expenses arising from changing any part of the fixed assets can be realized if the economic benefit of the asset is increased. All other expenses are recognized in the expense accounts in the consolidated profit and loss when they are realized.

The useful lives of fixed assets are as follows:

	<u>Useful life</u>
Buildings	5-50 years
Land improvements	7-25 years
Machinery and equipment	2-35 years
Motor vehicles	5-18 years
Furniture and fixtures	2-50 years
Other tangible assets	4-20 years

## Intangible Assets

### Intangible assets acquired

Intangible assets acquired are recognized at cost less accumulated amortization and accumulated impairment losses. Amortization is charged on a straight-line basis over their estimated useful lives. The estimated useful life and amortization methods are reviewed at the end of each annual reporting period, with the effect of any changes in accounting estimates for on a prospective basis.



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### Trademarks and Licenses

Acquired licenses are shown at historical cost. Licenses have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method to allocate the cost of licenses over their estimated useful lives.

### Computer software

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortized over their estimated useful lives.

### Internally generated intangible assets - Research and Development

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale,
- The intention to complete the intangible asset and use or sell it,
- The ability to use or sell the intangible asset,
- How the intangible asset will generate probable future economic benefits,
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognized, development expenditure is charged to profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

The useful lives of the intangible assets are as follows:

	<u>Useful life</u>
Rights	2-15 years
Computer software	2-11 years
Development expenditures	1-5 years
Leasehold improvements	2-11 years

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Impairment of Assets

### Non-derivative Financial Assets

For financial assets that are not recognized in profit or loss, including shares in investments accounted for by equity method, it is assessed if there is objective evidence of impairment at each reporting period.

Objective evidence of impairment in financial assets includes the sentences below.

- failure to fulfill the commitment or obligation by debtor;
- depending on the circumstances that the Group may not take into consideration;
- the possibility of bankruptcy of the debtor or the issuer;
- arise of a negative status in debtor or issuer's payment status;
- elimination of a marketable asset from the active market or
- observable information indicating a measurable decrease in expected cash flows from a group of financial assets.

The fact that the fair value of an investment based on stocks falls permanently below the cost price for an important period or for a long period of time is also an objective evidence of impairment. The Group considers a 20 percent decline to be significant and a 9-month period as long-term and permanent.

### Available-for-sale financial assets

Impairment losses on available for sale financial assets are recognized by reclassifying the losses accumulated in the gain on revaluation of available for sale financial assets reserve to profit or loss. The amount reclassified is the difference between the acquisition cost (net of any principal repayment and amortization) and the current fair value, less any impairment loss previously recognized in profit or loss.

If the fair value of an impaired available for sale debt security subsequently increases and the increase can be related objectively to an event occurring after the impairment loss was recognized, then the impairment loss is reversed through profit or loss. Impairment loss is recognized in profit or loss for an investment in an equity instrument classified as available for sale are not reversed through profit or loss.

If there is an increase in the fair value of a debt instrument classified as impaired or available for sale and if that increase is recognized as reliably correlated to an event occurred after the impairment loss is recognized, withdrawal of impairment loss is accounted for in profit or loss, otherwise in comprehensive income. Impairment losses recognized in profit or loss by associating with investments in equity instruments classified as available-for-sale cannot be withdrawn through profit or loss.

### Equity Accounted Investees

An impairment loss in respect of an equity accounted investee is measured by comparing the recoverable amount of the investment with its carrying amount. An impairment loss is recognized in profit or loss, and is reversed if there has been a favorable change in the estimates used to determine the recoverable amount.

## Borrowing Cost

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

When the Group borrows funds specifically for the purpose of the qualifying assets, the amount of borrowing costs eligible for capitalization is the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Financial Instruments

### ***(i) Non-derivative financial assets***

The Group initially recognizes loans, receivables and deposits on the date that they are originated. All other financial assets including financial assets at fair value through profit or loss are recognized initially on the trade date, which is the date that the Group becomes a party to the contractual provisions of the instrument.

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Group classifies non-derivative financial assets as financial assets at fair value through profit or loss, financial assets to be held until maturity, loans and receivables and available for sale financial assets.

### ***Loans and receivables***

Loans and receivables are financial assets that are not quoted in active market, with fixed or variable payments. These assets are initially measured at fair value plus any direct attributable transaction costs. Subsequent to initial recognition, they are measured at amortised cost using the effective interest method.

Loans and receivables contain cash and cash equivalent, trade and other receivables.

### ***Cash and cash equivalents***

Cash and cash equivalents comprise of cash balances that are subject to insignificant risk of change and in value and cash deposits with maturities less than three months. And they are used in order to finance short-term liabilities.

### ***Available-for-sale financial assets***

Available-for-sale financial assets are non-derivative financial assets that are, defined as available for sale. These assets are initially measured at fair value plus any direct attributable transaction costs.

Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses and foreign currency differences on debt instruments, are recognised in OCI and accumulated in the fair value reserve. When these assets are derecognised, "Gain on Revaluation of Available for Sale Financial Assets" is reclassified to profit or loss. Available for sale financial assets are comprised of equity securities.

### ***(ii) Non-derivative Financial Liabilities***

The Group initially recognises and subordinated debt and debt securities issued on the date when they are originated. All other financial assets and financial liabilities are initially recognised on the trade date when the entity becomes a party to the contractual provisions of the instrument.

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire.

The Group classifies non-derivative financial liabilities as other financial liabilities category. Other non-derivative financial liabilities are initially measured at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.

Other financial liabilities consist of debt securities including preferred shares, bank overdrafts and trade and other payables.

Bank overdrafts that are reimbursable on demand and used as in cash management of the Group, are included in statement of cash flow in cash and cash equivalents.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## **(iii) Derivative Financial Instruments (Including Hedge Accounting)**

The Group holds derivative financial instruments to hedge its foreign currency and interest rate risk exposures.

- If the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;
- The host contract is not itself carried at fair value through profit or loss; and
- Embedded derivatives are separated from the host contract and accounted for separately.

The Group designates certain derivatives held for risk management as well as certain non-derivative financial instruments as hedging instruments in qualifying hedging relationships. On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objective and strategy in undertaking the hedge, together with the method that will be used to assess the effectiveness of the hedging relationship. The Group makes an assessment, both at inception of the hedge relationship and on an ongoing basis, of whether the hedging instrument(s) is(are) expected to be highly effective in offsetting the changes in the fair value or cash flows of the respective hedged item(s) during the period for which the hedge is designated, and whether the actual results of each hedge are within a range of 80-125 percent. The Group makes an assessment for a cash flow hedge of a forecast transaction, of whether the forecast transaction is highly probable to occur and presents an exposure to variations in cash flows that could ultimately affect profit or loss.

Derivatives are initially measured at fair value; any directly attributable transaction costs are recognised in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are generally recognised in profit or loss.

## **Capital**

### **Common Stocks**

Common stocks are classified as equity. Incremental costs that can be directly attributable to the issue of ordinary shares are recognised as a deduction from equity considering the tax effect.

## **Financial Lease Operations**

### **Leasing- the group as lessor**

Leases in terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. All other leases are classified as operating leases.

Finance lease receivables are recognized at the amount of the Group's net investment in the leases. Finance lease income is recognized allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Start-up costs for the realization and optimisation of the operational lease agreement are added to the cost of the leased asset and amortized through the leased time on a straight line basis method.

## **Foreign Currency Transactions**

### **Foreign currency transactions and balances**

The financial statements of each Group entity are presented in the currency of the primary economic environment in which the entity operates as its functional currency. For the purpose of the consolidated financial statements, the operational results and financial position of each entity are expressed in TL, which is the functional currency of the Company, and the presentation for consolidated financial statements.

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

In preparing the financial statements of the individual entities, transactions in foreign currencies (other than TL) are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary items (including advances) denominated in foreign currencies are retranslated at the rates prevailing on the balance sheet date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are accounted for the period in profit or loss in which they are incurred except for the following cases:

- Exchange differences which relate to assets under construction for future productive use, which are included in the cost of those assets where they are regarded as an adjustment to interest costs on foreign currency borrowings;
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks (see below for hedging accounting policies); and
- Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur, which form part of the net investment in a foreign operation, and which are recognized in the foreign currency translation reserve and recognized in profit or loss on disposal of the net investment.

### Earnings per Share

Earnings per share, disclosed in the consolidated statement of profit or loss, are determined by dividing the net income attributable to equity holders of the parent by the weighted average number of shares outstanding during the period concerned.

In Turkey, companies can increase their share capital by distributing "bonus shares" to shareholders from retained earnings. In computing earnings per share, such "bonus share" distributions are assessed as issued shares. Accordingly, the weighted average number of shares is computed by taking into consideration of the retrospective effects of the share distributions.

### Events After the Reporting Period

Events after the reporting periods include all events that take place between the balance sheet date and the date of authorization for the release of the financial statements, although the events occurred after the announcements related to the net profit/loss or even after the public disclosure of other selective financial information.

In the case that events occur requiring an adjustment, the Group adjusts the amount recognized in its consolidated financial statements to reflect the adjustments after the balance sheet date.

### Provisions, Contingent Liabilities and Contingent Assets

Provisions are recognized when the Group has a present obligation as a result of a past event, and it is probable that the Group will be required to settle that obligation, and a reliable estimate can be made for the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties related with the obligation.

Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

### Operating Segments

Operations of the Company are technical system design, development, production and after-sales services for various products for defense industry. One kind of operating segment has occurred in consequence of similarities between methods that are used for products, quality of services and processes, client's type and class, and distribution or presentation of products. It is not required to disclose segment reporting for the consolidated subsidiaries, since revenue profit/loss and assets are below 10 percent of consolidated amounts.

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### Construction Contracts

Cost of contracts is recognized when incurred. These costs include the costs that relate directly to the specific contract and the costs that are attributable to contract activity in general and can be allocated to the contract and the other costs that are specifically chargeable to the customer under the terms of the contract. A major part of the costs include the development expenses of the projects.

Where the outcome of a construction contract cannot be estimated reliably, revenue is recognized to the extent of contract costs incurred that it is probable that it will be recoverable.

Where the outcome of a construction contract can be estimated reliably, revenue is recognized over the terms of the contract term. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

Variations in contract work, claims and incentive payments are included to the extent that the amount can be measured reliably and its receipt is considered probable.

The Group uses the "percentage-of-completion method" to determine the appropriate amount to recognize in a given period. The stage of completion is measured by reference to the contract costs incurred up to the reporting date as a percentage of total estimated costs for each contract. Costs incurred in the year in connection with future activity on a contract are excluded from contract costs in determining the stage of completion. They are presented as inventories, prepayments or other assets, depending on their nature.

Each project contract is evaluated by the technical teams regarding the expected change in the upcoming costs and the profitability of the contracts that is determined as of the balance sheet dates. If purchases and collections made by more than one currency regarding a contract, then the upcoming purchasing and invoicing is forecasted based on the amount stated in the contract and the weighted average currency in the following financial years. Besides the amounts of the contracts subjected to escalation as of the reporting date, are estimated based on the contract details.

Government grants, if any, are also taken into consideration while calculating the profitability of the contract. The grants are recognized by offsetting from the costs in accordance with TAS 20 "Accounting for Government Grants and Disclosure of Government Assistance".

The Group presents the amount as an asset if the gross amount due from customers for customer work for all contracts in progress for which costs incurred plus recognized profits (less recognized losses) exceed progress billings. Progress billings not yet paid by customers and retention are included within "Trade Receivables".

The Group presents the amount as a liability if the gross amount due to customers for contract work for all contracts in progress for which progress billings exceed costs incurred plus recognized profits (less recognized losses).

### Government Grants and Incentives

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## **Taxes Calculated on the Basis of the Company's Earnings**

Turkish tax legislation does not permit a parent company and its subsidiary to file a consolidated tax return. Therefore, provisions for taxes, as reflected in the accompanying consolidated financial statements, have been calculated on a separate-entity basis.

Income tax expense represents the sum of the tax currently payable and deferred tax.

### **Current tax**

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the statement of profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

### **Deferred tax**

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax liabilities are recognized for all taxable temporary differences and deferred tax assets are recognized for deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that future taxable profits will be available against which they can be used.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

### **Current and deferred tax for the period**

Tax, provided that it is not related with a transaction directly recognized in equity, is classified in the statement of profit or loss. Otherwise, tax is recognized in equity.

## **Employee Benefits**

### **Termination and retirement benefits**

Under Turkish law and union agreements, lump sum payments are made to employees retiring or involuntarily leaving the Group. Such payments are considered as being part of defined retirement benefit plan as per TAS 19 "Employee Benefits" ("TAS 19").

The retirement benefit obligation recognized in the consolidated financial statements represents the present value of the defined benefit obligation.

The actuarial gains and losses are recognized in other comprehensive income.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## **Dividend and bonus plans**

The Group recognizes a liability and an expense for bonuses and dividend, based on a formula that takes into consideration the profit attributable to the Company's shareholders after certain adjustments. The Group recognizes a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

The Group recognizes the cost of providing additional retirement bonuses to employees who have completed 20 years of service and earned the right to retirement benefits. In 26 November 2015, according Board of Directors' resolution numbered 869/6c, the Company has decided to terminate payment of retirement bonus employees worked for 20 years for the Company and is qualified pensioner, beginning from 30 July 2016. These compensations are deducted from the net present values of the unrealized liability amounts and are recognized in the accompanying consolidated financial statements.

## **Statement of Cash Flows**

Current period statement of cash flows is categorized and reported as operating, investing and financing.

## **Offsetting**

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to offset the amounts and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

## **Non-Current Assets Held for Sale**

Non-current assets are classified as "assets held for sale" when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell. The assets can be a part of the Entity, disposal group as a single fixed asset.

## **2.6 Critical Accounting Judgments and Estimates**

### **Critical judgments in applying the Group's accounting policies**

In the process of applying the accounting policies, which are described in note 2.5, management has made the following judgments that have the most significant effect on the amounts recognized in the financial statements:

### **Deferred tax**

Deferred tax assets and liabilities are recorded using substantially enacted tax rates for the effect of temporary differences between book and tax bases of assets and liabilities. Currently, there are deferred tax assets resulting from operating loss carry-forwards and deductible temporary differences, all of which could reduce taxable income in the future. Based on available evidence, both positive and negative, it is determined whether it is probable that all or a portion of the deferred tax assets will be realized.

The main factors which are considered include future earnings potential; cumulative losses in recent years; history of loss carry-forwards and other tax assets expiring; the carry-forward period associated with the deferred tax assets; future reversals of existing taxable temporary differences; tax-planning strategies that would, if necessary, be implemented, and the nature of the income that can be used to realize the deferred tax asset. If based on the weight of all available evidence, it is the Group's belief that taxable profit will not be available sufficient to utilize some portion of these deferred tax assets, then provision is set for some portion of or all of the deferred tax assets (Note 28).

### **Liabilities with respect to employee benefits**

The Group makes various assumptions on discount, inflation rate, wage increase rate, the probability of quitting voluntarily for calculating provisions for employee benefits and retirement pays (Note 17).

### **Useful lives of tangible and intangible assets**

The Group amortizes the non-current assets based on the useful lives of those assets stated in the accounting policies (Note 11-12).

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## Percentage of completion

The Group uses the percentage of completion method in accounting for contracts in accordance with TAS 11 "Construction Contracts". Use of percentage of completion method requires the Group to estimate the services performed to date as a proportion of the total services to be performed. Moreover for projects that are estimated to end up with a loss, provision for loss is calculated (Note 15). The estimation of the total cost of the projects consists of the risks that may cause major changes in the adjustments of the fair values of assets and liabilities for the subsequent periods.

If purchases and collections made by more than one currency regarding the projects TAS 11 "Construction Contracts" the upcoming purchasing and invoicing is forecasted with respect of contract amount and cost are determined considering weighted average currency.

## Escalation

As of the reporting dates, the amounts of the projects subject to escalation are calculated with respect to the provisions of the contracts and estimated in accordance with TAS 11 "Construction Contracts".

## Provision for guarantee expenses

The Group calculates provision, according to the budgeted estimations for specific parts of the sales under the scope of warranty that needs specific guarantee calculations, and according to the realizations in previous years for the remaining part of the sales (Note 15).

## Development Expenses

As of reporting dates, the Management assess the recoverability of the expenses regarding the Group's development activities. These expenses are started to be amortized with respect to their useful lives when their development phases are completed and it becomes probable that there is an associated economic benefit. When the development phase is completed and no economic benefit is foreseen, the related expenses are recognized in consolidated income statement (Note 12).

## 3. CASH AND CASH EQUIVALENTS

	31 December 2017	31 December 2016
Cash	153	141
Bank		
- Time deposit	1.100.402	1.108.300
- Demand deposit	161.170	59.348
Other	28	105
<b>Cash and cash equivalents on the cash flow statement</b>	<b>1.261.753</b>	<b>1.167.894</b>
Interest income accruals	1.151	882
	<b>1.262.904</b>	<b>1.168.776</b>

As of 31 December 2017, the Group has time deposits denominated in foreign currencies with maturities between January-February 2018 (31 December 2016: January-March 2017), with the interest rates between 1,85 percent and 5,01 percent (31 December 2016: 0,5 percent to 3,8 percent) amounting to TL 942.195 (31 December 2016: TL 656.603) in several banks.

As of "31 December, 2017, the Group has time deposits denominated in TL terms with maturities between January-February 2018 (31 December 2016: January-March 2017) with the interest rates between 14,25 percent and 15,75 percent (31 December 2016: 10,4 and 12,2 percent amounting to TL 158.205 (31 December 2016: TL 451.697) in several banks.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 4. INTERESTS IN OTHER ENTITIES

### a) Subsidiaries

Details of the Group's material subsidiaries as of 31 December are as follow:

Name of Subsidiary	Place of incorporation and operation	Currency	Group's proportion of ownership and voting power held (%)		Principal Activity
			2017	2016	
ASELSANNET	Turkey	TL	100	100	Communication systems
ASELSAN Baku	Azerbaijan	AZN	100	100	Marketing and sales of group products
Mikro Ar-Ge	Turkey	TL	85	85	R&D on microelectronic projects
ASELSAN Malaysia	Malaysia	MYR	100	--	Remote controlled weapon systems

### Composition of the Group

Explained in Note 1.

### Change in the Group's ownership interest in a subsidiary:

Change in the Group's subsidiaries ownership is explained in Note 2.1

### b) Joint Ventures

Where a Group entity undertakes its activities under joint venture arrangements directly, the Group's share of jointly controlled assets and any liabilities incurred jointly with other ventures are recognized in the financial statements of the relevant entity and classified according to their nature. Liabilities and expenses incurred directly in respect of interests in jointly controlled assets are accounted for on an accrual basis. Income from the sale or use of the Group's share of the output of jointly controlled assets, and its share of joint venture expenses, are recognized when it is probable that the economic benefits associated with the transactions will flow to/ from the Group and their amount can be measured reliably.

SADEC LLC is consolidated since 31 March 2017 and YİTAL is consolidated since 31 December 2017 by using equity method.

## 5. RELATED PARTY DISCLOSURES

Transactions between the Company and its subsidiaries which are related parties of the Company have been eliminated on consolidation, therefore have not been disclosed in this note.

The trade receivables from related parties generally arise from sales activities with maturities of 1-2 years.

The trade payables to related parties generally arise from the purchase activities with maturities of 1-9 months.

Total amount of salaries and other short-term benefits paid for key management for the period ended 31 December 2017 is TL 9.629 (31 December 2016: TL 8.658).

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The details of transactions between the Group and other related parties are disclosed in the following pages.

31 December 2017					
	Receivables				
	Short-term		Other Receivables	Long-term	
Balances with related parties	Trading	Prepaid Expenses		Trading	Prepaid Expenses
<b>Main shareholder</b>					
TSKGV	28	--	--	--	--
<b>Other shareholder</b>					
Axa Sigorta Anonim Şirketi ("Axa Sigorta")	--	--	--	--	--
<b>Main shareholder's subsidiaries and associates</b>					
Hava Elektronik Harp Sis. Müh. Tic. Anonim Şirketi			--		
("HAVELSAN EHSİM")	--	1.165		--	--
Hava Elektronik San. ve Tic. Anonim Şirketi ("HAVELSAN")	11.095	21.482	--	957	7.365
HAVELSAN Teknoloji Radar San. ve Tic. Anonim Şirketi			--		
("HTR")	--	2.319		--	--
İşbir Elektrik Sanayii Anonim Şirketi ("İŞBİR")	2	12.878	--	--	1.683
NETAŞ Telekomünikasyon Anonim Şirketi ("NETAŞ")	714	2.090	--	--	15.056
Savunma Teknolojileri Mühendislik ve Ticaret Anonim Şirketi ("STM")	55.650	7.577	--	172	--
Türk Havacılık ve Uzay Sanayi ve Ticaret Anonim Şirketi ("TUSAŞ")	65.044	92	--	81.252	--
<b>Financial Instruments</b>					
Askeri Pil Sanayi ve Ticaret Anonim Şirketi ("ASPILSAN")	--	1.235	--	--	--
Roket Sanayi ve Ticaret Anonim Şirketi ("ROKETSAN")	32.335	787	--	49.371	124.686
<b>Joint ventures and its related parties</b>					
ASELSAN Bilkent Nano	--	215	--	--	4.405
İhsan Doğramacı Bilkent University	--	4.455	--	--	41
ASELSAN Optik	1.882	22.261	--	--	--
IGG	21.535	--	--	8.552	--
IGG ASELSAN	747	--	--	--	--
ASELSAN Kazakhstan	52.547	--	--	11.512	--
ASELSAN Jordan	24.545	--	--	--	--
TÜBİTAK BİLGEM	--	6.072	--	--	254
TÜBİTAK-UME	--	228	--	--	--
TÜBİTAK BİLİMSEL TEKNOLOJİK ARAŞTIRMA	10.063	--	--	15.316	
TÜBİTAK SAGE Savunma Sanayii	--	9.699	--	6.560	11.997
TÜBİTAK UZAY TEKNOLOJİLERİ	--	--	--	--	--
Savunma Sanayi Müsteşarlığı ("SSM")	184.440	--	--	655.154	
YİTAL	--	--	14	--	--
Ankaref Bilişim Teknolojileri Limited Şirketi ("ANKAREF")	--	--	20	--	--
SADEC LLC	214	--	--	--	--
	<b>460.841</b>	<b>92.555</b>	<b>34</b>	<b>828.846</b>	<b>165.487</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

31 December 2017					
Payables					
Short-term			Long-term		
Trading	Deferred Income	Other Payables	Trading	Deferred Income	
--	--	--	--	--	--
--	--	65	--	--	--
--	--	--	--	--	--
21.569	--	--	--	--	--
6.875	--	--	--	--	--
6.403	--	--	--	--	--
41.273	--	--	--	--	--
16.324	119.354	--	144.705	60.871	
690	2.317	--	64.381	285.669	
8.901	--	--	--	--	--
32.577	9.035	--	11.473	52.520	
1.890	--	--	--	--	--
6.135	--	--	--	--	--
12.436	--	--	--	--	--
--	--	--	--	--	--
916	--	--	--	--	--
195	956	--	--	--	--
--	--	--	--	--	--
3.770	--	--	--	--	--
3	--	--	--	--	--
--	--	--	14.506	13.631	
11.000	--	--	--	--	--
--	--	--	--	--	--
24.989	12.535	--	813.311	1.048.655	
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
<b>195.946</b>	<b>144.197</b>	<b>65</b>	<b>1.048.376</b>	<b>1.461.346</b>	



# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	31 December 2016			
	Receivables			
	Short-term		Long-term	
	Trading	Advances given	Trading	Advances given
<b>Balances with related parties</b>				
<b><u>Main shareholder</u></b>				
TSKGV	318	--	--	--
<b><u>Other shareholder</u></b>				
Axa Sigorta	--	--	--	--
<b><u>Main shareholder's subsidiaries and associates</u></b>				
HAVELSAN EHSİM	39	745	--	--
HAVELSAN	17.524	20.401	3.004	--
HTR	--	1.561	--	--
İŞBİR	--	9.146	--	2.350
NETAŞ	--	12.097	--	16.667
STM	25.116	9.028	--	--
TUSAŞ	49.763	--	23.118	--
<b><u>Financial Instruments</u></b>				
ASPILSAN	--	762	--	--
ROKETSAN	65.647	--	10.065	180.824
<b><u>Joint ventures and its related parties</u></b>				
İhsan Doğramacı Bilkent University	--	2.056	--	--
IGG ASELSAN	1.178	3.266	--	--
IGG	28.916	--	--	--
ASELSAN Optik	845	--	--	--
ASELSAN Kazakhstan	68.575	--	--	--
ASELSAN Jordan	53.351	--	--	--
SADEC LLC	383	--	--	--
	<b>311.655</b>	<b>59.062</b>	<b>36.187</b>	<b>199.841</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

31 December 2016					
Payables					
Short-term			Long-term		
Trading	Advances received	Non-trading	Trading	Advances received	
--	--	--	--	--	--
--	--	69	--	--	--
--	--	--	--	--	--
--	75	--	--	--	--
2.027	--	--	--	--	--
4.072	--	--	--	--	--
26.402	--	--	--	--	--
16.651	623	--	--	--	3.028
569	14.755	--	21.721	--	266.200
5.098	--	--	--	--	--
17.275	2.003	--	--	--	45.096
3.621	--	--	--	--	--
2.419	--	--	--	--	--
--	--	--	--	--	--
851	--	--	--	--	--
185	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
<b>79.170</b>	<b>17.456</b>	<b>69</b>	<b>21.721</b>	<b>314.324</b>	

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Transactions with related parties</b>	<b>Purchases</b>	<b>Purchases</b>
<b>Main Shareholder</b>		
TSKGV	672	654
<b>Main shareholder's subsidiaries and associates</b>		
NETAŞ	105.512	57.910
STM	10.334	22.674
İŞBİR	29.776	18.326
HTR - HAVELSAN	15.745	7.903
MERCEDES-BENZ TÜRK ANONİM ŞİRKETİ ("MERCEDES")	--	2.335
TUSAŞ	738	840
HAVELSAN	22.630	541
HAVELSAN EHSİM	41	--
<b>Financial Instruments</b>		
ROKETSAN	91.264	96.518
ASPİLSAN	15.655	7.790
<b>Joint ventures and its related parties</b>		
İhsan Doğramacı Bilkent University	12.526	10.423
TÜBİTAK BİLGEM	9.055	--
TÜBİTAK-UME	184	--
TÜBİTAK SAGE Savunma Sanayii	15.418	--
ANKAREF	405	--
	<b>329.955</b>	<b>225.914</b>

Transactions with related parties are generally related to the purchases and sales of goods and services related to projects under TAS 11 "Construction Contracts".



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Transactions with related parties</b>	<b>Sales</b>	<b>Sales</b>
<b>Main Shareholder</b>		
TSKGV	319	604
<b>Main shareholder's subsidiaries and associates</b>		
TUSAŞ	298.815	197.259
STM	358.910	76.244
HAVELSAN	1.324	9.347
HAVELSAN HTR	611	--
HAVELSAN EHSİM	--	46
İŞBİR	2	--
NETAŞ	939	7
<b>Financial Instruments</b>		
ROKETSAN	59.188	62.542
<b>Joint ventures and its related parties</b>		
IGG	2.758	6.700
TÜBİTAK BİLİMSEL TEKNOLOJİK ARAŞTIRMA	51.947	--
TÜBİTAK SAGE Savunma Sanayii	6.177	--
TÜBİTAK UZAY TEKNOLOJİLERİ	21	--
SSM	2.687.614	--
	<b>3.468.625</b>	<b>352.749</b>

## 6. TRADE RECEIVABLES AND PAYABLES

### a) Trade receivables

Details of the Group's trade receivables are as follows:

	31 December 2017	31 December 2016
<b>Short-term trade receivables</b>		
Trade receivables	1.134.180	1.706.200
Trade receivables from related parties (Note 5)	460.841	311.655
Unbilled receivables from construction contracts in progress	--	17.640
Notes receivable	6.744	4.200
Doubtful trade receivables	921	921
Allowance for doubtful trade receivables (-)	(921)	(921)
	<b>1.601.765</b>	<b>2.039.695</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

<b>Long-term trade receivables</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Unbilled receivables from construction contracts in progress	299.134	233.168
Trade receivables	70.314	115.997
Unbilled receivables from construction contracts in progress-Related party (Note 5)	812.177	35.577
Trade receivables from related parties (Note 5)	16.669	610
Notes receivables	--	240
	<b>1.198.294</b>	<b>385.592</b>

The movement for the Group's allowance for doubtful receivables is as follows:

	<b>31 December 2017</b>	<b>31 December 2016</b>
Opening balance	921	859
Provision for the period	--	62
<b>Closing balance</b>	<b>921</b>	<b>921</b>

The sectorial distribution of trade receivables is as follows:

	<b>31 December 2017</b>	<b>31 December 2016</b>
Public sector	1.235.632	1.177.776
Private sector	832.703	644.348
Receivables from companies operating in foreign countries	731.724	603.163
<b>Total receivables</b>	<b>2.800.059</b>	<b>2.425.287</b>

Receivables from public sector represent the receivables are due from the Ministry of Defense ("MOD") and other public entities. The Group's operations are based on contracts and no other collaterals are obtained from the customers.

## b) Trade payables

Details of The Group's trade payables are as follows:

<b>Short-term trade payables</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Trade payables	1.123.688	749.756
Unearned revenue related to construction contracts in progress	48.269	221.962
Due to related parties (Note 5)	170.205	78.843
Unearned revenue related to construction contracts in progress-Related party (Note 5)	25.741	327
Other trade payables	1.897	2.019
	<b>1.369.800</b>	<b>1.052.907</b>
<b>Long-term trade payables</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Unearned revenue related to construction contracts in progress	213.639	231.328
Unearned revenue related to construction contracts in progress- Related party (Note 5)	1.048.376	21.721
Trade payables	--	95
	<b>1.262.015</b>	<b>253.144</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 7. OTHER RECEIVABLES AND PAYABLES

### a) Other receivables

Short-term other receivables	31 December 2017	31 December 2016
Receivables from tax office <sup>1</sup>	110.943	81.623
Deposits and guarantees given	1.378	1.170
Other receivables from related parties (Note 5)	34	--
Other <sup>2</sup>	406	1.919
	<b>112.761</b>	<b>84.712</b>
Long-term other receivables	31 December 2017	31 December 2016
Deposits and guarantees given	<b>661</b>	<b>295</b>

### b) Other payables

Short-term other payables	31 December 2017	31 December 2016
Short-term other payables	1.352	805
Deposits and guarantees received	77	5.374
Short-term other payables to related parties (Note 5)	65	69
	<b>1.494</b>	<b>6.248</b>
Long-term other payables	31 December 2017	31 December 2016
Deposits and guarantees received	<b>105</b>	<b>45</b>

## 8. EQUITY ACCOUNTED INVESTMENTS

The Group's financial information for its shareholdings consolidated with equity method, that are not presented, according to the Group's ownership rates are as below:

31 December 2017	Ownership Rate (%)	Current Assets	Non-current Assets	Total Assets	Short-term Liabilities	Long-term Liabilities	Total Liabilities
ASELSAN		64.621	94.567	159.188	72.649	5.770	78.419
Kazakhstan	49						
ASELSAN Jordan	49	43.753	15.004	58.757	32.764	--	32.764
ASELSAN Optik	50	28.345	39.119	67.464	34.091	18.657	52.748
IGG ASELSAN	49	12.911	1.724	14.635	4.453	345	4.798
ASELSAN Bilkent	50	33.606	68.520	102.126	1.586	83.615	85.201
SADEC LLC	50	16.419	514	16.933	482	105	587
YİTAL	51	4.369	12	4.381	74	--	74
		<b>204.024</b>	<b>219.460</b>	<b>423.484</b>	<b>146.099</b>	<b>108.492</b>	<b>254.591</b>

31 December 2017	Ownership Rate (%)	Revenue	Expenses	Net Profit/(Loss)	Group Share of Net Assets	Group Share of Profit/(Loss)
ASELSAN		77.333	(64.016)	13.317	39.576	6.525
Kazakhstan	49					
ASELSAN Jordan	49	33.585	(32.490)	1.095	12.736	537
ASELSAN Optik	50	29.908	(28.309)	1.599	7.359	800
IGG ASELSAN	49	7.133	(6.774)	359	4.820	175
ASELSAN Bilkent	50	6.565	(7.186)	(621)	8.463	(310)
SADEC LLC	50	--	(5.730)	(5.730)	8.173	(2.865)
YİTAL	51	1	(59)	(58)	2.197	(30)
		<b>154.525</b>	<b>(144.564)</b>	<b>9.961</b>	<b>83.324</b>	<b>4.832</b>

During 2017, there was a capital increase amounted TL 9.122 by International Golden Group in IGG ASELSAN joint venture, in cash.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

31 December 2016	Ownership Rate (%)	Current Assets	Non-current Assets	Total Assets	Short-term Liabilities	Long-term Liabilities	Total Liabilities
ASELSAN		58.752	87.008	145.760	79.578	3.534	83.112
Kazakhstan	49						
ASELSAN Jordan	49	75.230	15.235	90.465	61.660	--	61.660
ASELSAN Optik	50	12.664	28.854	41.518	9.614	18.786	28.400
IGG ASELSAN	49	12.526	3.878	16.404	1.200	24.886	26.086
ASELSAN Bilkent	50	12.345	58.619	70.964	630	52.788	53.418
		<b>171.517</b>	<b>193.594</b>	<b>365.111</b>	<b>152.682</b>	<b>99.994</b>	<b>252.676</b>

31 December 2016	Ownership Rate (%)	Revenue	Expenses	Net Profit/ (Loss)	Group Share of Net Assets	Group Share of Profit/(Loss)
ASELSAN Kazakhstan	49	66.881	(62.737)	4.144	30.697	2.030
ASELSAN Jordan	49	56.277	(44.377)	11.900	11.357	5.831
ASELSAN Optik	50	8.400	(8.100)	300	6.559	150
IGG ASELSAN	49	6.090	(22.103)	(16.013)	--	(7.846)
ASELSAN Bilkent	50	714	(617)	97	8.774	48
		<b>138.362</b>	<b>(137.934)</b>	<b>428</b>	<b>57.387</b>	<b>213</b>

In 2016, joint ventures' ASELSAN Kazakhstan, ASELSAN Optik and ASELSAN Bilkent capital increase, in cash. The capital increase amounts of joint ventures' shares are for ASELSAN Bilkent TL 2.250, for ASELSAN Kazakhstan TL 5.160 and for IGG ASELSAN TL 7.846.

SADEC LLC was established on 27 December 2016 in Saudi Arabia. Since ASELSAN has a capital commitment to SADEC LLC, there is no consolidation effect on the Group's financial statements.

## 9. INVENTORIES

	31 December 2017	31 December 2016
Raw materials	974.457	587.699
Work in progress	590.719	369.145
Goods in transit <sup>3</sup>	209.176	96.450
Finished goods	97.221	91.098
Trade goods	62.307	36.071
Other inventories	36.170	26.954
Allowance for impairment on inventories (-)	(25.661)	(20.019)
	<b>1.944.389</b>	<b>1.187.398</b>

The Group provides an allowance for impairment on inventories when the inventories net realizable values are lower than their costs or when they are determined as slow-moving inventories.

The Group has identified raw material, work-in progress and finished goods inventories below net realizable value within the current year. Therefore, there is a provision for inventories amounting to TL 25.661 in the statement of financial position (31 December 2016: TL 20.019).

<sup>3</sup> Goods in transit includes the goods for which significant risks and rewards of ownership has been transferred to the Group due to their shipping terms.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Impaired inventory movements for the period ended in 31 December are as follows:

	2017	2016
Opening balance	20.019	15.670
Provision released	(8)	(3)
Provision for the period	5.650	4.352
<b>Closing balance</b>	<b>25.661</b>	<b>20.019</b>

## 10. PREPAID EXPENSES AND DEFERRED INCOME

<b>Short-term prepaid expenses</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Order advances given for inventory purchases	520.419	294.636
Short-term order advances given to related parties for inventory purchases (Note 5)	92.555	59.062
Prepaid expenses	41.163	26.452
	<b>654.137</b>	<b>380.150</b>

<b>Long-term prepaid expenses</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Long-term order advances given to related parties for inventory purchases (Note 5)	165.487	199.841
Order advances given for inventory purchases	245.756	155.029
Order advances given for fixed assets purchases	28.191	32.686
Prepaid expenses	3.297	6.143
	<b>442.731</b>	<b>393.699</b>

<b>Short-term deferred income</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Order advances received	101.477	310.676
Deferred income	54.785	42.449
Order advances received from related parties (Note 5)	144.197	17.456
	<b>300.459</b>	<b>370.581</b>

Short-term order advances received comprises advances received from 33 customers (31 December 2016: 35 customers) of which first 10 customers constitutes 97,9 percent of the total (31 December 2016: 95,7 percent).

<b>Long-term deferred income</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Order advances received	181.417	1.777.653
Order advances received from related parties (Note 5)	1.461.346	314.324
Deferred income	3	2
	<b>1.642.766</b>	<b>2.091.979</b>

Long-term order advances received comprises advances received from 12 customers (31 December 2016: 24 customers) of which the first 10 customers constitutes 99,9 percent of the total (31 December 2016: 99,6 percent).

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### 11. PROPERTY, PLANT AND EQUIPMENT

	Land	Land improvements	Buildings	Machinery and equipment
<b><u>Cost and revaluation</u></b>				
Opening balance as of 1 January 2017	246.318	15.259	175.925	710.762
Additions <sup>3</sup>	--	199	--	107.103
Revaluation fund	2.947	--	--	--
Disposals	--	--	--	(47)
Transfers	--	2.771	17.574	11.105
<b>Closing balance as of 31 December 2017</b>	<b>249.265</b>	<b>18.229</b>	<b>193.499</b>	<b>828.923</b>
<b><u>Accumulated depreciation</u></b>				
Opening balance as of 1 January 2017	--	9.123	66.917	428.067
Charge for the period	--	823	6.549	53.088
Disposals	--	--	--	(44)
<b>Closing balance as of 31 December 2017</b>	<b>--</b>	<b>9.946</b>	<b>73.466</b>	<b>481.111</b>
<b>Net book value as of 31 December 2017</b>	<b>249.265</b>	<b>8.283</b>	<b>120.033</b>	<b>347.812</b>
	Land	Land improvements	Buildings	Machinery and equipment
<b><u>Cost and revaluation</u></b>				
Opening balance as of 1 January 2016	245.174	13.781	173.516	639.741
Additions	1.144	1.478	2.409	71.627
Disposals	--	--	--	(606)
Transfers	--	--	--	--
<b>Closing balance as of 31 December 2016</b>	<b>246.318</b>	<b>15.259</b>	<b>175.925</b>	<b>710.762</b>
<b><u>Accumulated depreciation</u></b>				
Opening balance as of 1 January 2016	--	8.503	60.804	385.200
Charge for the period	--	620	6.113	43.448
Disposals	--	--	--	(581)
<b>Closing balance as of 31 December 2016</b>	<b>--</b>	<b>9.123</b>	<b>66.917</b>	<b>428.067</b>
<b>Net book value as of 31 December 2016</b>	<b>246.318</b>	<b>6.136</b>	<b>109.008</b>	<b>282.695</b>

<sup>1</sup> Comprises the mould model devices manufactured by the Group with net book value of TL 34.196 (31 December 2016: TL 37.065).

<sup>2</sup> Includes of investments in molds, models, devices and construction works.

<sup>3</sup> TL 2.270 of additions are free of charge investment income (31 December 2016: TL 735).



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Vehicles	Furniture and fixtures	Other fixed assets <sup>1</sup>	Leasehold improvements	Construction in progress <sup>2</sup>	Total
3.839	155.280	85.809	197.205	61.277	1.651.674
1.178	34.903	15	637	69.949	213.984
--	--	--	--	--	2.947
(477)	(14)	--	--	(899)	(1.437)
--	--	5.814	--	(37.264)	--
<b>4.540</b>	<b>190.169</b>	<b>91.638</b>	<b>197.842</b>	<b>93.063</b>	<b>1.867.168</b>
2.303	110.997	48.744	18.001	--	684.152
349	16.153	8.698	7.035	--	92.695
(477)	(1)	--	--	--	(522)
<b>2.175</b>	<b>127.149</b>	<b>57.442</b>	<b>25.036</b>	<b>--</b>	<b>776.325</b>
<b>2.365</b>	<b>63.020</b>	<b>34.196</b>	<b>172.806</b>	<b>93.063</b>	<b>1.090.843</b>
Vehicles	Furniture and fixtures	Other fixed assets	Leasehold improvements	Construction in progress	Total
3.765	132.896	76.522	197.070	46.669	1.529.134
783	22.454	9.284	135	14.783	124.097
(709)	(70)	--	--	(172)	(1.557)
--	--	3	--	(3)	--
<b>3.839</b>	<b>155.280</b>	<b>85.809</b>	<b>197.205</b>	<b>61.277</b>	<b>1.651.674</b>
2.775	95.650	40.502	10.858	--	604.292
237	15.394	8.242	7.143	--	81.197
(709)	(47)	--	--	--	(1.337)
<b>2.303</b>	<b>110.997</b>	<b>48.744</b>	<b>18.001</b>	<b>--</b>	<b>684.152</b>
<b>1.536</b>	<b>44.283</b>	<b>37.065</b>	<b>179.204</b>	<b>61.277</b>	<b>967.522</b>

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The details of the depreciation expenses with respect to the plant, property and equipment is as follows:

	31 December 2017	31 December 2016
Cost of sales	63.173	55.305
General administrative expenses	17.523	15.480
Inventories	11.728	10.116
Marketing expenses	271	296
	<b>92.695</b>	<b>81.197</b>

There is no tangible assets acquired through financial leasing as of 31 December 2017 and 2016.

Total value of tangible assets that completed their useful lives but still in use is TL 1.173.581 as of 31 December 2017 (31 December 2017: 1.026.223).

There is no collateral, pledges, and mortgages on tangible assets as of 31 December 2017 and 2016.

There is no capitalized interest expense as of 31 December 2017 and 2016.

### Fair value measurement of the Group's land

The lands owned by the Group are revalued and presented at fair value as of 31 December 2017. The fair value of the lands owned by the Group is revalued by Metrik Gayrimenkul Değerleme Danışmanlık Anonim Şirketi ("Metrik Değerleme"), an independent appraisal company. Metrik Değerleme is authorized by the CMB and provides real estate appraisal services in accordance with the capital market legislation. The fair value of the lands is determined according to "Market Value Approach (Equivalent Comprasion Method)". Gains resulting from revaluation are recognized under "Gain on Revaluation of Property" in other comprehensive income.

In accordance with TFRS 13 "Fair Value Measurement" standard, since measurement techniques do not include observable market inputs, fair values of the lands are considered as level 3 in respect of fair value hierarchy.

There are no restrictions on the distribution of revaluation funds. The valuation difference on the lands is TL 230.391 (31 December 2016: TL 227.444).

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Details of the Group's lands and information regarding fair value hierarchy as of 31 December 2017 are as follows:

	31 December 2017	Fair value as of reporting date		
		Level 1 TL	Level 2 TL	Level 3 TL
Macunköy	173.421	--	--	173.421
Akyurt	74.513	--	--	74.513
Gölbaşı	1.110	--	--	1.110
Gölbek	166	--	--	166
Denizli	55	--	--	55
	<b>249.265</b>	<b>--</b>	<b>--</b>	<b>249.265</b>

	31 December 2016	Fair value as of reporting date		
		Level 1 TL	Level 2 TL	Level 3 TL
Macunköy	170.421	--	--	170.421
Akyurt	74.513	--	--	74.513
Gölbaşı	1.144	--	--	1.144
Gölbek	220	--	--	220
Denizli	20	--	--	20
	<b>246.318</b>	<b>--</b>	<b>--</b>	<b>246.318</b>

The fair value level action table as of 31 December 2017 are as follows:

	Fair Value Level as of Reporting Date		
	Level 1 TL	Level 2 TL	Level 3 TL
<b>1 January 2017</b>	--	--	<b>246.318</b>
Additions	--	--	2.947
<b>31 December 2017</b>	<b>--</b>	<b>--</b>	<b>249.265</b>



# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### 12. INTANGIBLE ASSETS

	<b>Rights</b>	<b>Development Costs</b>	<b>Other intangible assets<sup>1</sup></b>	<b>Total</b>
<b>Cost</b>				
Opening balance as of 1 January 2017	42.689	818.547	100.745	961.981
Additions	5.512	296.912	37.080	339.504
Disposals	--	(111.313)	--	(111.313)
Transfers	3.187	(3.187)	--	--
<b>Closing balance as of 31 December 2017</b>	<b>51.388</b>	<b>1.000.959</b>	<b>137.825</b>	<b>1.190.172</b>
<b>Accumulated Amortization</b>				
Opening balance as of 1 January 2017	23.291	162.277	79.282	264.850
Charge for the period	4.442	31.641	20.242	56.325
<b>Closing balance as of 31 December 2017</b>	<b>27.733</b>	<b>193.918</b>	<b>99.524</b>	<b>321.175</b>
<b>Net book value as of 31 December 2017</b>	<b>23.655</b>	<b>807.041</b>	<b>38.301</b>	<b>868.997</b>
	<b>Rights</b>	<b>Development Costs</b>	<b>Other intangible assets</b>	<b>Total</b>
<b>Cost</b>				
Opening balance as of 1 January 2016	33.428	644.911	81.668	760.007
Additions	2.757	207.378	19.079	229.214
Disposals	--	(27.238)	(2)	(27.240)
Transfers	6.504	(6.504)	--	--
<b>Closing balance as of 31 December 2016</b>	<b>42.689</b>	<b>818.547</b>	<b>100.745</b>	<b>961.981</b>
<b>Accumulated Amortization</b>				
Opening balance as of 1 January 2016	20.159	134.859	67.477	222.495
Charge for the period	3.132	27.418	11.807	42.357
Disposals	--	--	(2)	(2)
<b>Closing balance as of 31 December 2016</b>	<b>23.291</b>	<b>162.277</b>	<b>79.282</b>	<b>264.850</b>
<b>Net book value as of 31 December 2016</b>	<b>19.398</b>	<b>656.270</b>	<b>21.463</b>	<b>697.131</b>

<sup>1</sup> Other intangible assets include licences related to computer software.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The details of amortization expenses regarding intangible assets is as follows:

	31 December 2017	31 December 2016
Research and development expenses	31.642	24.929
Cost of sales	16.783	11.159
Inventories	4.667	3.278
Marketing expenses	1.139	1.977
General administrative expenses	2.094	1.014
	<b>56.325</b>	<b>42.357</b>

## 13. GOVERNMENT GRANTS AND INCENTIVES

The deferred incentive income shown under short and long-term liabilities in the consolidated statement of financial position is as follows:

	31 December 2017	31 December 2016
<b>Current government grants and incentives</b>	<b>41.643</b>	<b>28.268</b>

As part of the Decision on Government Incentives on Investments, there are 6 investment incentives taken from General Directorate of Turkish Undersecretariat of the Treasury. The incentives allow VAT exemption and customs tax exemption. VAT exemption is applied in both domestic and international purchases while customs tax exemption is applied for international purchases.

In Corporate Tax Calculation, no tax payable is calculated because of R&D deduction and deductions due to investment incentive certificates cannot be applied. For this reason, no deferred tax effect is calculated for the temporary differences arising from investment incentives.

Government grants show the unearned proportion of the grant after the costs related with the completed parts of the projects are deducted from the grants taken by the Group for the ongoing projects that was obtained as of the reporting date.

The incentive obtained consists of the incentives that are accrued in accordance with TÜBİTAK's R&D recognition letter prepared with respect to the Group's ongoing projects.

The Group obtains capital support from "Support and Price Stabilization Fund" of Central Bank of Turkey via Undersecretariat of Foreign Trade's consent. The Scientific and Technological Research Council of Turkey ("TÜBİTAK") and Technology Development Foundation of Turkey ("TTGV") act as intermediary in accordance with Communiqué No:98/10 published by the Money-Loans and Coordination Board.

In accordance with Law on Technology Development Zones numbered 4691, Group utilizes withholding income tax incentive, social security premium incentive and stamp tax exceptions. Such incentives are utilized through not paying withholding income tax incentive, social security premium incentive and stamp tax exceptions calculated based on research and development and software personnel payroll. Income generated in accordance with law on Technology Development Zones numbered 4691 is exempt from corporate income tax until 31 December 2023.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The research and development expenditure deduction rate used as a tax benefit has been increased from 40 percent to 100 percent in accordance with the amended article 10 of the Tax Law numbered 5520, the amended article 89 of Law numbered 193 and 5746 with respect to the Support of Research and Development Activities. The aforementioned law was enacted as of April 2008 after its issue in the Official Gazette dated 12 March 2008, numbered 26814. In accordance to the Law regarding the Incentive of Research and Development Activities numbered 6676 published on Official Gazettes numbered 29636 on 26 February 2016 and The Law Regarding the Amendments on Delegated Legislation, the content of the law and incentives has been broadened and additional exceptions has been given. Research and development expenditure may be used as a tax deduction in the determination of the taxable income. If taxable income levels are not sufficient to absorb all available tax deductions, any unused research and development tax deduction is allowed to be carried forward to the next tax period. The remaining amount from previous year is increased according to revaluation ratio defined at Tax Procedure Law. According to the item No. 8 of the related law, all the costs related with research and development can be subjected to deduction until 31 December 2023.

## 14. BORROWING COSTS

As of 31 December 2017, there is no borrowing cost regarding the qualifying assets. (31 December 2016: None).

## 15. PROVISIONS, CONTINGENT ASSETS AND LIABILITIES

### a) Provisions

Other short-term provisions	31 December 2017	31 December 2016
Provision for warranties <sup>1</sup>	253.253	183.555
Provision for onerous contracts	106.318	91.555
Provision for delay penalties <sup>2</sup>	15.787	19.705
Provision for legal cases	5.917	5.332
Provision for cost expenses	1.527	2.955
Other	804	265
	<b>383.606</b>	<b>303.367</b>

The movement of the provision for warranties is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	183.555	117.809
Provision for the period	155.138	145.576
Realized during the period	(85.440)	(72.746)
Provision reversed during the period	--	(7.084)
<b>Closing balance</b>	<b>253.253</b>	<b>183.555</b>

<sup>1</sup> The Group's provision for warranty is based on sales under warranty are estimated in accordance with historical data. Provision for warranty is calculated by using warranty rate included in the contract as long as the invoice issued throughout the life of the Contract

<sup>2</sup> Provision for delay penalties and fines are calculated in accordance with interest rates mentioned in the agreement for default and within the client's knowledge.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The movement of the provision for onerous contracts is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	91.555	41.804
Reclass from long-term provisions to short-term provisions	--	16.128
Reclass from short-term provisions to long-term provisions	(13.618)	--
Provision for the period	34.290	34.463
Realized during the period	(4.867)	(644)
Provision reversed during the period	(1.042)	(196)
<b>Closing balance</b>	<b>106.318</b>	<b>91.555</b>

The movement of the provision for delay penalties is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	19.705	10.779
Provision for the period	7.010	31.711
Realized during the period	(10.918)	(22.785)
Provision reversed during the period	(10)	--
<b>Closing balance</b>	<b>15.787</b>	<b>19.705</b>

The movement of the provision for legal cases is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	5.332	2.649
Provision for the period	2.349	2.934
Realized during the period	(100)	(71)
Provision reversed during the period	(1.664)	(180)
<b>Closing balance</b>	<b>5.917</b>	<b>5.332</b>

	31 December 2017	31 December 2016
<b>Other long-term provisions</b>		
Provision for delay penalties	42.925	36.022
Provision of onerous contracts	19.614	16.114
	<b>62.539</b>	<b>52.136</b>

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The movement of the provision for onerous contracts is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	36.022	23.518
Reclass from long-term provisions to short-term provisions	--	(16.128)
Reclass from short-term provisions to long-term provisions	13.618	--
Provision during the period	427	29.598
Provision reversed during the period	(7.142)	(966)
<b>Closing balance</b>	<b>42.925</b>	<b>36.022</b>

The movement of the provision for delay penalties is as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Opening balance	16.114	--
Provision during the period	3.500	16.114
<b>Closing balance</b>	<b>19.614</b>	<b>16.114</b>

### b) Legal cases

As of the dates 31 December, according to the declarations written by the legal counselors, the lawsuits and legal executions in favor of and against the Group are as follows:

Description	2017	2016
a) Ongoing lawsuits filed by the Group	1.017	1.395
b) Execution proceedings carried out by the Group	8.691	5.210
c) Ongoing lawsuits filed against the Group	5.917	5.332
d) Lawsuits finalized against the Group within the period	99	139
e) Lawsuits finalized in favor of the Group within the period	2.304	4.076

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 16. COMMITMENTS AND CONTINGENCIES

### a) Operating lease

As of 31 December 2017, the Group has two lands that are rented for 49 years and 46 years. In 2017 the Group has paid rent amounting to TL 197 (31 December 2016: TL 195) and TL 404 (31 December 2016: TL 350) for property lands rented for 49 years and 46 years respectively. Rent payments escalated every year based on the "Producer Price Index (PPI)" rate. The rental period will end on 23 January 2061.

As of 31 December 2017, the Group has paid rent amounting to TL 3.680 (31 December 2016: TL 3.355) for vehicles rented during the year.

### b) Guarantees received

	31 December 2017	31 December 2016
Letters of guarantees received from the suppliers	1.307.008	1.040.467
Collaterals received from the customers	13.546	11.130
Letters of guarantees received from the customers	3.313	2.780
Collaterals received from the suppliers	--	2.430
Mortgages received from the customers	265	265
Guarantees received from the customers	--	6
Guarantees received from the suppliers	--	--
	<b>1.324.132</b>	<b>1.057.078</b>

### c) Collaterals / Pledges / Mortgages ("CPM") given

The collaterals/pledges/mortgages ("CPM") given by the Group as of 31 December 2017 and 31 December 2016 is as follows:

In accordance with the terms of the Patrol and Anti-Submarine Warfare Ship Projects ("MİLGEM"), the Company is a guarantor if HAVELSAN cannot be able to fulfill the obligations in this project of an amount of USD 267.826.



# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

31 December 2017	TL Equivalent	TL	USD
A. Total amount of CPM given on behalf of the legal entity			
-Collateral	13.304.922	1.916.017	1.838.751
-Pledge	--	--	--
-Mortgage	--	--	--
B. Total amount of CPM given on behalf of the subsidiaries included in full consolidation			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
C. Total amount of CPM given to maintain operations and collect payables from third parties			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
D. Total amount of other CPM given			
i. Total Amount of CPM on behalf of the main partner			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
ii. Total amount of CPM given on behalf of other group companies that do not cover B and C <sup>1</sup>			
-Collateral	16.337	495	4.200
-Pledge	--	--	--
-Mortgage	--	--	--
iii. Total amount of CPM on behalf of third parties that do not cover			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
<b>Total</b>	<b>13.201.259</b>	<b>1.916.512</b>	<b>1.842.951</b>

The Group is responsible as joint guarantor for the portion amounting to EURO 2,5 Million of investment credit amounting to EURO 5 Million which will be used by ASELSAN Optik, the Group's joint venture.

<sup>1</sup> The ratio of the other CPM given by the Group to equity as of 31 December 2017 is 0,32 percent. TL 16.749 is the collateral amount pertaining to guarantee letter given on behalf of the entities' affiliate company Mikro AR-GE and joint venture ASELSAN Bilkent.

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

EURO	UAE Dirham	Indian Rupee	British Pound
984.226	50	10.000	1.654
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<b>984.226</b>	<b>50</b>	<b>10.000</b>	<b>1.654</b>

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

31 December 2016	TL Equivalent	TL	USD
A. Total amount of CPM given on behalf of the legal entity			
-Collateral	11.268.113	1.473.279	1.835.161
-Pledge	--	--	--
-Mortgage	--	--	--
B. Total amount of CPM given on behalf of the subsidiaries included in full consolidation			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
C. Total amount of CPM given to maintain operations and collect payables from third parties			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
D. Total amount of other CPM given			
i. Total Amount of CPM on behalf of the main partner			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
ii. Total amount of CPM given on behalf of other group companies that do not cover B and C <sup>1</sup>			
-Collateral	15.688	907	4.200
-Pledge	--	--	--
-Mortgage	--	--	--
iii. Total amount of CPM on behalf of third parties that do not cover			
-Collateral	--	--	--
-Pledge	--	--	--
-Mortgage	--	--	--
<b>Total</b>	<b>11.283.801</b>	<b>1.474.186</b>	<b>1.839.361</b>

The Group is responsible as joint guarantor for the portion amounted EURO 2,5 Million of investment credit amounted EURO 5 Million which will be used by ASELSAN Optik that is the Group's joint venture.

<sup>1</sup> The ratio of the other CPM given by the Group to equity as of 31 December 2016 is 0,42 percent. TL 15.688 is the collateral amount pertaining to guarantee letter given on behalf of the entities' affiliate company Mikro AR-GE and joint venture ASELSAN Bilkent.



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

<b>EURO</b>	<b>UAE Dirham</b>	<b>Indian Rupee</b>	<b>British Pound</b>
890.377	26.760	10.000	1.654
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<b>890.377</b>	<b>26.760</b>	<b>10.000</b>	<b>1.654</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 17. EMPLOYEE BENEFITS

### a) Obligations for employee benefits

	31 December 2017	31 December 2016
Social security premiums payable	36.593	28.380
Taxes and funds payable	8.403	7.838
Due to personnel	1.137	618
	<b>46.133</b>	<b>36.836</b>

### b) Short-term provisions for employee benefits

	31 December 2017	31 December 2016
<b>Provision for vacation pay liability</b>	<b>42.301</b>	<b>43.362</b>

As of 31 December the movement of the provision for vacation pay is as follows:

	2017	2016
Opening balance	43.362	38.115
Provision for the period	7.167	21.140
Provision paid during the period	(6.231)	(10.314)
Provision realized during the period	(1.997)	(5.579)
<b>Closing balance</b>	<b>42.301</b>	<b>43.362</b>

### c) Long-term provisions for employee benefits

	31 December 2017	31 December 2016
Provision for severance pay	155.107	138.248
Provision for retirement pay	13.635	12.749
	<b>168.742</b>	<b>150.997</b>

As of 31 December the movement of severance and retirement pays are as follows:

	2017	2016
Opening balance	150.997	163.412
Service cost	11.472	15.099
Interest cost	13.645	13.666
Termination cost	1.088	498
Actuarial gains/(loss)	2.033	(22.759)
Payments	(10.493)	(18.919)
<b>Closing balance</b>	<b>168.742</b>	<b>150.997</b>

### Provision for severance pay:

In accordance with the Labor Law Legislations, the Group is obliged to make legal severance indemnity payments to entitled employees whose employment has been terminated. Furthermore, with regard to Social Security Law numbered 506 dated 6 March 1981, number 2422 dated 25 August 1999 and law numbered 4447, article 60 denotes the legal obligation to make severance payments to all employees who are entitled to indemnity by the date of leave of employment.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Certain provisions regarding services before retirement, has been annulled on 23 May 2002 during the revision of the related law. As of 31 December 2017 severance payments are calculated on the basis of 30 days' pay, limited to a ceiling of TL<sup>1</sup> 4.732 (31 December 2016: TL<sup>1</sup> 4.297)

As of 1 January 2018, the ceiling for the severance payments is TL 5.002<sup>1</sup>

The liability is not funded, as there is no funding requirement. The provision has been calculated by estimating the present value of the future probable obligation of the Group arising from the retirement of employees. TAS 19 ("Employee Benefits") requires actuarial valuation methods to be developed to estimate the entity's obligation under defined benefit plans.

## Provision for retirement grant:

Retirement bonus provision is recognized for the employees with service of more than 20 years within the Group and has earned/will earn their retirement.

Accordingly, the following actuarial assumptions were used in the calculation of the total liability:

	31 December 2017 (%)	31 December 2016 (%)
Interest rate	11,65	10,59
Inflation rate	8,50	7
Discount ratio	3,22	3,36
Estimation of probability of retirement ratio	97	98

## 18. OTHER ASSETS AND LIABILITIES

### a) Other current assets

	31 December 2017	31 December 2016
VAT carried forward <sup>1</sup>	145.786	105.202
Restricted cash <sup>2</sup>	57.550	63.062
Other VAT	4.332	4.088
Job advances	344	1.039
Other <sup>14</sup>	14.167	28.316
	<b>222.179</b>	<b>201.707</b>

### b) Other non-current assets

	31 December 2017	31 December 2016
VAT carried forward <sup>1</sup>	253.298	119.687
Prepaid taxes and funds	17.741	8.619
Other <sup>3</sup>	5.750	4.739
	<b>276.789</b>	<b>133.045</b>

### c) Other short-term liabilities

	31 December 2017	31 December 2016
Taxes and funds payable	11.566	9.874
Other <sup>3</sup>	1.980	11.900
	<b>13.546</b>	<b>21.774</b>

<sup>1</sup> Amounts are shown in original Turkish Lira values.

<sup>1</sup> Taxpayers (Contractor/the Group) who deliver goods and provides services to the Natural Security Institutions (such as MOD and UDI) are to be approved by purchasers (contracting authority) in terms of content and nature accordingly. Value Added Tax (VAT) is exempted as of 1 March 2009 in accordance with General Declaration on Value Added Tax with the Serial Number 112 in the Official Gazette as of 12 February 2009. These amounts usually are not collected, but they are offset with other tax liabilities.

<sup>2</sup> The amount consists of the restricted cash with regard to 1007 and the European Union projects.

<sup>3</sup> Mainly comprises of other assets and liabilities of consolidated subsidiaries.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 19. SHARE CAPITAL, RESERVES AND OTHER EQUITY ITEMS

### Capital

	31 December		31 December	
Shareholders	Share (%)	2017	Share (%)	2016
TSKGV	84,58	845.826	84,58	845.826
Publicly held	15,30	153.019	15,30	153.019
Axa Sigorta Anonim Şirketi	0,12	1.155	0,12	1.155
Nominal capital	100	1.000.000	100	1.000.000
Share capital adjustment		98.621		98.621
<b>Inflation adjusted capital</b>		<b>1.098.621</b>		<b>1.098.621</b>

The Group's nominal capital is TL 1.000.000 comprising 100.000.000.000 shares each of which is 1 kuruş. A total of 60.545.454.546 of the shares constitutes "Group A" and 39.454.545.454 of the shares constitutes "Group B" shares. All of the shares are nominative. "Group A" shares are privileged nominative shares and 6 members of the Board of Directors members are assigned from the holders of nominative "Group A" type shareholders or from the ones nominated by "Group A" type shareholders. Moreover, when new shares are issued the proportion of nominative "Group A" shares are preserved. In accordance with the CMB's legislation, other Board of Directors members, not including elected Independent Board of Director Members, are assigned from nominative "Group A" shareholders or elected from among candidate nominated by "Group A" shareholders.

### Restricted reserves

In accordance with Capital Markets Board's Communiqué Serial II No:19.1 "Share of Profit", effective as of 1 February 2014, and with regard to the Turkish Commercial Code ("TCC"), legal reserves in publicly held companies will be generated by 5 percent of income until it reaches 20 percent of paid-in share capital. After the 5 percent of the dividend is paid to shareholders, 10 percent of the total distributed to shareholders and employees can be added in the other legal reserve. Under the TCC, the legal reserves can be used only to offset losses for the going concern of the company or to prevent unemployment as long as the amount does not exceed 50 percent of the paid-in capital.

As of 31 December 2017, The Group's restricted reserves set aside from profit comprises legal reserves. The total of the Group's legal reserves are TL 124.062 (31 December 2016: TL 94.159).

### Retained Earnings

Accumulated profits apart from net profit for the year and extraordinary reserves which is accumulated profit by nature are shown under retained earnings. As of 31 December 2017 the extraordinary reserves balance presented in retained earnings is TL 677.863 (31 December 2016: TL 248.547). According to the statutory records, the Company's profit for the period is TL 890.749 (31 December 2016: TL 534.070) and its other funds available for profit distribution is TL 706.805 (31 December 2016: TL 259.858) and the details are as followings.

	31 December 2017	31 December 2016
<b>Capital reserves and extraordinary reserves</b>	706.805	259.858

### Profit distribution

Publicly listed companies perform dividend distribution in accordance with Capital Market Board's Communiqué Serial II No:19.1 "Share of Profit", effective as of 1 February 2014.

Shareholders, distribute dividend with general assembly decision, within the context of profit distribution policies set by general assembly and related regulations. As part of the communiqué, no specific minimum distribution ratio is indicated. Companies pay dividend as defined in their articles of association or dividend distribution policies.

On 15 March 2017, in accordance with the consolidated financial statements, the General Assembly of the Company has decided to allocate legal reserve amounting to TL 29.903 of the TL 795.191 which is based on the profit distribution, and to distribute TL 75.500 in cash to shareholders for dividend payment and the remaining TL 689.788 to be within the Group. Thus, the cash gross dividend amount for TL 1 nominal value per share is Kuruş 7,55 net (31 December 2016: Kuruş 4,2 net).

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Within 2017, dividend amounting to TL 75.500 in gross, 7,55 Kuruş per share of TL 1 (net profit amounting to TL 64.175, 6,42 Kuruş per share of TL 1) will be paid to shareholder. (31 December 2016: TL 42.000 in gross, 4,2 Kuruş per share of TL 1 (TL 5.700 in net, 3,57 Kuruş per share of TL 1) was paid).

On 1 March 2017, General Assembly of Aselsanet has decided to distribute TL 4.000 as dividend payments to shareholders and reserve TL 650 as retained earnings from net profit of the year 2016. Remaining TL 11.886 will be added to extraordinary reserves (31 December 2016: 10.000).

On 27 February 2017, General Assembly of Mikro AR-GE's has decided to distribute TL 65 as dividend payments to shareholders and reserve TL 6,2 as retained earnings from net profit of the year 2016. Remaining TL 26,2 will be added to extraordinary reserves (31 December 2016: 200).

All of the gross TL 75.500 of dividend to be distributed has been paid to the shareholders as of 31 December 2017.

## 20. REVENUE AND COST OF SALES

	1 January- 31 December 2017	1 January- 31 December 2016
<b>a) Revenue</b>		
Domestic sales	4.581.260	3.294.613
Export sales	784.165	485.404
Other revenues	1.068	324
Sales returns (-)	(4.417)	(10.480)
Sales discounts (-)	(1.797)	(1.745)
	<b>5.360.279</b>	<b>3.768.116</b>
<b>b) Cost of sales (-)</b>		
Cost of raw materials and supplies	1.498.776	969.267
Development expenses <sup>1</sup>	1.435.576	1.045.267
Cost of services sold	418.136	274.865
Production overheads	385.232	275.449
Cost of merchandise goods sold	121.428	70.314
Personnel expenses	101.245	79.994
Depreciation expenses	79.956	66.464
Change in finished goods	(6.123)	(16.762)
Change in work in progress	(221.574)	(94.352)
Cost of other sales	192.694	174.592
	<b>4.005.346</b>	<b>2.845.098</b>

<sup>1</sup> Development expenses consist of raw material, design and personnel expenses amounting TL 482.354 (31 December 2016: TL 384.658) of development expenses is comprised labour cost.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 21. CONSTRUCTION CONTRACTS

	31 December 2017	31 December 2016
Construction costs incurred plus recognized profits less recognized losses to date	11.627.027	9.862.184
Less: earned allowances	(11.851.741)	(10.051.137)
	<b>(224.714)</b>	<b>(188.953)</b>
Amounts due from customers under construction contracts (Note 6)	1.111.311	286.385
Amounts due to customers under construction contracts (Note 6)	(1.336.025)	(475.338)
	<b>(224.714)</b>	<b>(188.953)</b>

## 22. GENERAL ADMINISTRATIVE EXPENSES, MARKETING EXPENSES, RESEARCH AND DEVELOPMENT EXPENSES

	1 January - 31 December 2017	1 January - 31 December 2016
General administrative expenses (-)	177.622	150.732
Marketing expenses (-)	164.431	83.758
Research and development expenses (-)	97.300	82.603
	<b>439.353</b>	<b>317.093</b>

a) General administrative expenses (-)	1 January - 31 December 2017	1 January - 31 December 2016
Personnel expenses	112.474	100.498
Depreciation and amortization expenses	19.617	16.494
Expertise and consultancy expenses	6.609	5.788
Outsourcing expenses	4.503	2.803
Electricity expenses	3.332	2.963
Maintenance and repair expenses	3.060	1.999
Travel expenses	2.815	1.613
Personnel transportation expenses	2.379	1.743
Rent expenses	2.345	1.814
Insurance expenses	2.071	1.950
Personnel meal expenses	1.830	1.291
Course and seminar expenses	1.375	893
Property and environmental cleaning tax	1.326	1.286
Telephone expenses	660	716
Other	13.226	8.881
	<b>177.622</b>	<b>150.732</b>



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	1 January- 31 December 2017	1 January- 31 December 2016
<b>b) Marketing expenses (-)</b>		
Commission expenses	68.252	28.006
Exhibition expenses	22.678	11.093
Personnel expenses	15.626	14.338
Stamp duty expenses	12.654	7.278
Shipping and delivery expenses	5.746	3.708
Travel expenses	5.708	4.447
Expertise and Consultancy	4.240	1.072
Advertising expenses	3.514	2.400
Representation expenses	2.723	1.232
Packaging expenses	2.477	1.515
Depreciation and amortization expenses	1.410	2.273
Samples expenses	1.334	840
Rent expenses	1.243	687
Insurance expenses	203	789
Other	16.623	4.080
	<b>164.431</b>	<b>83.758</b>
<b>c) Research and development expenses (-)</b>		
Personnel expenses	42.185	33.930
Depreciation and amortization expenses	31.642	24.929
Equipment costs	12.473	13.226
Other	11.000	10.518
	<b>97.300</b>	<b>82.603</b>

### 23. OTHER OPERATING INCOME AND EXPENSES

#### a) Other operating income

	1 January- 31 December 2017	1 January- 31 December 2016
Foreign currency exchange gains	1.898.836	464.616
Discount expense	12.947	12.211
Free of charge investment income <sup>1</sup>	--	734
Other income	24.122	12.115
	<b>1.935.905</b>	<b>489.676</b>

<sup>1</sup> Free of charge investment income comprises of fixed assets donated by public bodies and utilized within the scope of research projects conducted with universities. Subsequent to the completion of these projects, the subject matter fixed assets have been incorporated to the Group without any charge.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

**b) Other operating expenses (-)**

	1 January- 31 December 2017	1 January- 31 December 2016
Foreign currency exchange losses	1.645.224	267.334
Discount expense	19.585	9.378
Other expense and losses	13.611	8.886
	<b>1.678.420</b>	<b>285.598</b>

**24. INCOME FROM INVESTING ACTIVITIES**

	1 January- 31 December 2017	1 January- 31 December 2016
Dividend income	8.938	8.171
Gain on sale of fixed assets	364	566
	<b>9.302</b>	<b>8.737</b>

**25. FINANCIAL INCOME**

	1 January- 31 December 2017	1 January- 31 December 2016
Foreign currency exchange gains on bank loans	66.449	45.546
Interest income	32.520	20.227
Other financial income	525	588
	<b>99.494</b>	<b>66.361</b>

**26. FINANCIAL EXPENSES**

	1 January- 31 December 2017	1 January- 31 December 2016
Foreign currency exchange losses from bank loans (-)	82.885	123.039
Interest cost related with employee benefits (-)	13.645	13.666
Discount expenses at bank loans (-)	15.508	7.510
Interest cost of borrowings (-)	8.102	7.076
	<b>120.140</b>	<b>151.291</b>

**27. ANALYSIS OF OTHER COMPREHENSIVE INCOME ITEMS**

	31 December 2017	31 December 2016
Gain from revaluation of available for sale financial assets	535.444	485.346
Revaluation of property	207.431	216.072
Cumulative Translation Adjustments	5.246	3.283
Loss on remeasurement of defined benefit plans	1.656	684
	<b>749.777</b>	<b>705.385</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Revaluation reserve available for sale financial assets</b>		
Opening balance	485.346	406.802
Gain on revaluation and reclassification of available for sale financial assets	52.735	82.678
Deferred tax liability arising from revaluation	(2.637)	(4.134)
<b>Closing balance</b>	<b>535.444</b>	<b>485.346</b>

Gain on revaluation or reclassification of available for sale financial assets arises due to revaluation of financial investments. When available for sale financial assets are sold, any related amount included in revaluation reserve is transferred to profit or loss.

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Revaluation of property</b>		
Opening balance (Prior reported)	216.072	216.072
Restatement effect	--	--
Opening balance (Restated)	--	216.072
Increase arising from revaluation of property	3.035	--
Deferred tax on revaluation	(11.372)	--
Current period value increase deferred tax effect <sup>1</sup>	(303)	--
<b>Closing balance</b>	<b>207.431</b>	<b>216.072</b>

Revaluation of property increase arises from revaluation of the lands. On the subsequent sale or retirement of a revalued property, the attributable revaluation surplus remaining in the properties revaluation reserve is transferred directly to retained earnings.

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Foreign currency exchange differences:</b>		
Opening balance	684	(95)
Currency differences from net asset currency translation investent in foreign operations	4.562	779
Deferred tax on revaluation	--	--
<b>Closing balance</b>	<b>5.246</b>	<b>684</b>

	1 January- 31 December 2017	1 January- 31 December 2016
<b>Gain/Loss on remeasurement of defined benefit plans</b>		
Opening balance	3.283	(14.924)
Gain/Loss on remeasurement of defined benefit plans	(2.033)	22.759
Deferred tax on gain/loss on remeasurement of defined benefit plans	406	(4.552)
<b>Closing balance</b>	<b>1.656</b>	<b>3.283</b>

<sup>1</sup> 75 percent of the income derived by entities from the sale of participation shares and real estates (immovable property) preferential rights, founders' shares and redeemed shares which are carried in assets at least for two years is exempt from corporate tax as of 31 December 2017. However, according to the amendments by Law numbered 7061, this rate is educed from 75 percent to 50 percent with regard to immovable properties and tax declarations starting from 2018 will be calculated using 50 percent for immovable properties.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 28. INCOME TAXES

### Corporate tax liabilities:

Current corporate tax provision  
Less: Prepaid taxes and funds

31 December 2017	31 December 2016
2.036	1.548
(1.319)	(1.121)
<b>717</b>	<b>427</b>

### Tax income:

Current corporate tax expense  
Deferred tax income

1 January- 31 December 2017	1 January- 31 December 2016
(2.036)	(1.548)
218.862	62.726
<b>216.826</b>	<b>61.178</b>

### Tax effects related to components of other comprehensive income

Defined benefit plan revaluation gains/losses  
Changes in Non-Current Assets Value Increase Fund  
Cumulative Translation Adjustments  
Gain on revaluation of available for sale financial assets

### Other comprehensive income in the period

1 January-31 December 2017		
Amount before tax	Tax income/ expense	Net of tax amount
(2.033)	406	(1.627)
3.034	(11.675)	(8.641)
4.562	--	4.562
52.735	(2.637)	50.098
<b>58.298</b>	<b>(13.906)</b>	<b>44.392</b>

### Tax effects related to components of other comprehensive income

Defined benefit plan revaluation gains/losses  
Cumulative Translation Adjustments  
Gain on Revaluation of Available for Sale Financial Assets

### Other comprehensive income in the period

1 January-31 December 2016		
Amount before tax	Tax income/ expense	Net of tax amount
22.759	(4.552)	18.207
779	--	779
82.678	(4.134)	78.544
<b>106.216</b>	<b>(8.686)</b>	<b>97.530</b>

### Tax recognized directly in equity

#### Deferred tax:

Directly recognized in equity:

- Revaluation of property  
- Gain on revaluation of available for sale financial assets  
- Actuarial gain/expense

### Deferred tax recognized directly in equity

1 January- 31 December 2017	1 January- 31 December 2016
(11.675)	--
(2.637)	(4.134)
406	(4.552)
<b>(13.906)</b>	<b>(8.686)</b>

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### Corporate tax

The Group is subject to Turkish corporate taxes. The corporate income tax is declared until the relevant accounting period-end's following fourth month, twenty-fifth day's evening and it is batch paid until the end of the related month. In accordance with the tax legislation, quarterly 20 percent (31 December 2016: 20 percent) on profits of advance tax is being calculated and paid. The amounts paid in this way are deducted by the tax on annual earning.

In accordance with the tax legislation in Turkey, financial losses could be carried forward for a maximum of five years that the year they appeared. Besides, tax returns and the related accounting records may be reviewed within five years by the tax administration.

Provision is made in the accompanying consolidated financial statements for the estimated change based on the Group's results for the year. Turkish tax legislation does not permit a parent company and its subsidiary to file a consolidated tax return. Therefore, provisions for taxes, as reflected in the accompanying consolidated financial statements, have been calculated on a separate entity bases.

Corporate tax rate that will be accrued based on rate able profit of the company is calculated on a basis by including disallowed deductions written of as expense when determining commercial profit with excluding tax-exempt profits and other discounts (also previous year losses and investments allowances used, if preferred)

The tax rate in 2017 is 20 percent (31 December 2016: 20 percent).

### Deferred Tax

The Group recognizes deferred tax assets and liabilities based upon temporary differences arising from its financial statements as reported for TFRS purposes and its statutory tax financial statements. These differences usually result in the recognition of revenue and expenses in different reporting periods for TFRS and tax purposes and the differences are given below.

In Turkey, corporate tax rate is 20 percent as of 31 December 2017 (2016: 20 percent). However, according to the Article 91 of the Law numbered 7061 "Legislation on Amendment of Certain Tax Legislation and Other Certain Legislation" which was published on the Official Gazette numbered 30261 on 5 December 2017 and according to the provisional clause 10 added to the Corporate Tax Law numbered 5520; corporate tax rate for the taxation periods of 2018, 2019 and 2020 is amended to be 22 percent, which would later be applied as 20 percent at the end of these periods.

In Turkey, the tax legislation does not permit a parent company and its subsidiaries to file a consolidated tax return. Therefore, provision for taxes, as reflected in the consolidated financial statements, has been calculated on a separate-entity basis.

The dividend income (excluding the participation certificates of investment funds and profit shares derived from the share certificates of investment trusts) derived by entities from the participation in the capital of another resident entity is exempt from corporate tax. Furthermore, 75 percent of the income derived by entities from the sale of participation shares and real estates (immovable property) preferential rights, founders' shares and redeemed shares which are carried in assets at least for two years is exempt from corporate tax as of 31 December 2017. However, according to the amendments by Law numbered 7061, this rate is reduced from 75 percent to 50 percent with regard to immovable properties and tax declarations starting from 2018 will be calculated using 50 percent for immovable properties. In order to be able to benefit from the exemption, the relevant income should be kept under a fund account in the liabilities and should not be withdrawn from the enterprise for 5 years. The sales amount should be collected by the end of the second calendar year following the year of sale.

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### Deferred Tax

The details of deferred tax assets and liabilities of the Group are as follows:

<b>Deferred Tax Assets:</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Discount on receivables	4.217	1.902
Adjustment to costs and provision for expected losses of construction contracts	718.491	429.590
Allowance for impairment on inventories	2.039	3.971
Provision for delay penalties	7.788	7.164
Provision for warranties	56.000	36.886
Provision for severance pay	31.021	27.650
Provision for retirement bonus pay	2.727	2.550
Provision for annual leave	9.306	8.672
Provision for legal cases	61	51
Accumulated research and development incentive	772.335	513.261
<b>Deferred Tax Liabilities:</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Discount on payables	(2.764)	(1.831)
Adjustment of progress payments for long- term construction projects	(926.323)	(580.319)
Depreciation of fixed assets / amortization of intangible assets	(34.140)	(28.057)
Fixed assets revaluation fund	(23.048)	(11.372)
Gain on revaluation of available for sale financial assets	(28.181)	(25.545)
<b>Deferred tax assets</b>	<b>1.603.985</b>	<b>1.031.697</b>
<b>Deferred tax liabilities</b>	<b>(1.014.456)</b>	<b>(647.124)</b>
<b>Deferred tax assets - net</b>	<b>589.529</b>	<b>384.573</b>



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	1 January- 31 December 2017	1 January- 31 December 2016
<b><u>Movement of deferred tax assets/(liabilities):</u></b>		
Opening balance as of 1 January	384.573	330.533
Charged to statement of profit or loss	218.862	62.726
Charged to equity	(13.906)	(8.686)
	<b>589.529</b>	<b>384.573</b>

	Effective Tax Rate (%)	1 January- 31 December 2017	Effective Tax Rate (%)	1 January- 31 December 2016
<b><u>Tax reconciliations:</u></b>				
Profit before tax from continuing operations		1.171.023		734.023
Income tax rate		20%		20%
Tax at the domestic income tax rate	20	234.205	20	146.805
Tax effects of:				
- revenue that is exempt from taxation	(1)	(11.000)	(2)	(12.401)
- expenses that are not deductible in determining taxable profit	(1)	8.880	1	7.268
- R&D incentives and other income exempt from taxation	(35)	(409.408)	(27)	(203.156)
- Change effect of determining statutory tax rate as 20 percent to 22 percent for 3 years	(3)	(38.542)	--	--
- Subsidiaries and associates revenue that is exempt from taxation	--	(1.622)	--	(187)
- effect of other adjustments	--	661	--	493
<b>Tax income recognized in profit or loss</b>	<b>(19)</b>	<b>(216.826)</b>	<b>(8)</b>	<b>(61.178)</b>

## 29. EARNINGS PER SHARE

Earnings per share is calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity by the weighted average number of ordinary shares outstanding during the period. The Group does not have diluted shares.

For the years ended 31 December 2017 and 2016, earnings per share calculations are as follows:

	1 January- 31 December 2017	1 January- 31 December 2016
Number of shares outstanding (in thousands)	100.000.000	100.000.000
Net profit - TL	1.388.064	795.191
<b>Earnings per 100 shares</b>	<b>138,78</b>	<b>79,52</b>
<b>Diluted earnings per 100 shares</b>	<b>138,78</b>	<b>79,52</b>

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 30. FINANCIAL INVESTMENTS

### Financial Investments

#### Non-Current Financial Investments

	31 December 2017	31 December 2016
a) Available for sale financial investments	568.767	516.032
b) Financial investments valued at cost that do not have a quoted market value	147	147
	<b>568.914</b>	<b>516.179</b>

#### a) Available for sale financial investments

	31 December 2017	31 December 2016
Available for sale financial investments that are not traded in an active market	568.914	516.179
	<b>568.914</b>	<b>516.179</b>

ROKETSAN which is Group's equity investment is revalued and stated at fair value. As of 31 December 2017, the revaluation was performed by Oyak Yatırım Menkul Değerler Anonim Şirketi which is an independent valuation company. The fair value was determined according to "Discounted Cash Flow", "Similar Company Comparison" and "Realized Company Mergers and Acquisitions" methodologies. Discount ratio used in "Discounted Cash Flow" method is 15 percent (31 December 2016: 15 percent).

Company Name	Ratio (%)	31 December 2017	Ratio (%)	31 December 2016
ROKETSAN	14,897	568.767	14,897	516.032

Roketsan shares, shown under available for sale financial investments, are reported on the third level in the fair value hierarchy (Note 33).

#### b) Financial investments valued at cost that do not have a quoted market value

The Group's equity investment and participation rate and the amount shown in financial investments are as follows:

Company Name	Ratio (%)	31 December 2017	Ratio (%)	31 December 2016
ASPILSAN	1	147	1	147
		<b>147</b>		<b>147</b>

The above available-for-sale equity investment amounting to TL 147 (31 December 2016: TL 147) does not have a quoted market value and the fair value cannot be reliably measured due to a wide range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed. For this reason they are stated at cost less provision for diminution in value, if any.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

## 31. FINANCIAL LIABILITIES

### Financial Liabilities

		31 December 2017	31 December 2016
Short-term financial liabilities	Unsecured loan	401.822	303.928
Other short-term financial liabilities	Unsecured loan	2.490	2.315
Current portion of long-term financial liabilities	Secured loan	67.624	65.665
<b>Total short-term financial liabilities</b>		<b>471.936</b>	<b>371.908</b>
Other long-term financial liabilities	Secured loan	62.207	120.140
Other long-term financial liabilities	Unsecured loan	--	2.275
<b>Total long-term financial liabilities</b>		<b>62.207</b>	<b>122.415</b>
<b>Total financial liabilities</b>		<b>534.143</b>	<b>494.323</b>

As of 31 December 2017, in the long term financial liabilities, current portion of all short term liabilities consist of instalment payments of the principal equal to USD 17.892 that belongs to credits that are taken from Undersecretariat of Defense Industries with the interest rate of 2,1% percent and 3,5 percent respectively with the total amount of principal equal to 34.421 US dollar. Instalment payments maturity dates are Marh-October 2018.

As of 31 December 2017, other financial liabilities amounting to TL 2.490 are comprised of interest-free sources obtained from the Technology Development Foundation of Turkey for project financing purposes. The rest of the short and long term other financial liabilities consist of loans amounting to USD 16.492 in long term with interest rates of 2,1 percent and 3,5 percent from Undersecretariat for Defense Industries. A letter of guarantee amounting to USD 34.421 was given for the loan.

As of 31 December 2016, the borrowings in short-term borrowings consist of Discounted Foreign Currency Credits amounting to TL 303.928 and maturity dates due between January-May 2017, interest rates which range between 1,6-9,4 percent. The short-term portions of long-term financial liabilities consist of principal payments of USD 18.659 with maturities of USD 52.385 and interest rates of 2,1 percent and 3,5 percent, respectively, with the maturity date of March-October 2017 of the Undersecretariat of Defense Industries.

As of 31 December 2016, other financial liabilities amounting to TL 4.590 are comprised of interest-free sources obtained from the Technology Development Foundation of Turkey for project financing purposes. The rest of the short and long term other financial liabilities consist of loans amounting to USD 34.138 in long term with interest rates of 2,1 percent and 3,5 percent from Undersecretariat for Defense Industries. A letter of guarantee amounting to USD 52.385 was given for the loan.

### Bank Loans

		31 December 2017	
Currency	Weighted average interest rate (%)	Short-term	Long-term
TL	12,67	354.672	--
USD	2,49	117.264	62.207
		<b>471.936</b>	<b>62.207</b>



# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

	31 December 2016	
	Weighted average interest rate (%)	
Currency		
TL	9,25	58.197
USD	1,99	313.711
		122.415
		<b>371.908</b>
		<b>122.415</b>

The breakdown of the loan repayments with respect to their maturities is as follows:

	31 December 2017	31 December 2016
Within 1 year	471.936	371.908
Between 1-2 years	47.700	64.375
Between 2-3 years	14.507	44.504
Between 3-4 years	--	13.536
Between 4-5 years	--	--
	<b>534.143</b>	<b>494.323</b>

### 32. NATURE AND LEVEL OF RISKS RELATED TO FINANCIAL INSTRUMENTS

#### a) Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the return through the optimization of the debt and equity balance.

The capital structure of the Group consists of debt, which includes the borrowings as explained Note 31, cash and cash equivalents and equity attributable to equity holders of the parent, comprising issued capital, reserves and retained earnings.

The Group's board of directors review capital structure regularly in the meetings. The risks that are associated with every equity item together with the Group's cost of capital are evaluated by the board of directors. Based on the recommendations of the board, the Group aims to balance its overall capital structure through the payment of dividends and new share issues as well as the issue of new debt on the redemption of existing debt.

The Group's general strategy has not changed since 2010. The ratio of liabilities to share capital as of 31 December 2017 and 2016 is as follows:

	31 December 2017	31 December 2016
Total liabilities	534.143	494.323
Less: Cash and cash equivalents	(1.262.904)	(1.168.776)
Net asset/debt (asset)	(728.761)	(674.453)
Total equity	5.048.208	3.691.467
Total capital	4.319.447	3.017.014
Net debt (asset) / total equity ratio (%)	(17%)	(22%)

#### b) Financial Risk Factors:

The Group has exposure to the credit risk, liquidity risk, market risk and foreign currency risk from its activities. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Risk management is carried out by the Enterprise Risk Management and Internal Control Department, headed by Finance Directorate, in the direction of the Financial Management Executive Vice Presidency, in line with the policies approved by the Board of Directors. Group's finance department identifies and evaluates financial risks and use tools to reduce risks by working in cooperation with the group's operating units.

## Credit Risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group is mainly working with public sector and obtaining advance payments where appropriate, both from public sector and private sector entities. Financing needs arising from new contracts are satisfied by advances received when the projects start and milestone payments during the projects. Since the receivables are generally from public sector and based on contract conditions, they are considered as highly collectible. The Group management does not foresee significant credit risk. Additionally, receivables are monitored regularly to minimize the collection risk.

Carrying values of the financial assets reflect the maximum exposure to credit risk. The credit risks as of reporting date is as follows:

31 December 2017	Receivables						Other
	Trade Receivables		Other Receivables		Bank Deposits		
	Related party	Third party	Related party	Third party			
Maximum net credit risk as of the reporting date (A+B+C+D) <sup>1</sup>	1.289.687	1.510.372	34	113.388	1.320.273		28
- The part of maximum risk under guarantee with collateral etc. <sup>2</sup>	--	3.313	--	--	--		--
A. Net book value of financial assets that are neither past due nor impaired	1.289.687	1.338.087	34	113.388	1.320.273		28
B. Net book value of financial assets that are past due but not impaired	--	166.340	--	--	--		--
C. Net book value of impaired assets	--	--	--	--	--		--
- Overdue (gross carrying amount)	--	921	--	--	--		--
- Impairment (-)	--	(921)	--	--	--		--
- The part of net value under guarantee with collateral etc.	--	--	--	--	--		--
- Undue (gross carrying amount)	--	--	--	--	--		--
- Impairment (-)	--	--	--	--	--		--
- The part of net value under guarantee with collateral etc.	--	--	--	--	--		--
D. Factors that include off balance sheet credit risks	--	--	--	--	--		--

<sup>1</sup> While determining the amount, components which provide increase on credit reliability, like guarantees received are not taken into consideration.

<sup>2</sup> The guarantees consist of the letters of guarantees, collaterals, checks and mortgages.

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Carrying values of the financial assets reflect the maximum exposure to credit risk. The credit risks as of reporting date is as follows:

31 December 2016	Receivables						Other
	Trade Receivables		Other Receivables		Bank Deposits		
	Related party	Third party	Related party	Third party			
Maximum net credit risk as of the reporting date (A+B+C+D) <sup>1</sup>	347.842	2.077.445	--	85.007	1.231.593		105
- The part of maximum risk under guarantee with collateral etc. <sup>2</sup>	--	2.780	--	--	--		--
A. Net book value of financial assets that are neither past due nor impaired	347.842	2.066.914	-	85.007	1.231.593		105
B. Net book value of financial assets that are past due but not impaired	--	10.531	--	--	--		--
C. Net book value of impaired assets	--	--	--	--	--		--
- Overdue (gross carrying amount)	--	921	--	--	--		--
- Impairment (-)	--	(921)	--	--	--		--
- The part of net value under guarantee with collateral etc.	--	--	--	--	--		--
- Undue (gross carrying amount)	--	--	--	--	--		--
- Impairment (-)	--	--	--	--	--		--
- The part of net value under guarantee with collateral etc.	--	--	--	--	--		--
D. Factors that include off balance sheet credit risks	--	--	--	--	--		--

The aging of the overdue receivables is as follows:

	31 December 2017	31 December 2016
Overdue by 1-30 days	122.427	7.916
Overdue by 1-3 months	489	2.324
Overdue by 3-12 months	3.227	291
Overdue by 12 months	40.197	--
<b>Total receivables</b>	<b>166.340</b>	<b>10.531</b>

No collateral has been received for the overdue receivables.

Management has assessed its aged receivables and does not expect any collection problem arising from its aged receivables.

## Liquidity risk

Board of directors has built an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity management requirements. The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

<sup>1</sup> While determining the amount, components which provide increase on credit reliability, like guarantees received are not taken into consideration.

<sup>2</sup> The guarantees consist of the letters of guarantees, collaterals, checks and mortgages.



## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The following tables detail the Group's remaining contractual maturity for its non-derivative financial liabilities. The tables have been drawn up based on the undiscounted cash flows of non-derivative financial liabilities based on the earliest payment date. The table includes both interest and principal cash flows. When receivables and payables are not constant, amounts are determined in accordance with interest rates generated from return rates as of the reporting date.

The maturities of the financial liabilities determined with respect to the contracts including the expected interest payments as of 31 December 2017 is as follows:

<b>Contractual Maturity Analysis</b>	<b>Carrying value</b>	<b>Total cash outflow according to contract (I+II+III+IV)</b>	<b>Less than 3 Months (I)</b>	<b>3-12 Months (II)</b>	<b>1-5 Years (III)</b>	<b>More than 5 Years (IV)</b>
Non-derivative financial instruments						
Financial liabilities	534.143	538.750	39.906	434.845	63.999	--
<b>Expected Maturity</b>	<b>Carrying value</b>	<b>Total cash outflow according to contract (I+II+III+IV)</b>	<b>Less than 3 Months (I)</b>	<b>3-12 Months (II)</b>	<b>1-5 Years (III)</b>	<b>More than 5 Years (IV)</b>
Non-derivative financial instruments						
Trade payables	2.631.815	2.644.097	1.233.919	148.163	1.262.015	--
Other payables	1.599	1.599	1.494	--	105	--

The maturities of the financial liabilities determined with respect to the contracts including the expected interest payments as of 31 December 2016 is as follows:

<b>Contractual Maturity Analysis</b>	<b>Carrying value</b>	<b>Total cash outflow according to contract (I+II+III+IV)</b>	<b>Less than 3 Months (I)</b>	<b>3-12 Months (II)</b>	<b>1-5 Years (III)</b>	<b>More than 5 Years (IV)</b>
Non-derivative financial instruments						
Financial liabilities	494.323	503.004	229.501	146.741	126.762	--
<b>Expected Maturity</b>	<b>Carrying value</b>	<b>Total cash outflow according to contract (I+II+III+IV)</b>	<b>Less than 3 Months (I)</b>	<b>3-12 Months (II)</b>	<b>1-5 Years (III)</b>	<b>More than 5 Years (IV)</b>
Non-derivative financial instruments						
Trade payables	1.306.051	1.315.256	765.609	296.481	253.166	--
Other payables	6.293	6.293	6.248	--	45	--

### Market risk management

The Group's activities, as detailed below, expose primarily to the financial risks from changes in foreign currency exchange rates and interest rates.

Market risk exposures are evaluated by sensitivity analysis, and stress scenario analysis.

There has been no change to the Group's exposure to market risks or the manner in which it manages and measures the risk in the current year compared to prior year.

### Foreign currency risk management

Foreign currency denominated transactions cause foreign currency risk. The core principle of the foreign currency risk management reduces to minimum foreign exchange position deficit or surplus and minimize the effect of exchange rate fluctuation. Group's net foreign currency position is due to the operational structure of the operating industry.

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

Methods which are used to manage the exchange rate risk are on-balance sheet (structural) methods. The use of fixed rate of TL denominated credit instead of foreign currency loans in order to keep the foreign exchange position at desired levels and to ensure currency compatibility, determining the contract currency according to the currency which is predominant in the cost of the contracts and such as the signing of the contract in terms of the main contract currency with the subcontractors within the scope of the contracts.

FOREIGN EXCHANGE POSITION						
31 December 2017	TL Equivalent (Functional currency)	USD	TL equivalent by using closing rates	EURO	TL equivalent by using closing rates	Other <sup>1</sup>
1. Trade receivables	1.388.153	201.417	759.726	131.427	593.460	34.967
2a. Monetary financial assets (including cash, bank)	1.101.440	225.110	849.093	55.451	250.390	1.957
2b. Non- monetary financial assets	284.302	45.981	173.436	25.457	114.951	39.594
3. Other	6.883	10	36	1.499	6.770	77
<b>4. Current assets (1+2+3)</b>	<b>2.780.778</b>	<b>472.518</b>	<b>1.782.291</b>	<b>213.834</b>	<b>965.571</b>	<b>76.595</b>
5. Trade receivables	725.009	135.101	509.589	47.707	215.420	--
6a. Monetary trade receivables	--	--	--	--	--	--
6b. Non-monetary trade receivables	307.504	13.737	51.815	95.992	433.451	6.556
7. Other	8.091	926	3.491	891	4.024	576
<b>8. Long-term assets (5+6+7)</b>	<b>1.040.604</b>	<b>149.764</b>	<b>564.895</b>	<b>144.590</b>	<b>652.895</b>	<b>7.132</b>
<b>9. Total assets (4+8)</b>	<b>3.821.382</b>	<b>622.282</b>	<b>2.347.186</b>	<b>358.424</b>	<b>1.618.466</b>	<b>83.727</b>
10. Trade payables	569.754	85.536	322.633	50.232	226.821	20.300
11. Financial liabilities	117.264	31.089	117.264	--	--	--
12a. Other monetary financial liabilities	434	102	386	10	48	--
12b. Other non-monetary financial liabilities	111.626	39.554	149.194	24.408	110.216	--
<b>13. Current liabilities (10+11+12)</b>	<b>799.078</b>	<b>156.281</b>	<b>589.477</b>	<b>74.650</b>	<b>337.085</b>	<b>20.300</b>
14. Trade payables	950.502	119.582	451.050	110.608	499.452	--
15. Financial liabilities	62.207	16.492	62.207	--	--	--
16a. Other monetary financial liabilities	53	11	40	3	13	--
16b. Other non-monetary financial liabilities	1.058.003	275.266	1.038.275	233.439	1.054.092	--
<b>17. Non-current liabilities (14+15+16)</b>	<b>2.070.765</b>	<b>411.351</b>	<b>1.551.572</b>	<b>344.050</b>	<b>1.553.557</b>	<b>--</b>

<sup>1</sup> Comprises of the currencies CAD, CHF, GBP, JPY, AUD, DKK, ZAR, AED, PHP, SAR.

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

FOREIGN EXCHANGE POSITION						
31 December 2017	TL Equivalent (Functional currency)	USD	TL equivalent by using closing rates	EURO	TL equivalent by using closing rates	Other
<b>18. Total liabilities (13+17)</b>	<b>2.869.843</b>	<b>567.632</b>	<b>2.141.049</b>	<b>418.700</b>	<b>1.890.642</b>	<b>20.300</b>
<b>19. Net asset/liability position of off-balance sheet derivative financial instruments (19a-19b)</b>	--	--	--	--	--	--
<b>19a. Hedged total financial assets</b>	--	--	--	--	--	--
<b>19b. Hedged total financial liabilities</b>	--	--	--	--	--	--
<b>20. Net foreign currency asset/ liability (9-18+19)</b>	951.539	54.650	206.137	(60.276)	(272.176)	63.427
<b>21. Net foreign currency asset / liability position of monetary items (1+2a+5+6a-10-11-12a-14-15-16a)</b>	1.514.388	308.816	1.164.828	73.732	332.936	16.624
<b>22. Fair value of derivative financial instruments used in foreign currency hedge</b>	--	--	--	--	--	--
<b>23. Hedged foreign currency assets</b>	--	--	--	--	--	--
<b>24. Hedged foreign currency liabilities</b>	--	--	--	--	--	--
<b>25. Exports</b>	784.165	174.571	632.194	15.098	61.509	90.462
<b>26. Imports</b>	1.739.154	294.446	1.110.620	107.071	483.481	145.053

Accompanying foreign exchange position which was prepared in accordance with TAS is different from the foreign exchange position of the financial statement which is prepared according to General Communiqué on Accounting System Application (GCASA). The difference is mainly due to the adjustments and classifications which are related with TAS 11 "Construction Contracts".

"For TL functional currency" calculations regarding "Other non-monetary assets" and "Other non-monetary liabilities" presented under foreign currency position, advances received are considered with regard to historic values therefore "TL equivalent of currency as at balance sheet date" differentiate.



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

FOREIGN EXCHANGE POSITION						
31 December 2016	TL Equivalent (Functional currency)	USD	TL equivalent by using closing rates	EURO	TL equivalent by using closing rates	Other <sup>1</sup>
1. Trade receivables	1.778.821	327.010	1.150.814	164.265	609.408	18.599
2a. Monetary financial assets (including cash, bank)	715.511	121.399	427.227	77.692	288.231	53
2b. Non- monetary financial assets	133.242	20.978	73.825	17.033	63.190	24.287
3. Other	6.634	128	452	1.102	4.087	2.095
<b>4. Current assets (1+2+3)</b>	<b>2.634.208</b>	<b>469.515</b>	<b>1.652.318</b>	<b>260.092</b>	<b>964.916</b>	<b>45.034</b>
5. Trade receivables	336.000	61.815	217.538	31.931	118.462	--
6a. Monetary trade receivables	--	--	--	--	--	--
6b. Non-monetary trade receivables	241.674	17.483	61.526	76.108	282.354	693
7. Other	1.993	85	298	419	1.555	140
<b>8. Long-term assets (5+6+7)</b>	<b>579.667</b>	<b>79.383</b>	<b>279.362</b>	<b>108.458</b>	<b>402.371</b>	<b>833</b>
<b>9. Total assets (4+8)</b>	<b>3.213.875</b>	<b>548.898</b>	<b>1.931.680</b>	<b>368.550</b>	<b>1.367.287</b>	<b>45.867</b>
10. Trade payables	328.888	43.343	152.532	45.473	168.701	7.655
11. Financial liabilities	313.711	89.143	313.711	--	--	--
12a. Other monetary financial liabilities	99	26	92	--	--	7
12b. Other non-monetary financial liabilities	107.078	60.337	212.337	6.167	22.878	--
<b>13. Current liabilities (10+11+12)</b>	<b>749.776</b>	<b>192.849</b>	<b>678.672</b>	<b>51.640</b>	<b>191.579</b>	<b>7.662</b>
14. Trade payables	--	--	--	--	--	--
15. Financial liabilities	122.415	34.785	122.415	--	--	--
16a. Other monetary financial liabilities	43	9	32	3	11	--
16b. Other non-monetary financial liabilities	1.299.166	381.435	1.342.347	230.229	854.126	--
<b>17. Non-current liabilities (14+15+16)</b>	<b>1.421.624</b>	<b>416.229</b>	<b>1.464.794</b>	<b>230.232</b>	<b>854.137</b>	<b>--</b>

<sup>1</sup> Comprises of the currencies CAD, CHF, GBP, JPY, AUD, DKK, ZAR, AED, PHP, SAR.

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

FOREIGN EXCHANGE POSITION						
31 December 2016	TL Equivalent (Functional currency)	USD	TL equivalent by using closing rates	EURO	TL equivalent by using closing rates	Other
18. Total liabilities (13+17)	2.171.400	609.078	2.143.466	281.872	1.045.716	7.662
19. Net asset/liability position of off-balance sheet derivative financial instruments (19a-19b)	--	--	--	--	--	--
19a. Hedged total financial assets	--	--	--	--	--	--
19b. Hedged total financial liabilities	--	--	--	--	--	--
20. Net foreign currency asset/ liability (9-18+19)	1.042.475	(60.180)	(211.786)	86.678	321.571	38.205
21. Net foreign currency asset / liability position of monetary items (1+2a+5+6a-10-11-12a-14-15-16a)	2.065.176	342.918	1.206.797	228.412	847.389	10.990
22. Fair value of derivative financial instruments used in foreign currency hedge	--	--	--	--	--	--
23. Hedged foreign currency assets	--	--	--	--	--	--
24. Hedged foreign currency liabilities	--	--	--	--	--	--
25. Exports	485.404	138.617	487.819	19.667	72.961	--
26. Imports	1.206.547	227.080	799.141	88.573	328.596	78.810

Accompanying foreign exchange position which was prepared in accordance with TAS is different from the foreign exchange position of the financial statement which is prepared according to GCASA. The difference is mainly due to the adjustments and classifications which are related with TAS 11 "Construction Contracts".

### Foreign currency sensitivity

The Group is exposed to foreign currency risk with respect to USD and EURO. As of 31 December 2017, USD 1: TL 3,7719 (31 December 2016: TL 3,5192), EURO 1: TL 4,5155 (31 December 2016: TL 3,7099).

# Notes to the Consolidated Financial Statements

## for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The following table details the Group's sensitivity to a 10 percent increase and decrease in foreign exchange rates. 10 percent is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and present 10 percent change in foreign currency rates. This analysis does not include Group companies' balance sheet items which have functional currency other than TL. The effects of 10 percent changes in foreign currency rate on financial statements is as follows;

**Foreign currency sensitivity table**  
**31 December 2017**

	Profit/Loss		Equity <sup>1</sup>	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
<b>Change of USD against TL by 10%:</b>				
1- USD denominated net assets/(liabilities)	116.483	(116.483)	116.483	(116.483)
2- Hedged amount against USD risk (-)	--	--	--	--
<b>3- Net effect of USD (1+2)</b>	<b>116.483</b>	<b>(116.483)</b>	<b>116.483</b>	<b>(116.483)</b>
<b>Change of EURO against TL by 10%:</b>				
4- EURO denominated net assets/(liabilities)	33.294	(33.294)	33.294	(33.294)
5- Hedged amount against EURO risk (-)	--	--	--	--
<b>6- Net effect of EURO (4+5)</b>	<b>33.294</b>	<b>(33.294)</b>	<b>33.294</b>	<b>(33.294)</b>
<b>Change of other currencies against TL by 10%:</b>				
7- Other currencies denominated net assets/(liabilities)	1.662	(1.662)	1.662	(1.662)
8- Hedged amount against other currencies risk (-)	--	--	--	--
<b>9- Net effect of other currencies (7+8)</b>	<b>1.662</b>	<b>(1.662)</b>	<b>1.662</b>	<b>(1.662)</b>

**Foreign currency sensitivity table**  
**31 December 2016**

	Profit/Loss		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
<b>Change of USD against TL by 10%:</b>				
1- USD denominated net assets/(liabilities)	120.680	(120.680)	120.680	(120.680)
2- Hedged amount against USD risk (-)	--	--	--	--
<b>3- Net effect of USD (1+2)</b>	<b>120.680</b>	<b>(120.680)</b>	<b>120.680</b>	<b>(120.680)</b>
<b>Change of EURO against TL by 10%:</b>				
4- EURO denominated net assets/(liabilities)	84.739	(84.739)	84.739	(84.739)
5- Hedged amount against EURO risk (-)	--	--	--	--
<b>6- Net effect of EURO (4+5)</b>	<b>84.739</b>	<b>(84.739)</b>	<b>84.739</b>	<b>(84.739)</b>
<b>Change of other currencies against TL by 10%:</b>				
7- Other currencies denominated net assets/(liabilities)	1.099	(1.099)	1.099	(1.099)
8- Hedged amount against other currencies risk (-)	--	--	--	--
<b>9- Net effect of other currencies (7+8)</b>	<b>1.099</b>	<b>(1.099)</b>	<b>1.099</b>	<b>(1.099)</b>

<sup>1</sup> Comprises of profit/loss effect.



## Interest rate risk management

As of 31 December 2017, the Group does not have interest bearing financial assets, therefore there is no exposure to interest risk (31 December 2016: None).

The Group usually enters into fixed price contracts, therefore, is not exposed to any major price risk.

As of 31 December 2017 and 31 December 2016, the Group's financial assets at their fair values are as in the following page:

31 December 2017	Financial assets at fair value	Loans and receivables (including cash and cash equivalents)	Available for sale financial assets	Financial liabilities at amortized cost	Carrying value	Note
<b>Financial assets</b>						
Cash and cash equivalents	--	1.262.904	--	--	1.262.904	3
Blocked deposits	--	57.550	--	--	57.550	18
Financial investments	147	--	568.767	--	568.914	30
Equity accounted investees	83.324	--	--	--	83.324	8
Trade receivables	--	2.800.059	--	--	2.800.059	6
<b>Financial liabilities</b>						
Borrowings	--	--	--	534.143	534.143	31
Trade payables	--	--	--	2.631.815	2.631.815	7
Other payables	--	--	--	1.599	1.599	8
31 December 2016	Financial assets at fair value	Loans and receivables (including cash and cash equivalents)	Available for sale financial assets	Financial liabilities at amortized cost	Carrying value	Note
<b>Financial assets</b>						
Cash and cash equivalents	--	1.168.776	--	--	1.168.776	3
Blocked deposits	--	63.062	--	--	63.062	18
Financial investments	147	--	516.032	--	516.179	30
Equity accounted investees	57.387	--	--	--	57.387	8
Trade receivables	--	2.425.287	--	--	2.425.287	6
<b>Financial liabilities</b>						
Borrowings	--	--	--	494.323	494.323	31
Trade payables	--	--	--	1.306.051	1.306.051	6
Other payables	--	--	--	6.293	6.293	7

## FINANCIAL INFORMATION

# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

The fair values of financial assets and financial liabilities are determined as follows:

- **Level 1:** The fair value of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices;
- **Level 2:** The fair value of other financial assets and financial liabilities are determined in accordance with data which can be observed by directly or indirectly and which excludes the registered prices described in Level 1 ; and
- **Level 3:** The fair value of the financial assets and financial liabilities are determined where there is no observable market data.

## Fair value hierarchy of financial assets that are measured at fair value:

Group's available for sale financial asset, ROKETSAN is measured at fair value as of 31 December 2017. The fair value of ROKETSAN as of 31 December 2017 is TL 568.767 and was determined according to "Discounted Cash Flow", "Similar Company Comparison" and "Realized Company Mergers and Acquisitions" methodologies and its fair value hierarchy is Level 3.

Reconciliation of the Group's assets and liabilities that are measured at Level 3 fair value are presented as follow:

Available for sale financial assets	31 December 2017	31 December 2016
	Marketable Equity Shares	Marketable Equity Shares
Opening balance	516.032	433.354
Total gain/loss		
- transferred to other comprehensive income	52.735	82.678
<b>Closing balance</b>	<b>568.767</b>	<b>516.032</b>

31 December 2017	Fair value level as of reporting date		
	Level 1 TL	Level 2 TL	Level 3 TL
Financial Investments	--	--	568.767
	--	--	<b>568.767</b>

31 December 2016	Fair value level as of reporting date		
	Level 1 TL	Level 2 TL	Level 3 TL
Financial Investments	--	--	516.032
	--	--	<b>516.032</b>

The movement of the fair value level as of 31 December 2017 is as follows:

	Fair value level as of reporting date		
	Level 1 TL	Level 2 TL	Level 3 TL
<b>1 January 2017</b>	--	--	<b>516.032</b>
Additions	--	--	52.735
<b>31 December 2017</b>	--	--	<b>568.767</b>

## Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

(Amounts are expressed in thousands of TL and in thousands of "Foreign Currency" unless otherwise stated.)

### 34. EXPLANATIONS RELATED TO THE STATEMENT OF CASH FLOW

#### *Reconciliation of the movements related to cash flows from financing activities and liabilities*

	31 December 2016	Cash Movements	Non-cash movements			31 December 2017
			Additions	Exchange rate change	Other non-cash movements	
Financial Liabilities (Note 31)	494.323	42.340	8.102	(11.687)	1.065	534.143
<b>Total liabilities arising from financing activities</b>	<b>494.323</b>	<b>42.340</b>	<b>8.102</b>	<b>(11.687)</b>	<b>1.065</b>	<b>534.143</b>

The table above represents the changes in the cash amounts related to "Proceeds from Borrowings" and "Repayments from Borrowings" which are presented under cash flows from financing activities.

### 35. EVENTS AFTER THE REPORTING PERIOD

Amount of project contract signed by Group after the reporting date is approximately USD 932 Million.



## Independent Auditor's Report



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### INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Aselsan Elektronik Sanayi ve Ticaret Anonim Şirketi

#### A) Audit of the Consolidated Financial Statements

##### *Opinion*

We have audited the consolidated financial statements of Aselsan Elektronik Sanayi ve Ticaret Anonim Şirketi and its subsidiaries (together will be referred to as "the Group"), which comprise the consolidated statement of financial position as at 31 December 2017, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2017, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Turkish Accounting Standards ("TAS").

##### *Basis for Opinion*

We conducted our audit in accordance with standards on auditing issued by the Capital Markets Board of Turkey ("CMB") and Standards on Auditing which is a component of the Turkish Auditing Standards published by the Public Oversight Accounting and Auditing Standards Authority ("POA") ("Standards on Auditing issued by POA"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the consolidated Financial Statements* section of our report. We declare that we are independent of the Group in accordance with the Code of Ethics for Auditors issued by POA ("POA's Code of Ethics") and the ethical requirements in the regulations issued by POA that are relevant to audit of financial statements, and we have fulfilled our other ethical responsibilities in accordance with the POA's Code of Ethics and regulations. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.,  
a Turkish corporation and a member firm of the KPMG network of independent  
member firms affiliated with KPMG International Cooperative, a Swiss entity.

# Independent Auditor's Report



## Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

### Revenue recognition

Refer to Note 2.5 to the consolidated financial statements for summary of significant accounting policies and significant accounting assessments, estimates and assumptions for revenue recognition.

The key audit matter	How the matter was addressed in our audit
<p>Group's revenue mainly comprise of sales of goods, rendering of services and construction contracts with related parties or third parties. Revenue from sale of goods is recognized when ownership has been transferred, can be measured reliably and it is probable that the economic benefit of the transaction will flow the Group and measured at fair value of the consideration received on accrual basis.</p> <p>Revenue from rendering of services is recognized according to stage of completion of the contract signed with the customers-</p> <p>Contract revenue is recognized during the contract period when it can be measured reliably and it is probable that contract is profitable.</p> <p>When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as expense immediately.</p> <p>In case of the transfer of risk and reward of ownership that has not been completed for the products produced or not produced which the invoicing has been made, the revenue has been recognized as deferred revenue.</p> <p>We identified revenue recognition as a key audit matter because revenue is one of the key performance indicators of the Group and may be recorded in the incorrect period or involves management judgments, estimates and assumptions which gives rise to risk that revenue may be subject to manipulation to meet targets or expectations and the complexity of application of revenue recognition accounting standards.</p>	<p>We have performed the following audit procedures to be responsive to this area:</p> <ul style="list-style-type: none"> <li>- Assessing the appropriateness of the revenue recognition policy of the Group;</li> <li>- Reviewing and controlling sales agreements of the Group with its customers.</li> <li>- Assessing design, implementation and operation of controls on revenue recognition process through involvement of our Information Technology specialists</li> <li>- Controlling and reviewing the approval mechanism on delivery of the products and services rendered</li> <li>- Performing control tests and test of details whether budgeted and actual costs are reflected to related project costs accurately.</li> <li>- Testing accuracy of accrued income of construction contracts through recomputation.</li> <li>- Performing control tests and test of details for completeness of onerous contracts and accuracy of provision for onerous contracts.</li> </ul>

# Independent Auditor's Report



## Capitalized development costs

Refer to Note 2.5 to the consolidated financial statements for summary of significant accounting policies and significant accounting assessments, estimates and assumptions for capitalized development costs.

The key audit matter	How the matter was addressed in our audit
<p>The Group capitalizes costs related with development activities and cost incurred in the development phase of projects.</p> <p>As discussed in Note 12, capitalized development costs on the consolidated financial statements as of 31 December 2017 is significant for our audit due to variety of nature of costs, management judgments involved in the capitalization process and projects contract costs.</p>	<p>We have performed the following audit procedures to be responsive to this area:</p> <ul style="list-style-type: none"> <li>- Assessing the appropriateness of the impairment process and policy of the Group;</li> <li>- Assessing expectations regarding projects and performing substantive procedures and test of details for contents of capitalized development costs for selected projects.</li> <li>- Assessing management's judgments whether cost incurred will become a product for projects in development phase in the future.</li> <li>- Reviewing outcome of development activities.</li> <li>- Testing of controls on commencement and completion process of development projects and controlling relations with project costs by substantive procedures and test of details.</li> <li>- Moreover, recoverability of capitalized costs are assessed by discussing with project engineers and executives involved in research and development activities in related division of the Group.</li> </ul>



# Independent Auditor's Report



## Recoverability of deferred tax assets

Refer to Note 2.5 to the consolidated financial statements for summary of significant accounting policies and significant accounting assessments, estimates and assumptions for recoverability of deferred tax assets.

The key audit matter	How the matter was addressed in our audit
<p>The Group has recognized deferred tax assets for deductible temporary differences and incentives from research and development activities that it believes are recoverable.</p> <p>The recoverability of recognized deferred tax assets is dependent on the Group's ability to generate future taxable profits sufficient to utilize deductible temporary differences and tax deductions from incentives (before latter expire).</p> <p>We have determined this to be a key audit matter, due to the inherent uncertainty in forecasting the amount and timing of future taxable profits and the reversal of temporary differences. Significant judgment is required in relation to the recognition and recoverability of deferred tax assets.</p>	<p>We have performed the following audit procedures to be responsive to this area:</p> <ul style="list-style-type: none"> <li>- Assessing and challenging the assumptions and judgments exercised by management in respect of the forecasts of future taxable profits by analyzing the assumptions adopted by management;</li> <li>- Reviewing the historical accuracy of forecasts of future taxable profits made by management by comparing the actual taxable profits for the current year with management's estimates in the forecasts made in the previous year and assessing whether there were any indicators of management bias in the selection of key assumptions;</li> <li>- Considering the impact of recent regulatory developments, where applicable and relevant;</li> <li>- Assessing whether the Group's disclosures in the consolidated financial statements of the application of judgment in estimating recognized and unrecognized deferred tax asset balances appropriately reflect the Group's deferred tax position with reference to the requirements of the TASs.</li> </ul>

## Independent Auditor's Report



### *Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Turkish Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

### *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements*

Responsibilities of auditors in an audit are as follows:

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with standards on auditing issued by the CMB and Standards on Auditing issued by POA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these [consolidated] financial statements.

As part of an audit in accordance with the standards on auditing issued by the CMB and Standards on Auditing issued by POA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

## Independent Auditor's Report



- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### B) Other Legal and Regulatory Requirements

1) Pursuant to the fourth paragraph of Article 398 of Turkish Commercial Code ("TCC") no. 6102; Auditors' Report on System and Committee of Early Identification of Risks is presented to the Board of Directors of the Group on 20 February 2018.

2) Pursuant to the fourth paragraph of Article 402 of the TCC; no significant matter has come to our attention that causes us to believe that for the period 1 January - 31 December 2017, the Group's bookkeeping activities and consolidated financial statements are not in compliance with TCC and provisions of the Group's articles of association in relation to financial reporting.

3) Pursuant to the fourth paragraph of Article 402 of the TCC; the Board of Directors provided us the necessary explanations and required documents in connection with the audit.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik Anonim Şirketi  
A member of KPMG International Cooperative

  
Hakkı Özgür Sivaci, SMMM  
Partner  
20 February 2018  
Ankara, Turkey



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 1. Principles of preparation

The interim period report of the Board of Directors is prepared on the basis of Communiqué Series II, No: 14.1 “Principles of Financial Reporting in Capital Markets” dated 13 June 2013.

The Company and ASELSAN Bakü Şirketi (“ASELSAN Bakü”), Mikroelektronik Ar-Ge Tasarım ve Ticaret Limited Şirketi (“Mikro AR-GE”), ASELSANNET Elektronik ve Haberleşme Sistemleri Sanayi Ticaret İnşaat ve Taahhüt Limited Şirketi (“ASELSANNET”), and ASELSAN Malaysia Sdn. Bhd. (ASELSAN Malezya) which are subsidiaries of the Company operating in the same industry and whose financial statements are consolidated will be mentioned as “Group” in the report.

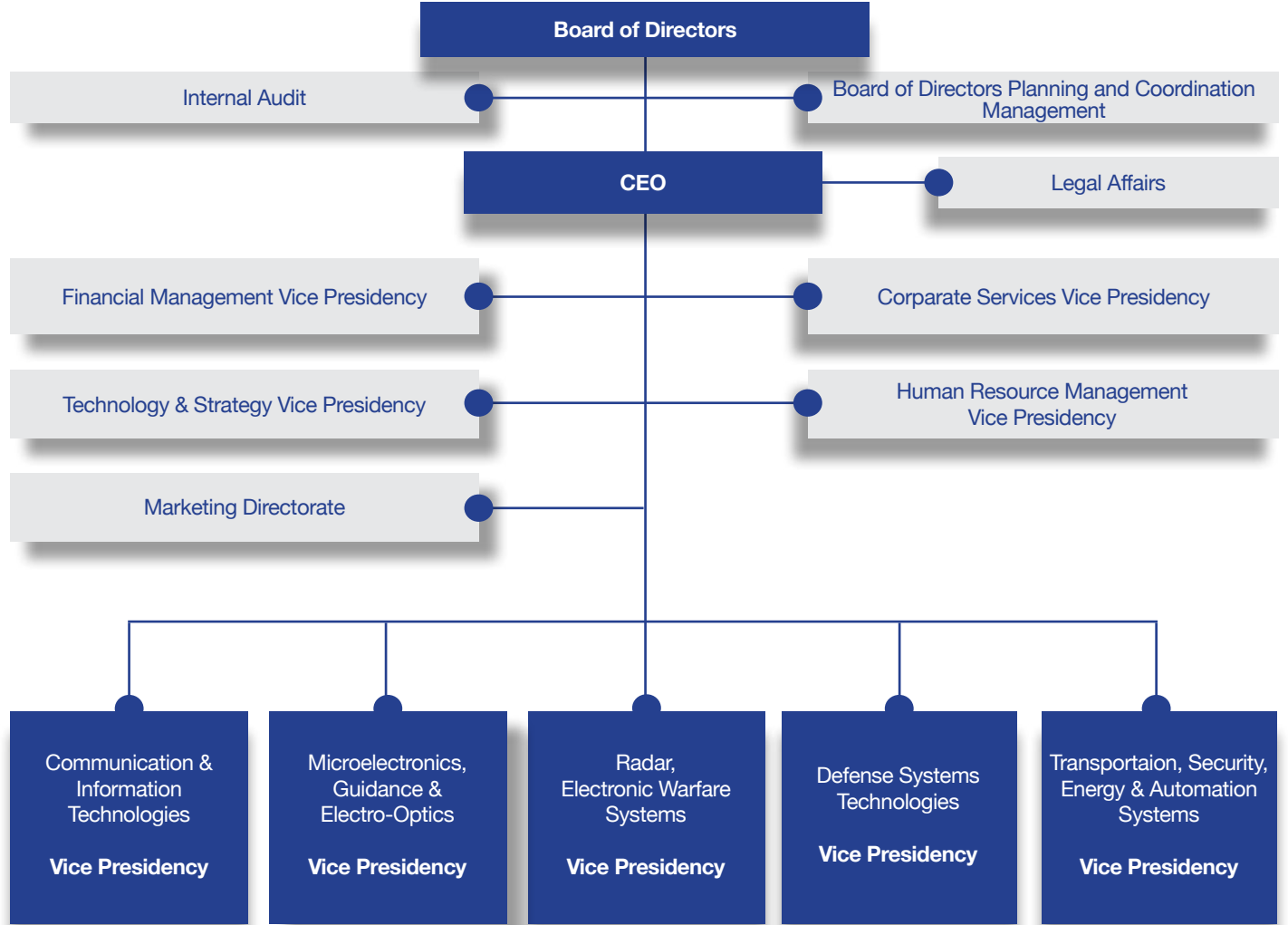
ASELSAN Hassas Optik Sanayi ve Ticaret Anonim Şirketi (“ASELSAN Optik”), ASELSAN Bilkent Mikro Nano Teknolojileri Sanayi ve Ticaret Anonim Şirketi (“ASELSAN Bilkent”), IGG ASELSAN Integrated Systems LLC (“IGG ASELSAN”), Kazakhstan ASELSAN Engineering LLP (“ASELSAN Kazakhstan”) and ASELSAN Middle East PSC LTD (“ASELSAN Jordan”) and Saudi Arabian Defense Electronics Corporation LLC (“SADEC LLC”) are consolidated by the equity method. Since the Company has a capital commitment to the YİTAL A.Ş., it has no consolidation effect on the Group’s financial statements.

## 2. Commercial title and trade registration number of the company and contact information pertaining to its headquarters, branches and its website address

Company	Type	Country/City	Address	Telephone/Fax	Web site
ASELSAN Elektronik Sanayi ve Ticaret A.Ş.	Headquarters	Turkey/Ankara	Mehmet Akif Ersoy Mahallesi 296. Cad. No:16 06370 Yenimahalle/Ankara Building 4, Room 005 CSIR Campus,	Tel: +90 (312) 592 1000 Fax: +90 (312) 354 1302	<a href="http://www.aselsan.com.tr">www.aselsan.com.tr</a>
ASELSAN South Africa Branch	Branch	Republic of South Africa/Pretoria	Meiring Naude Drive, Pretoria Gauteng, 0001, South Africa	Tel: +27 (0) 12 349 2613 Fax: +27 (0) 12 349 2544	--
ASELSAN Macedonia Branch	Branch	Macedonia/Skopje	Ankarska 29A, 1000 Skopje/Macedonia	--	--
BAE Contact Office	Contact Office	BAE/Abu Dhabi	Industrial City of Abu Dhabi 1, Plot 22J1 PO Box: 133627 Abu Dhabi/ UAE	Tel: +971 2 550 8808 Faks: +971 2 550 8812	--
Saudi Arabia Contact Office	Project Office	Saudi Arabia/Riyadh	A. Building 17B, 1 <sup>st</sup> Floor, The Business Gate, Riyadh, 11422, Saudi Arabia The Gate Tower II 7 <sup>th</sup> Floor - Office	Tel: +966 11 211 1111 Fax: +966 11 268 1111	--
ASELSAN Qatar Office	Project Office	Qatar/Doha	725 West Bay, Maysaloun Street P.O. Box 14023 Doha / QATAR	Tel: +974 402 06000 Fax: +974 402 06006	--

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 3. Organizational structure of the Company



The Company has been restructured under five Vice Presidencies that will carry the production and engineering tasks, which are; Communication and Information Technologies (HBT), Microelectronics, Guidance and Electro-Optics (MGEO), Defense Systems Technologies (SST), Radars, Electronic Warfare and Intelligence Systems (REHİS) and Transportation, Security, Energy and Automation Systems (UGES).

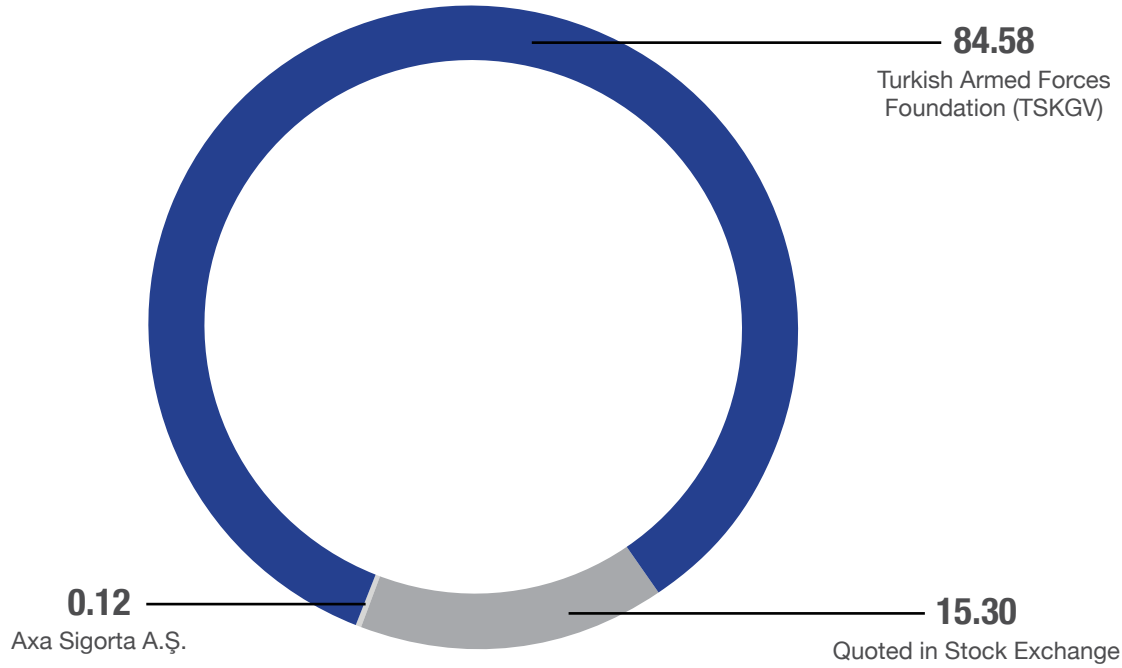
In order for General Management to fulfill planning at strategic level, pursuing and assessing functions in a more efficient way, four different Vice Presidencies have been constituted as Financial Management Vice Presidency, Corporate Services Vice Presidency, Technology and Strategy Vice Presidency and Human Resources Management Vice Presidency in addition to Marketing Directorate and Legal Affairs.

The Internal Audit Department and Board of Directors Planning and Coordination Management have been established under the Board of Directors.

The Company maintains engineering operations in Ankara, METU Teknokent; production and engineering operations in Macunköy, Akyurt and Gölbaşı. General Management is located in Ankara Macunköy. Furthermore, SST and REHİS Vice Presidencies management offices and Product Support Management of UGES Vice Presidency are located in Istanbul Teknopark.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 4. The Company's capital and shareholder structure with the changes during the fiscal period (%)



Partners	Share (%)	31 December 2017 (Thousand TL)	Share (%)	31 December 2017 (Thousand TL)
Turkish Armed Forces Foundation (TSKGV)	84,58	845.826	84,58	845.826
Quoted on BIST (Free float)	15,30	153.019	15,30	153.019
Axa Sigorta Anonim Şirketi	0,12	1.155	0,12	1.155
Paid-in capital	100	1.000.000	100	1.000.000
Share capital adjustment	--	98.621	--	98.621
Inflation adjusted capital	--	1.098.621	--	1.098.621

Registered capital ceiling of the Company is TL 1.000.000 Thousand (TL one billion). The nominal capital of the Company is TL 1.000.000 Thousand (TL one billion) and is divided into 100.000.000.000 (one hundred billion) shares, each having a nominal value of 1 kurus (1% of 1 Turkish Lira). 60.545.454.546 (sixty billion five hundred and forty five million four hundred and fifty four thousand five hundred and forty six) of the shares are Group A shares and 39.454.545.454 (thirty nine billion four hundred and fifty four million five hundred and forty five thousand four hundred and fifty four) of the shares are Group B Shares. All shares are in the name of the holder.

Group A shares are nominative preferred shares and 6 of the Members of the Board of Directors are elected among the Group A preferred shareholders or among the candidates presented by them.

No change has occurred in the shareholders' structure and the Company's capital during the period.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 5. Reporting period, title of the partnership, names, surnames and jurisdiction of the chairman, members and the managing members who served in the board of directors during the period, the term of office of the duties (with commence and end dates)

The report comprises the events took place during the period 1 January-31 December 2017. The title of the main shareholder in the report is ASELSAN Elektronik Sanayi ve Ticaret A.Ş.

### Members of the Board of Directors

Within the framework of the provisions of the Company's Articles of Association, the Board of Directors consists of a total of 9 members comprising of 6 members to be elected from privileged shareholders or candidates nominated by group A and 3 independent members to be elected under Capital Markets Board (CMB) regulations.

Information regarding the Members of the Board of Directors elected during the General Assembly Meeting held on 15 March 2017 are as follows:

#### MEMBER OF THE BOARD OF DIRECTORS

Name and Surname	Position	Date of Assignment	End of Term of Office
İbrahim ÖZKOL	Chairman/Independent Member	15 March 2017	March 2018
Mustafa Murat ŞEKER	Vice Chairman/Managing Member	15 May 2013	March 2018
Ziya AKBAŞ	Independent Member	31 March 2014	March 2018
Ercümend ARVAS	Independent Member	31 March 2016	March 2018
Bayram GENÇCAN	Member	15 March 2017	March 2018
Haluk GÖRGÜN	Member	15 March 2017	March 2018
Emin Sami ÖRGÜÇ	Member	15 March 2017	March 2018
Ercan TOPACA	Member	15 March 2017	March 2018
Murat ÜÇÜNCÜ	Member/Managing Member	15 March 2013	March 2018

The Members of the Board of Directors are entitled with the authorizations stipulated in the Turkish Code of Commerce (TCC) and in article 13 of the Articles of Association of the Company.

Entitled shareholders, members of the board of directors, senior executives and to their spouses as well as relatives up to second degree are not authorized to perform transactions which may cause conflict of interest or competition with the Company and/or subsidiaries.

There is not any ban on trading for board members with the Company, which they performed on their own or on behalf of a third party. There is no operation regarding the non-compete obligation by the members of the board.

### Changes of Members of the Board of Directors during the Period 1 January - 31 December 2017:

During the Ordinary General Assembly Meeting held on 15 March 2017, Mustafa Murat ŞEKER, Bayram GENÇCAN, Haluk GÖRGÜN, Emin Sami ÖRGÜÇ, Ercan TOPACA and Murat ÜÇÜNCÜ were elected as Member of Board of Directors for 1 year of service and İbrahim ÖZKOL, Ziya AKBAŞ and Ercümend ARVAS were elected as Independent Member of Board of Directors for 1 year of service.

## 6. Main factors that affect the performance of the company, significant changes occurred in the environment where company is operating, policies implemented by the company with respect to these changes, investment and dividend policy of the company to strengthen its performance

The Company carries on its business interests in defense industry as well as in civil industry. According to the latest data, the five countries which have the largest defense industry expenditures during 2016 are the USA, China, Russia, Saudi Arabia, and India. The declining tendency of the resources which the USA has allocated to defense in recent years has left its place to increase in 2016. Concurrently, in Europe and Asia-Oceania, an increase has been observed compared to the previous year and there has been a decrease in Africa. As of 2016 year-end, despite the fact that Turkey's annual defense expenditure has decreased from USD 17,9 Billion to USD 14,8 Billion due to the effect of foreign exchange rates within the last five years, 2% of the GDP is still comprised of defense expenditures. The ratio of defense expenditures over GDP stands steady while the number of Company's projects have increased by the years.

## Report of the Board of Directors for the Period Between 1 January - 31 December 2017

Due to the industry's nature defense projects are spread over years, furthermore a system project lasts approximately 4 to 5 years from its start to its delivery. As of 31 December 2017 long term plans which have been accordingly signed as contracts spread over years amounts to USD 6,8 Billion. The determination of target regions/countries and focusing on these markets for marketing and direct sales as well as engaging in joint productions, transfer of technology to/from international platform producers and strategic initiatives for sales to third countries are concurrent to our sustainable growth objectives. Our structure coincides with our objective to operate in civilian electronic fields which require high technology.

The Company's profit distribution policy is posted on [www.aselsan.com.tr](http://www.aselsan.com.tr) website under Investor Relations/ Corporate Governance/ Policies.

At the Ordinary General Assembly Meeting held in 15 March 2017; from the remaining distributable profit obtained after subtracting taxes and statutory obligation from Company's operating profit in 2016,

- In accordance with Article 519/(1) of the Turkish Commercial Code, TL 26.703.481,27 to be allocated as General Legal Reserves,
- Net distributable profit to the shareholders for the period, calculated in the framework of the profit distribution regulations and decisions of the Capital Markets Board is proposed as:
- Gross profit, TL 75.500.000 (Kurus 7,55 per share of TL 1 and 7,55 % on the basis of the capital) (net profit TL 64.175.000 - Kurus 6,4175 per share of TL 1 and 6,4175 % on the basis of the capital) as in the form of cash,
- In accordance with Article 519/(2) of the Turkish Commercial Code, TL 2.550.000 to be allocated as General Legal Reserves,
- It has been decided that the remaining profit is to be allocated as Extraordinary Legal Reserves and distribution of the dividends to the shareholders are decreed in three equal installments on the dates of 8 June 2017, 14 September 2017 and 14 December 2017.

All of the gross cash dividend that has been decided to be allocated amounting to TL 75.500.000 has been paid to shareholders as of 31 December 2017.

### 7. Financial resources of the company

The most substantial financial resources of the Company comprise the advance and interim payments taken within the scope of the contracts signed and profits generated by the main activities.

During 1 January - 31 December 2017 period, the cash requirements were met with the available cash, cash inflows from other operations and use of Türk Eximbank export discounted foreign currency loan due to low cost. Within the scope of the Eximbank Loan Program, during 1 January - 31 December 2017 period, "Discounted Foreign Currency Loan" was used as USD 57,5 Million with 240 days of maturity and "Discounted TL Loan" was used with the following maturities respectively: TL 388,3 Million with 240 days of maturity.

As of 31 December 2017, there is a loan balance equivalent to USD 111,2 Million in total which is used from Türk Eximbank.

Furthermore, loan obtained from Defense Industry Support Fund (DISF) in accordance with Defense Industry Execution Committee's Decision Risk is USD 34,1 Million as of 31 December 2017.

### 8. Risk management policies of the Company

The Company's Board of Directors perform in a transparent, accountable, impartial and responsible manner. The Chairman and Vice Chairman are elected among the Board of Directors members furthermore Board of Directors Committee Presidents and committee members are elected as well.

#### a. Corporate Risk Management

The Company's Corporate Risk Management Policy; aims to have the appropriate risk reaction against uncertainties threatening the corporate existence of the Company and protect the Company's corporate identity, its employees and the interests of its shareholders and related parties. Risk management has been an integrated part of the corporate management and information generated within the context of risk management process are integrated into decision-making mechanisms.

In order to identify the potential risks beforehand and to enable the management of these risks in compliance with the Company's risk-taking approach, an Early Detection and Management of Risk Committee which consists of the members of Board of Directors was established in 2012.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

Through Corporate Risk Management practices, “top down” and “bottom up” approaches are applied together and risks that may affect the company’s objectives are identified and evaluated along with the risk reactions and precautions to be taken. The reports prepared by the The Management and Early Detection of The Risk Committee are presented to the Board of Directors and the Independent Audit Company.

The risks which have been defined and prioritized in accordance with the opinion and suggestion companywide and in the scope of the operations carried out by the committee are explained below:

## **Difficulty to Increase the Number and Variety of Customers**

World’s leading defense industry companies, who provide the major portion of the defense needs of their country, face with several sectoral risks including lack of customer diversification caused by selling to mainly a single customer. The main client of the Company is the Public Institutions and Organizations, especially the Turkish Armed Forces. This situation is accompanied by the fact that the activities of the Company are generally directed towards the public demands of our country.

It is aimed to reduce this risk by working on increasing the sales abroad and carrying the existing know-how to the civilian sectors.

## **Insufficiency in the Number of Qualified Subcontractors and Suppliers**

The main contractor companies play an important part in providing deepening to the industry. To build an effective supply chain; the creation of qualified subcontractors/suppliers is highly critical in terms of sector productivity and sustainability. For the Company, which works with a large number of domestic and foreign suppliers and subcontractors, it is of utmost importance to ensure material quality and supply continuity.

Having a strong subsidiary infrastructure is among the elements that will support The Company’s business continuity, steady growth and global competitiveness. In order to reduce the risk arising from the failure of suppliers and subcontractors to achieve the required technical competence, expertise and performance, the Company is making great efforts to develop the subsidiary industry infrastructure and companies.

## **Changes In The Global Economy and Defense Spending**

Global economic variations have significant impacts on the economic activities of the countries and cause changes in projected defense budgets. This situation may bring along the risks of the demands of domestic and foreign customers lower from the expected level and also may affect the operational and functional indicators.

The current and potential economic developments, the countries which the Company have either collaborated or/and exported, and the effect of these matters on the company have been followed and the projection regarding global development have been planned. Financial precautions and strategies that will minimize the negative effects of current and possible economic developments are evaluated and implemented on constant basis.

## **b. Financial Risk Management**

The financial risk in the financial risk management model of the Company have been identified as foreign exchange risk, interest risk, liquidity risk, credit risk and capital risk.

Within the scope of the financial risk management, exchange risk, interest risk, liquidity risk, credit risk and capital risk which can possibly affect the assets and liabilities of the Company are defined, measured, managed and reported. Therefore, the adverse effects of the changes in financial markets on the Company’s financial performance are minimized. Financial derivatives are also utilized to minimize the risks. Moreover, financial risk management techniques have put to use in order to protect the return on the project from the effects of the inconsistency of cash inflows and outflows on the basis of currency which was formed within the projects and the deviation of the planned cash flow dates.

The Company’s subsidiaries and affiliates utilize financial risk management within the scope of their own management policies.

### **i. Foreign Exchange Risk and Management Policy**

The main principle of the foreign exchange management is to minimize the impact of the foreign exchange fluctuations by preventing foreign exchange short or long positions.

To define foreign exchange risks with taking the periodical foreign exchange position into consideration; loss and profits which would arise from upwards or downwards changes are calculated and the possible impacts of the foreign exchange risk incurred are measured. In this context, the possible changes in foreign currency-sensitive assets and liabilities for prospective interim financial periods are considered and the foreign currency position is estimated.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

The currency of the contracts signed between the company and its clients are mainly currencies other than the functional currency which is Turkish Lira. Advances can be made in different periods of the contracts so that the work can be carried out during the contracts, and the advances received can be in currencies other than the functional currency. All order advances taken and given apart from the functional currency are not subject to valuation according to the TAS 21 "The Effects of Changes in Foreign Exchange Rates Standard".

Due to the nature of the contracts, it is inevitable that there will be no change in the currencies during the term of the contract. As a result of the exchange rate fluctuations; there could be profits/losses from delivery, advance offsetting or collection within the scope of a foreign exchange rate based contract.

Methods which are used to manage the exchange rate risk are on-balance sheet (structural) methods. On-balance sheet (structural) methods are utilized in order to manage the exchange rate risk. In order to keep foreign currency position at desired levels and to ensure currency conformity, applications such as the use of fixed rate TL denominated credit instead of foreign currency denomination, the determination of the contract currency according to the weighted currency of the contract and the signing of the contract in terms of the main contract currency with subcontractors within the scope of contracts.

All public administrations subject to Public Financial Management and Control Law dated 10 December 2003 and numbered 5018 and their revolving fund institutions, dated 8 June 1984 and numbered 233 on State Economic Enterprises State-owned enterprises and subsidiaries subject to Decree Law are subject to special legislation in the privatization program within the scope of Law No. 4046 on Customization Practices dated 24 November 1994, and more than half of the capital of the public sector owned enterprises, Saving Deposits Insurance Fund and special laws having a direct or indirect public share ("CBRT") announced on 2 January 2017 that the liability of the borrower for domestic currency payment obligations, irrespective of the nature of the liability, until 31 December 2017, as Turkish Lira. The transactions and results within the scope of this article are not related to the budget revenues and expenditures accounts. "With this announcement published by the CBRT on 17 February 2017, Eximbank rediscount foreign currency loan repayments up to 31 May 2017 were made in TL. In addition, the repayment of loans granted by the Defense Industry Support Fund (SSDF) by the decision of the Defense Industry Executive Committee possibly be made in TL until 31 December 2017. Eximbank foreign currency denominated in USD and SSDF loans are repaid in Turkish Lira at the rate of 3,5338 USD/TL until 31 December 2017.

## ii. Interest Risk and Management Policy

In determining the interest risk, the difference between the interest rate sensitive assets and liabilities is analyzed and calculated in a certain condition. In the scope of fund management, sensitivity analysis is performed when the interest risk of interest sensitive assets in the portfolio is measured.

As of 31 December 2017, the sum of SSDF loans is USD 34,1 million. It is estimated that the interest rate does not constitute a risk due to the fact that the loans have fixed interest rates.

As of 31 December 2017, the loan balance of USD 111,2 million, of which USD 17,5 million and TL 353,3 million are used from Türk Eximbank. The interest rate of the loans is fixed for 240 days. Since the Company does not use floating rate loans, it is evaluated that interest rate is low.

## iii. Liquidity Risk and Management Policy

Liquidity Risk comprises the risks when the matured liabilities cannot be fulfilled, when the increase in assets cannot be funded and the risks which arise due to the transaction realized in non-liquid markets.

Liquidity risk is managed by considering short term liabilities, assets with high liquidity, anticipated cash flows and balance sheet maturity ladder. Through this scope, sufficient level of cash and assets which may be convertible to cash is maintained, attention is paid that the Company finances its activities without using any loans and the resources of funding are varied by keeping the commercial bank credit limits ready for any cash requirement. As of 31 December 2017, 32% of the short-term and long-term liabilities comprise of advance payments received therefore as there is no discrepancy in maturity dates, therefore liquidity risk is considered to be low.

## iv. Credit Risk and Management Policy

The substantial part of the Company's current credit balance comprises of the performance guarantees and advance payment guarantees (letter of guarantees) granted to the customers in the scope of the contracts and which are showed off-balance sheet. Within this scope, in the context of the management of the credit limits in the bank, periodically risk counterparts are followed and transactions are carried out in order to deduct the letters of guarantees for the completed contracts without delay.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## v. Capital Risk Management

Through the capital management of the Company, enabling a debt-equity balance that would minimize the financial risks and costs is taken care of. The objective of the Company is to guarantee a consistent growth by the means of the funds gained through its activities while providing its shareholders a regular dividend income.

### 9. Other issues not included in the financial statements but which would be beneficial to the users

- As of 31 December 2017, the Company has a backlog of USD 6,8 Billion and these orders include the period until 2025.
- No Extraordinary General Assembly was held during the period between 1 January - 31 December 2017.

### 10. Significant events between 1 January - 31 December 2017 fiscal period and the Board of Directors Meeting date when the corresponding financial statements shall be negotiated

The amount of contracts signed after the balance-sheet date by the Group is approximately USD 932 Million.

İbrahim BEKÂR has been assigned as the Transportation, Security, Energy & Automation Systems (UGES) Business Sector CEO and the Vice President

### 11. Expectations for the progress of the company, significant developments with respect to company activities and financial position, to observe whether past period targets were achieved or not, whether the general assembly resolutions were fulfilled, and in the event the targets were not achieved and the resolutions were not fulfilled, information regarding the reasons and explanations

The forecasts under the normal conditions regarding the Group's consolidated financial results for the 2017 year are presented below;

Financial Targets 2017	Financial Targets 2017 (Ratio/Amount)	Realization 2017 (Rate/Amount)
Consolidated revenue growth (TL)	≥ 25%	42%
EBITDA (Consolidated and adjusted without foreign exchange rate differences)	18% - 20	20%
Capital expenditures (Tangible and Intangible)	~ 500 million TL	550 million TL
Ratio of self-funded R&D to sales	7% level	6%

The expectations of Group on consolidated financial results for 2018 under normal circumstances are as follows:

Financial Targets 2018	Financial Targets 2018 (Ratio/Amount)
Consolidated revenue growth (TL)	25% - 35
EBITDA (Consolidated and adjusted without foreign exchange rate differences)	18% - 20
Capital expenditures (Tangible and Intangible)	~ 560 million TL
Ratio of self-funded R&D to sales	7% level

## Report of the Board of Directors for the Period Between 1 January - 31 December 2017

These expectations are based on the yearly average of USD/TL parity to be 4,02 and EURO/TL parity to be 4,89.

The Company, which has been in the most prestigious list since 2006, “Defense News Top 100”, published by “Defense News” magazine, aims to increase its ranking in the list in following years. In 2017, the Company raised its ranking to 57<sup>th</sup> in the list with a USD 1.243 Million defense sales.

In order to achieve the sustainable growth:

- The registration of SADEC LLC was completed in December 2016 as part of our efforts to establish a joint venture with TAQNIA DST in Saudi Arabia. The capital of the company is SAR 22,5 million (USD 6 Million) and the share of the Company in the partnership is 50%. SADEC LLC's main field of activity is going to be the production and sales of radar, electronic warfare and electro-optical systems. It is planned that the necessary infrastructure and production facility investments of the Company will be completed within two years.
- The company titled “ASELSAN Malaysia Sdn. Bhd.” was established in order to operate in the field of remote controlled weapon systems, of which ASELSAN owns 100%. The company's capital is MYR 100, and the establishment has been registered in July 2017. According to the new business and project potentials in Malaysia, the company is planned to grow and establish local partnerships.
- The company titled “YİTAL Mikroelektronik Sanayi ve Ticaret A.Ş.” was established in order to operate in the field of micro and nano-sized devices containing semiconductor and similar technological materials. 51% of the company belongs to ASELSAN whereas, TÜBİTAK and Undersecretariat for Defence Industries hold 29% and 20% stake respectively. The company's capital is TL 17.462.500 and establishment has been registered on 4 October 2017.
- The company titled “ASELSAN Bilkent Mikro Nano Teknolojileri Sanayi ve Ticaret A.Ş.” was established in order to manufacture micro and nano-sized devices containing semiconductors and similar technological materials and the share of the Company in the partnership is 50%. The company's capital is TL 18 million and the establishment has been registered on 11 November 2014. The company has signed its first contract which is related to GaN transistor/integrated circuits in December 2016.
- The quality and technological perspectives of the cooperation formed with the universities have been increased.
- ASELSAN employees are provided with the opportunity to study in the work environment with the initiation of ASELSAN Academy Postgraduate Training Program. The program serves the purpose of having the necessary technologies and developing existing technologies.
- The efforts to form an eco-system with the sub-industry companies and SME's have continued.
- Company is continuing its operations in civil electronic areas which requires high technology.
- Inorganic expansion will be also evaluated as well as organic expansion.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 12. Compliance Report on Corporate Governance Principles

The report will be provided with Annex-1 of the year end BOD Report.

## 13. Research and Development Activities Performed

The Group, as a leading defense industry establishment, develops advanced technology system solutions on land, air, naval and aerospace platforms, places great importance to Research and Development activities and technological gains since it was founded. Besides, it aims to spend approximately 7% of the annual turnover to its Research and Development activities financed with its own resources.

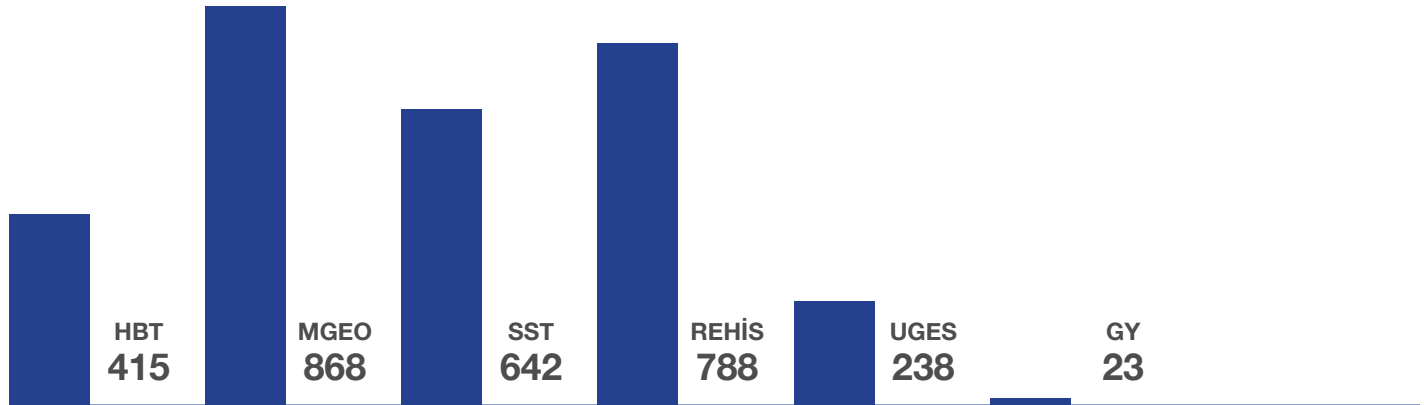
By following up on all kinds of technological developments pertaining to land, air, naval and aerospace platform product/system technologies, the Company not only applies technology but also designs, develops and produces product/system technologies in order to share or sell with/to national and international collaborations.

Projects are striving at maximum level in order to benefit from the technological opportunities existing in the country aiming to increase the national contribution share. For this purpose, cooperation is made with universities and various R&D organizations and importance is given to the use of local suppliers and subcontractors.

As for the projects carried out within the Group, the Research and Development incentive in compliance with the provisions of the Law on Corporate Tax numbered 5520 and Research and Development center application pursuant to the Law regarding the support of Research and Development activities numbered 5746 are being implemented together. As for non-public R&D projects, the approval of TEYDEB (Technology and Innovation Support Programs Directorate) and ARDEB (Research Support Programs Presidency) is received and are supported by the institutions. Within the Company, there are 6 Research and Development centers within the scope of Defense System Technologies (SST), Radar Electronic Warfare and Intelligence Systems (REHİS), Microelectronics, Guidance and Electro-optics (MGEO), Communication and Information Technologies (HBT), Transportation, Security, Energy & Automation Systems (UGES) Vice Presidencies as well as ASELSAN Research Center of Vice Presidency of Technology and Strategy Management. Currently, 2.974 staff are employed at the Group's Research and Development centers.

### The Number of Personnel Employed at R&D Centers

(2.974 people)

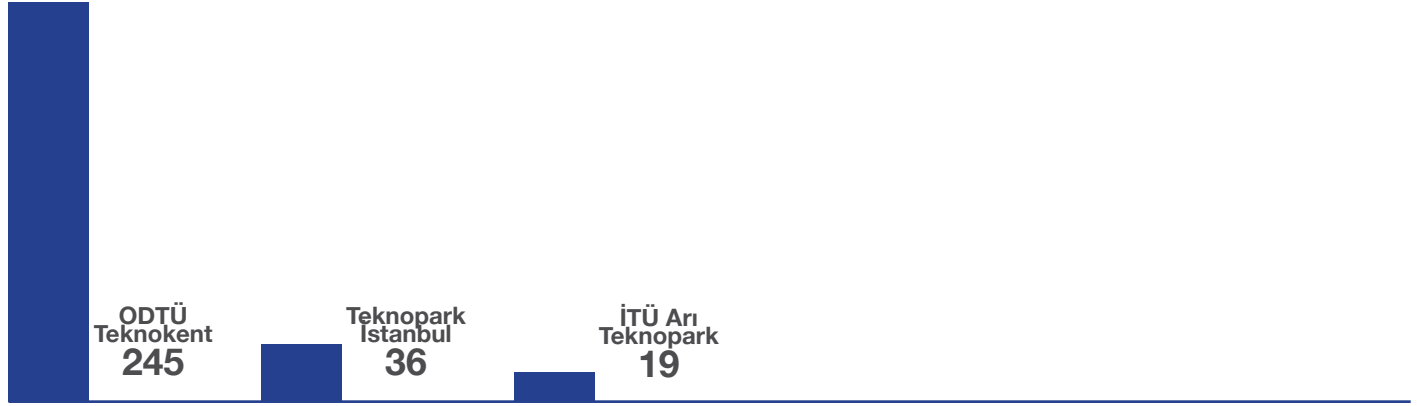


The Group also carry on its activities in Teknokent facility within Middle East Technical University, İstanbul Technology Development Area Teknopark and İTÜ Arı Teknopark within the scope of the Law numbered 4691 on Technology Development Regions. Group employed 300 staff within this region.

## Report of the Board of Directors for the Period Between 1 January - 31 December 2017

### The Number of Personnel Employed at Technopark

(300 people)



#### 14. Amendments to the Articles of Association during the period along with the reasons

There has not been such an event within the period.

#### 15. The kinds of issued capital market instruments and their amounts, if any

There has not been such an event within the period.

#### 16. The industry that the Company operates in and its position within the sector

The Company is a leading defense industry establishment developing advanced technology system solutions within land, air, naval and aerospace platforms.

The Company, being an establishment of TSKGV, stands in a position of a technology center within the fields of design, development, manufacturing, system integration, modernization and after sales services of military and civil communication systems, avionics systems, electronic warfare and intelligence systems, radar systems, command and control systems, naval warfare systems, security systems, transportation systems, energy systems, traffic and automation systems electro-optic systems and products.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

Ranking of Company's international, country-wide, sectorial rating systems is showed at table below:

Corporation		Research/Study	Related Period <sup>1</sup>	Ranking CurrentPrior	
International Ranking					
Defense News Magazine	Defense News Top 100		2017	57	58
SIPRI	SIPRI Top 100		2017	67	72
European Commision	World R&D Expense Top 2500 Company		2017	1.204	1.228
	PCB Technology Leadership Awards (TLA) - Printed Wiring Board Technology				
Mentor Graphics	2017: “Computers, Blade & Servers, Memory Systems” category		2017	2	2
	2016: “Military & Aerospace” category				
National Ranking					
Istanbul Chamber of Industry	ICI 500 Top Industry Companies		2017	20	23
	ICI 500 - Private Companies		2017	19	21
Fortune Magazine	The Top 500 Companies		2017	41	54
Capital Magazine	The Top 500 Private Companies		2017	50	65
BIST (Borsa Istanbul)	Sustainability Index		2017	No Ranking	
	Corporate Management Index		2017	No Ranking	
	BIST Top 30 Index		2017	No Ranking	
	BIST Top 30 Market Value Sequence		2017	6	8
TEA (Turkey Exporters' Assembly)	Top 1000 Exporters		2017	108	101
Turkish Time Journey	Study of Research and Development Top 100		2017	1	1
Deloitte	Technology Fast 50 / Big Star Category		2017	1	1
Brand Finance	Most Valuable Firms (100 Brands)		2017	33	46
Bloomberg Businessweek	Top 50 Firms (Between Universities)		2017	4	9
Universum	Ideal Employers (Engineering and Information Technologies- 100 Companies)		2017	1	4
Turkish Patent Institute	TÜRKPATENT Leauge (Top Ten Company Making National Patents)		2017	5	-
Ministry of Science, Industry and Technology	Top of the Private Sector R&D Centers / R&D Centers Performance Index / Defence Industry Sector		2017	1	1
CDP (Carbon Disclosure Project)	Firms Which Have Well Management of Climate Changes and Highest Greenhouse Gas Emission Performance (Turkey)		2017	No Ranking	
TESİD	Innovativeness and Creativeness Awards, Innovative Product Awards Between Big Firms		2017	No Ranking	

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 17. Progress in investments and degree of incentive utilization if any

### Progress in Investments

Directing the Company's resources to profitable, high value added fields, where advanced technology is used, is anticipated in the first place by considering the global tendencies, technological developments and the actual and prospective requirements of all customers, particularly Turkish Armed Forces. The investments within the Company are carried out after detailed consideration of the technological plans, strategic plans and project requirements.

During the current period, the investments, which will meet the needs of substructure and equipment in order to be used in research and development project have been sustained in compliance with the investment scheme in accordance with the policy of efficient use of resource.

### Incentives that Company has benefitted

Income tax withholding incentive, insurance premium support, stamp tax exemption and Research and Development incentive are utilized within the scope of the Law numbered 5746. In accordance to the Law regarding the Incentive of Research and Development Activities numbered 6676 published on Official Gazettes numbered 29636 on 26 February 2016 and The Law Regarding the Amendments on Delegated Legislation, the content of the law and incentives has been broadened and additional exceptions has been given. Income tax withholding incentive, insurance premium support and stamp tax exemption is utilized by being calculated over the salaries of the Research and Development personnel and not being paid to the relevant institution and the Research and Development discount is utilized by means of applying a discount on the corporate tax return. Aforesaid law is valid until the date of 31 December 2023.

Within the scope of the Teknokent Law numbered 4691, incentive on withholding income tax, insurance premium support and stamp tax exemption is applied. These are utilized by making calculations on Research and Development and software personnel wages and not being paid to the related institution. The gain obtained with reference to the execution of Technology Development Zones Law numbered 4691 is exempted from the corporate tax of 31 December 2023.

Between the period 1 January - 31 December 2017 because of having Research and Development centers, TL 110.332 Thousand within the scope of income tax withholding incentive, promotion of insurance premium, stamp duty exception; as a result of being active at ODTÜ Teknokent, İstanbul Technology Development Area Technopark and ITU Ari Technopark TL 16.541 Thousand incentives have been used.

Within the scope of the Research and Development Law No 5746 and Teknokent Law No 4691, TL 190.625 Thousand Corporate Tax advantage has been gained as of 1 January-31 December 2017 period.

At periods when Group's Research and Development expenses, which is subject of Research and Development discount, is higher than the principal amount of Research and Development discount which is indicated at corporate tax return, Corporate Tax ratio is 22% for the years 2018-2019 and 2020 and 20% for the next years of distinction amount is evaluated as deferred tax income at financial tables.

The 1501 Industrial Research and Development Projects Support Programme has been established in order to encourage the Research and Development operations of the companies creating added values at company level and to contribute to the enhancement of the Research and Development ability of the Turkish industry by this means. Projects within the scope of 1511-Prioritized fields' research technologies development and innovation programme came into force as of 2013. The support process of the projects have been initiated as of July 2010 by 1509 EUREKA-International Industrial Research and Development Projects Support Program where market oriented projects for developing products and processes to be commercialized in short term are supported the Group have benefited from the incentives. In addition to these, TÜBİTAK 1003 Research Support programs were implemented within the scope of the projects entered into implementation in 2017 and the Company benefited from the incentives. (TL 17.546 Thousand)

Within the scope of SAN-TEZ Research and Development support programme aimed at supporting the postgraduate and/or doctorate thesis works which shall contribute to increasing the competitiveness in international markets by means of commercializing the scientific studies at the universities and institutionalizing the University - Industry cooperation, 4 Projects are ongoing.

The 1007 Public Institutions Research and Development Project Support Program has been formed in order to meet the requirements of the Public Institutions with Research and Development or to support the projects aimed at solving their problems. In scope of this support 8 Research and Development projects are still ongoing.

Within the context of the European Commission 7<sup>th</sup> Cooperation Framework Programs, 6 integration projects were executed. In the "Circulation of the Researchers, Return Grants; Individual Support Private Programme" within the scope of the European Commission 7<sup>th</sup> Cooperation Framework Programmes, 4 projects have gone into effect in the years 2010 and 2011.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

Expenses regarding the foreign market research travels realized with respect to the products and the foreign office expenses are used up by the rate and amount of subsidies implemented within the scope of Governmental Grants for Export. (TL 780 Thousand)

Within the Decision Regarding the Governmental Grant in Investments, there are 6 Investment Incentive Certificates taken from the Turkish Republic Prime Ministry Under secretariat for Treasury General Directorate of Incentives and Implementation. With such incentive certificates, VAT exemption and customs tax exclusion are utilized. (TL 18.530 Thousand)

Monetary support is got within the scope of the Communiqué on Council of Ministers Decision related to Agricultural Support and Research and Development Support Program from Ministry of Agriculture/ General Directorate of Agricultural Researches and Policies (TAGEM). (TL 419 Thousand)

VAT exemption is applied in domestic and foreign purchases and customs tax exemption is used in foreign purchases. (TL 159.732 Thousand)

The sources, amounts and types of the incentives utilized are summarized in the table below collectively.

The Source of Incentives	Type of Advantage	31 December 2017 Amount (Thousand TL)
Research and Development Promotion Law numbered 5746 and Teknopark Law numbered 4691	Income tax withholding, Insurance Premium, Stamp Tax	190.625
VAT Law numbered 3065	VAT Return	159.732
Research and Development Promotion Law numbered 5746	Corporate Income Tax	110.332
Ministry of Economy Investment Incentive Support Programme (TÜBİTAK 1501,1511,1509)	VAT and Customs Duty Exemptions Income tax withholding, Insurance Premium, Stamp Tax	18.530 17.546
Teknopark Law numbered 4691	Monetary Support	16.541
Ministry Of Economy Fair and Market Research Incentives	Monetary Support	780
Support Programs (TAGEM)	Monetary Support	419
<b>TOTAL</b>		<b>514.505</b>

## 18. Explanations including the qualities of the production units of the company along with the capacity utilization rates and their developments, general capacity utilization rate, developments in the manufacturing of the products and services which are subjects to activity, amounts, quality, circulation and the prices compared with the previous period figures

The capacity utilization shows how much of total production capacity is used. It is calculated by dividing the realized production capacity (Realized personnel hours) to the potential production capacity (Number of personnel x 8,5 hours x work day). The capacity utilization for the period 1 January - 31 December 2017 was realized at the level of 102%. Substantial part of the production has occurred as order based production. Research and Development activities are carried out for the products designed to be tailored through customer requirements. There is variation between qualities, quantities and prices between the systems and the products.

The production processes and resource planning have been managed more efficiently upon the usage of Enterprise Resource Planning System (ERPS).

## 19. The prices, sales revenues, sales conditions of the products and services which are subjects of activity with their improvements within the year, developments in the yield and productivity parameters and the reasons of the substantial changes in these compared to the previous years

The Company carries out its operations in the basic fields of: "Communication and Information Technologies", "Defense System Technologies", "Radar, Electronic Warfare and Intelligence Systems", "Microelectronics Guidance and Electro-Optics" and "Transportation, Security, Energy and Automation".

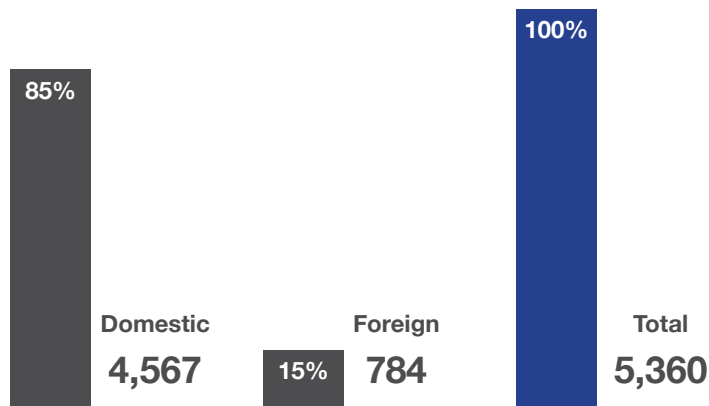
According to the relevant sales agreement terms and conditions, the Company's revenue from projects contains order based production, mass production product sales, services, commodities and progress billing sales. Sales terms and conditions are subject to change as for the respective agreements.

As for the consolidated amount of the Group's realized net sales during the period 1 January - 31 December 2017; TL 4.576.113 Thousand of this realized as domestic sales and TL 784.165 Thousand of it realized as foreign sales.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Sales

(TL Million)



**20. The basic ratios regarding profitability and liabilities, as calculated on the basis of the financial statements, sales, efficiency, income generation capacity, profitability and liabilities/equity ratios in comparison basis with prior period and information about other matters and future expectations and risks that have been prepared in accordance with Capital Markets Board Communiqué Series: II and No:14.1**

As of 31 December 2017, the Group's financial statements prepared in accordance with the Communiqué Series II, No: 14.1 "Communiqué on Capital Market Financial Reporting Standards" issued by Capital Markets Board, Gross margin is 25%, Operating profit margin (EBIT) is 17%, EBITDA margin is 20% and Net Profit margin is 26%. At the end of the 3<sup>rd</sup> Quarter, Return on Equity (ROE) is 32% and Average Net Working Capital/ Net Sales is 41%.

<b>Basic Ratios Consolidated Financial Statement</b>	<b>30 December 2017</b>	<b>31 December 2016</b>
Current Ratio (Acid-test)	2,2	2,3
Liquidity Ratio	1,1	1,5
Short Term Current Liabilities / Total Financial Liabilities	88%	75%
Total Financial Liabilities / Total Assets	5%	6%

<b>Basic Ratios Consolidated Balance Sheet</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Gross Profit Margin	25%	24%
Operating Profit Margin (EBIT)	17%	16%
EBITDA Margin	20%	19%
Net Profit Margin	26%	21%
Return On Equity (ROE)	32%	22%
Average Net Working Capital / Net Sales	41%	44%
Return on Assets (ROA)	14%	11%

The liabilities of the Group are mainly consist of the short and long term order advances received.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 21. Measures planned to be taken to improve the financial structure of the company

As for the annual budgets and implementations for the period 2017-2019, the Group has adopted the principles as the basis to take care of savings in all kinds of expenditures, to follow up the advances and receivables closely, to pay attention to the proportion of the term and currency in purchasing and sales agreements and the risk status of the domestic/foreign suppliers and sub-contractors.

## 22. Changes in the top management within the period and the names and surnames of those are on duty

Changes in the top management within the period 1 January - 31 December 2017 and information regarding the ones on duty are given in the below table:

### List Of Upper Management In Service

No	Name and Surname	Duty	Date of Appointment
1.	İbrahim ÖZKOL	Chairman/Independent Member of the Board of Directors	15.03.2017
2.	Mustafa Murat ŞEKER	Vice Chairman/Managing Member of the Board of Directors	15.05.2013
3.	Ziya AKBAŞ	Independent Member of the Board of Directors	31.03.2014
4.	Ercümend ARVAS	Independent Member of the Board of Directors	31.03.2016
5.	Bayram GENÇCAN	Member of the Board of Directors	15.03.2017
6.	Haluk GÖRGÜN	Member of the Board of Directors	15.03.2017
7.	Emin Sami ÖRGÜÇ	Member of the Board of Directors	15.03.2017
8.	Ercan TOPACA	Member of the Board of Directors	15.03.2017
9.	Murat ÜÇÜNCÜ	Managing Member of the Board of Directors	15.05.2013
10.	Faik EKEN	CEO/President	24.07.2014
11.	Okan Turan	CFO/Vice President (Financial Management)	04.01.2016
12.	Yavuz BAYIZ	Division CEO/Vice President (Communication & Information Technologies Business Sector)	01.09.2014
13.	Alper ÜNSOY	Division CEO/Vice President (Microelectronics, Guidance & Electro-Optics Business Sector)	25.05.2017
14.	Oğuz ŞENER	Division CEO/Vice President (Radar & Electronic Warfare Systems Business Sector)	01.09.2014
15.	Mustafa KAVAL	Division CEO/Vice President (Defense Systems Technologies Business Sector)	01.09.2014
16.	Hezarfen ORUÇ	Division CEO/Vice President (Corporate Services)	01.09.2014
17.	Mehmet ÇELİK	Division CEO/Vice President (R&D and Technology Management)	14.05.2017
18.	Hüseyin YAVUZ	Division CEO/Vice President (Human Resource Management)	01.09.2014
19.	Abdülkadir GÖKTAŞ	Internal Audit President	01.09.2014

## 23. Total amounts of the financial benefits such as attendance fee, remuneration, premium, bonus payments, share profit provided to the managing members and senior executives

The total amount of the remuneration and similar benefits paid to the senior executives by the Company as for the period that ended on 31 December 2017 is TL 9.629 Thousand.

In the table below, the annual gross total amount of the wages paid to the members of the Company's Main Shareholder Board of Directors and the interests of private health insurance are given.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Aselsan Electronics Industry and Trade Inc. List Of Total Amount Of Financial Benefits Provided To The Bod Members And Higher Level Executives

No	Name and Surname	Duty	Total Amount Paid Thousand TL (Wage and Health Insurance)
1.	İbrahim ÖZKOL	BOD Chairman	36
2.	Mustafa Murat ŞEKER	BOD Vice Chairman/Managing Member	47
3.	Ziya AKBAŞ	BOD Member	48
4.	Ercümen ARVAS	BOD Member	49
5.	Bayram GENÇCAN	BOD Member	36
6.	Haluk GÖRGÜN	BOD Member	36
7.	Emin Sami ÖRGÜÇ	BOD Member	38
8.	Ercan TOPACA	BOD Member	36
9.	Murat ÜÇÜNCÜ	Managing Member	48
10.	Nazım ALTINTAŞ	BOD Member	9
11.	Mehmet Celalettin LEKESİZ	BOD Member	14
12.	Turan EROL	BOD Member	9
13.	İsmail GÜMÜŞTEKİN	BOD Member	9
14.	Sedat NAZLIBİLEK	BOD Member	9
15.	CEO/President and Vice Presidents	Senior Management Members	5,385
TOTAL			5,809

### 24. Information regarding the allowances granted to the managing members and the senior executives with the travel, accommodation and representation expenses and financial benefits in kind, insurances and total amounts of the similar benefits

Total amount of domestic and foreign allowances, travel, accommodation and representation expenses and financial benefits in kind and total amounts of insurances granted to the senior executives and members of the Board of Directors of the Group for the period ended by 31 December 2017 is TL 1.590 Thousand.

### 25. Personnel and workers turnover, collective agreement implementations, rights and benefits provided to the personnel and workers

The Group recruited a total number of 502 people (204 with fixed term contract) as the personnel including fixed-term contracted personnel, disabled and terror-stricken personnel during the period 1 January - 31 December 2017 and the number of people quit for the same period is 318 (19 with fixed-term contracted).

The rights and benefits provided to the personnel by the Company are bonus payments, meal allowances, marriage benefits, maternity benefits, death allowances, transportation, private health insurance, childcare, and kindergarten benefits. The average number of personnel employed by the Group as of 31 December 2017 is 5.440.

There is no collective bargaining agreement in the Company.

### 26. Information regarding the donations within the year and social responsibility

Within the period of 1 January 2017 - 31 December 2017, the Group donated TL 10.000 to Mardin Derik District Governorate in total.

### 27. Information on Business Partnerships, Associates, Subsidiaries, Joint Ventures and Branches

- The Republic of Turkey, Sivas, ASELSAN-Optics Joint Venture
- The Republic of Turkey, ASELSAN-Bilkent Joint Venture
- The Republic of Turkey, Gebze, YİTAL A.Ş. Joint Venture
- Jordan, Amman, ASELSAN-Jordan Joint Venture
- Kazakhstan, Astana, ASELSAN-Kazakhstan Joint Venture
- United Arab Emirates; Abu Dhabi, IGG ASELSAN Joint Venture
- Saudi Arabia; Riyadh, SADEC LLC Joint Venture
- Republic of South Africa; Pretoria Branch
- Republic of Macedonia; Skopje Branch
- United Arab Emirates; Abu Dhabi Office
- Saudi Arabia, Riyadh Office
- Qatar, ASELSAN Doha Project Office
- Domestic Associates and Subsidiaries

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Local Affiliates

### 1- MİKROELEKTRONİK

Ownership: 85%  
Partner: İTÜ ETA Vakfı  
Participation: 2010  
Foundation: 2006  
Assets: \$ 2 Million

### 2- ASELSANNET

Ownership: 100%  
Foundation: 2004  
Assets: \$193 Million

### 3- ROKETSAN

Ownership: 15%  
Partner: TSKGV  
Foundation: 1988  
Assets: \$1,1 Billion

### 4- ASELSAN HASSAS OPTİK

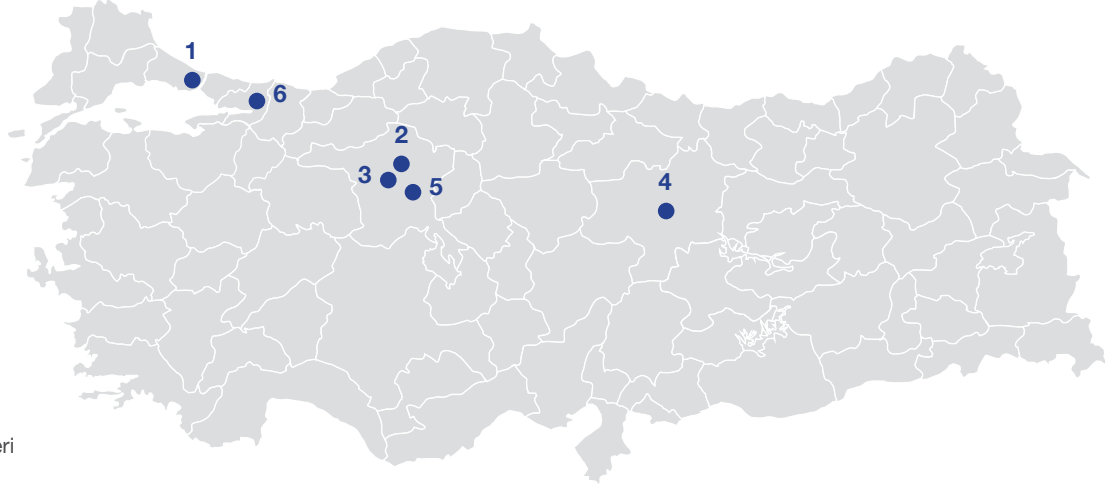
Ownership: 50%  
Partner: Sivas Optik Malzemeleri  
Foundation: 2014  
Assets: \$17,9 Million

### 5- ASELSAN BİLKENT MİKRO NANO

Ownership: 50%  
Partner: BİLKENT Üniversitesi  
Foundation: 2014  
Assets: \$27,1 Million

### 6- YİTAL

Ownership: 51%  
Partner: TÜBİTAK, SSM  
Foundation: 2017  
Assets: \$1,2 Million



## Global Affiliates

### 1- ASELSAN-BAKU (AZERBAIJAN)

Ownership: 100%  
Foundation: 1998  
Assets: \$1,7 Million

### 2- ASELSAN MIDDLE EAST (JORDAN)

Ownership: 49%  
Partner: KADDB Investment Group  
Foundation: 2012  
Assets: \$15,5 Million

### 3- IGG ASELSAN INTEGRATED SYSTEMS (UAE)

Ownership: 49%  
Partner: IGG  
Foundation: 2011  
Assets: \$3,9 Million

### 4- KAZAKHSTAN ASELSAN ENGINEERING (KAZAKHSTAN)

Ownership: 49%  
Partner: Kazakhstan Engineering  
Foundation: 2011  
Assets: \$42,2 Million

### 5- SOUTH AFRICA BRANCH

Ownership: 100%  
Foundation: 2011  
Assets: \$1,2 Million

### 6- SADEC (Saudi Defence Electronics Company - SAUDI ARABIA)

Ownership: 50%  
Partner: TAQNIA DST  
Foundation: 2016

### 7- ASELSAN Malaysian Sdn. Bhd. (MALESIA)

Ownership: 100%  
Foundation: 2017



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 28. Information regarding the shares of the companies subject to consolidation in the parent company

There is no cross ownership relation between the companies subject to full consolidation (ASELSANNET, ASELSAN BAKU, Mikro AR-GE, and ASELSAN Malaysia) and equity pick-up method consolidation (ASELSAN Bilkent, ASELSAN Optik, IGG ASELSAN, ASELSAN Kazakhstan, ASELSAN Jordan, SADEC LLC, and YİTAL A.Ş.) and the Company.

## 29. As for the preparation process of the consolidated financial statements; comments with respect to the principal factors of the internal audit, internal control and risk management systems of the Group and opinion of the managing body

The controls are carried out by the Enterprise Risk Management and Internal Control Department, Internal Audit Presidency (IAP), Audit Committee and members of the Board of Auditors within the parent company in order to minimize the substantial error risk on the financial statements of the Group. IAP and Audit Committee carry out their duties independent from each other but within the guidance of common objectives and targets, with the aim of maintaining an internal control system, which provides required controls in matters such as the reliability of the financial reporting system, the efficiency of the activities in order to eliminate the operational risks and compliance with the law. Furthermore, the efficiency and sufficiency of the internal control are supported with the directives in effect.

The Committee for Early Determination and Management of Risks' mission is to determine and manage the potential risks which may affect the Company. The committee meets on a periodical basis and directly reports in every two months to the Board of Directors. The report is also shared with the independent audit firm.

## 30. Direct and indirect affiliates of the company and information regarding the share ratios

The Group own 100% of ASELSANNET and ASELSAN Bakü and 85% of Mikro AR-GE, thus these companies are subject to the full consolidation.

The affiliated partnerships, subsidiaries subject to joint management and affiliates of the Group recorded as financial investments and investments valued by equity method, with their participation ratios and amounts are as follows:

Company	Main Activity Area	Share (%)	31 December 2017 (Thousand TL)
ROKETSAN - Roket Sanayi ve Ticaret A.Ş.	All kinds of missiles, rockets, guided ammunition and their launch systems and propulsion systems and rocket fuels, guidance and control systems, algorithms and softwares related to these systems, warheads and other parts of these systems, all kinds of plugs and all kinds of ballistic protection (armor) system	14,897	568.768
ASELSAN Kazakhstan	Manufacture, sale and technical service of electronic and electro-optical devices and systems	49	39.576
ASELSAN Jordan	Marketing sales and joint production of group products	49	12.736
SADEC LLC	Manufacture and sale of radar, electronic warfare and electrooptic products	50	8.173
ASELSAN Bilkent	Manufacture of micro and nano-sized devices containing semiconductors and similar technological materials	50	8.463
ASELSAN Optik	Precision optic technology	50	7.359
IGG ASELSAN	Production, integration, sales and technical service of high technology products	49	4.820
YİTAL A.Ş.	Production of micro and nano-sized devices containing semi-conductor and similar technological materials	51	2.197
ASPILSAN Askeri Pil Sanayi ve Ticaret A.Ş.	Manufacture and sale of Ni-Cd, Ni-MH, Li-Ion battery / battery blocks and aircraft battery systems	1	147



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 31. Information regarding the company's own shares acquired by itself

There has not been such an event within the period.

## 32. Comments with respect to the private audit and governmental audit realized within the activity period

There has not been such the private and governmental audit within the period.

## 33. Information regarding the lawsuits filed against the company which would have an impact on the financial position and activities of the Group and their possible outcomes

The lawsuits and execution proceedings filed by or against the Group as of 31 December 2017 are summarized below:

Description	31 December 2017 (Thousand TL)
Ongoing lawsuits filed by the Group	1.017
Execution proceedings carried on by the Group	8.691
Lawsuits proceedings carried against the Group	5.917
Lawsuits finalized in favor of the Group within the period	2.304
Lawsuits finalized against the Group within the period	99

## 34. Explanations with respect to the administrative and judicial sanctions applied to the company and the managing members due to the acts contrary to the legislation provisions

No penalties with substantial amounts were paid by the Group within the period.

## 35. If it is an affiliate company, the legal transactions carried out in favor of the parent company or its affiliate with the parent company, with an affiliate company connected to the parent company with the direction of the parent company and all other measures taken or avoided to be taken in favor of the parent company or its affiliate in the previous activity year

There has not been such an event within the period.

## 36. If it is an affiliate company, whether any counter performance was realized for each legal transaction according to the known status and conditions at the time the legal transaction mentioned in article 35 was realized or at the time the measures were taken or avoided to be taken and whether the company incurred losses due to the taken or avoided measure and if the company incurred losses to observe whether this was equalized or not

There has not been any material event that affects the Company's financial statements within the period.

## 37. The determination and management's assessment with respect to the company's unpaid capital or whether the company is deeply in debt

There has not been such an event within the period.

## 38. The status of owning directly or indirectly five, ten, twenty, twenty five, thirty three, fifty, sixty seven or one hundred percent of the shares representing the capital of an equity company or in the event that the proportions go below these percentages and ground for this

There has not been such an event within the period.

## 39. Related party transactions

Detailed table is disclosed in Note 5 in condensed Consolidated Financial Statements of 31 December 2017.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## CORPORATE GOVERNANCE PRINCIPLES COMPLIANCE REPORT 2017

### CHAPTER I - STATEMENT FOR COMPLIANCE WITH CORPORATE GOVERNANCE PRINCIPLES

ASELSAN, in scope of the Corporate Governance Principles which has been implemented by Capital Markets Board (CMB) since 2003, has been making efforts to work in compliance with the principles under the titles shareholders, public disclosure and transparency, stakeholders and Board of Directors.

ASELSAN, adopting the corporate governance understanding as a principle, was rated with a grade of 8,77 out of 10 as the result of the Corporate Rating Studies carried out by SAHA Corporate Governance and Credit Rating Services Inc (SAHA) in 2012 and therefore was included in the Borsa İstanbul Corporate Governance Index. As a result of the importance given to corporate governance principles, carrying out this effort as a continuous, dynamic process and making improvements accordingly; according to the report of SAHA, which was published on 12 December 2017, ASELSAN's corporate governance rating grade was updated to 9,20 out of 10 points from 9,15 in 2016.

Corporate governance rating grade shows to what extent the companies comply with the corporate governance principles set out by the CMB and the Company's compliance level with the principles is defined with a methodology measuring under the main titles Shareholders, Public Disclosure and Transparency, Stakeholders and Board of Directors. Within this context, the methodology that is based on the "Corporate Governance Principles" published by CMB in January 2014, was used in the rating made by SAHA.

ASELSAN also stands in the first group at World Corporate Governance Index (WCGI) that was published on 21 July 2017 by SAHA. As a result of the efforts made for improving Corporate Governance Rating during 2017, ASELSAN's corporate governance rating was updated as 9,20 over 10 on 12 December 2017 by SAHA A.Ş.

The ratings of 2016 and 2017 and the subtitles are given below:

2016 Rating Distribution		2017 Rating Distribution	
Shareholders:	83,62 / 100	Shareholders:	83,63 / 100
Public Disclosure and Transparency:	98,46 / 100	Public Disclosure and Transparency:	98,70 / 100
Stakeholders:	95,87 / 100	Stakeholders:	98,09 / 100
Board of Directors:	90,32 / 100	Board of Directors:	90,70 / 100
<b>Average 9,15 / 10,00</b>		<b>Average 9,20 / 10,00</b>	

ASELSAN Corporate Governance Ranking Reports published by SAHA can be accessed both in Turkish and English at the company website: [www.aselsan.com.tr](http://www.aselsan.com.tr)

The compliance with all the mandatory principles of Corporate Governance Principles was achieved. There are no conflicts of interest arising because of the arbitrary principles where compliance has not been achieved. The titles regarding the arbitrary principles, where compliance has not been achieved yet, are given below and are explained in detail through the Compliance Report.

- No recognition of minority rights to those who own less than twentieth of the capital indicated in the Articles of Association,
- Group A shares having the privileges on Board nominations and the transfer of those shares being subject to permission,
- The fact that although the mechanisms enabling the participation of stakeholders in the management of the company are built, they are not included in the Articles of Association.
- Non-existence of a judgement in the Articles of Association; declaring that shareholders may individually demand special audit of certain incidents from the General Assembly even if it is not on the meeting agenda, under the condition that the right to ask to obtain information and to examine has been used before and if the exercise of shareholders rights is necessary,
- The article "Group A shares shall not be sold or transferred without the consent of the Board of Directors because of the Company's operations in security and defence industry; in the event that these shares are transferred or sold to third parties partially or completely without the consent of the Board of Directors, the Board of Directors is entitled to abstain from recording this sale in the records" in the Articles of Association of the Company,
- Non-existence of a female member in the Board of Directors, the fact that a target, where the ratio of the female members should not be less than 25%, was not set and that there is not a written Company policy on that issue,
- Not disclosing the remuneration of executive managers or the benefits provided to them per each individual.

## Report of the Board of Directors for the Period Between 1 January - 31 December 2017

Corporate Governance Committee will carry on the necessary efforts in order to achieve full compliance with Corporate Governance Principles.



**Ercüment ARVAS**

Independent Member of Board of Directors  
Corporate Governance Committee Chairman



**Haluk GÖRGÜN**

Member of Board of Directors  
Member of Corporate Governance Committee



**Emin Sami ÖRGÜÇ**

Member of Board of Directors  
Member of Corporate Governance Committee



**Pınar ÇELEBİ**

Investor Relations Manager  
Member of Corporate Governance Committee

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## CHAPTER II - SHAREHOLDERS

### 2.1. Investor Relations Department

The information regarding Investor Relations Department responsible for the relations with shareholders is given below.

Okan TURAN	Chief Financial Officer / Vice President
Aykan ÜRETEN	Finance Director
Pınar ÇELEBİ	Investor Relations Manager
Bâni Betül GÖKÇE	Investor Relations Department / Leader
Başak YÜCEKAYALI	Investor Relations Department / Senior Specialist
Gülru Selçuk FİLİZ	Investor Relations Department / Specialist
Alper GÜNEY	Investor Relations Department / Assistant Specialist

#### Contact Information

Phone: (312) 592 12 22- 33 - 42 - 45 - 54

e-mail: aselsan.ir@aselsan.com.tr

Investor Relations Department has submitted the report regarding the tasks carried during 2016, to Board of Directors on 6 February 2017.

Pınar ÇELEBİ, Investor Relations Manager, has Capital Markets Transactions Level-3 and Corporate Governance Rating Expertise Licenses.

Main operations carried out by Investor Relations Department during 2017 are as follows:

- Maintenance of the exercise of partnership rights of shareholders, updated and safe records regarding shareholders,
- Coordination of public disclosure of material events,
- Answering the written inquiries of shareholders regarding the company, excluding the information considered as confidential, trade secret and which was not disclosed to public,
- Ensuring the execution of General Assembly meeting in compliance with the regulation in force, Articles of Association and other company regulations, records being kept regarding the ballots and the results being reported to shareholders,
- Monitoring of every issue regarding the public disclosure including the regulations and company policies on information,
- Execution of tasks assigned by Corporate Governance Committee,
- Operation of transactions regarding dividend distribution, capital increase and tasks regarding Corporate Governance Principles,
- Coordination of updating the list of people who have access to insider information; informing those people in purpose of protecting the insider information and making sure they follow the confidentiality rules until financial and operational results are disclosed to public,
- Coordination of preparation and publishing of Sustainability Report,
- Performing the tasks regarding the compensation of the beneficiaries with the capital market instruments, the property of which has been lapsed to the Investor Compensation Center (ICC) and have become valid again.

Meetings with 113 corporate investors were made in investor conferences, roadshows, visits to ASELSAN and teleconferences; additionally approximately 650 of our shareholders' questions regarding exercising their rights, public disclosures made, financial tables, etc. were answered either written or verbally in 2017.

The information and explanations, which may affect the exercise of shareholders rights, are provided in the company website.



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## 2.2 Exercising of Information Acquisition Rights of the Shareholders

Investor Relations Department has taken care of every written and verbal inquiry of all shareholders in 2017 with the most accurate and fastest way. It has paid attention to respond to all the information demands of shareholders with complete and comprehensible responses.

Investor Relations Department has been using Turkish and English website [www.aselsan.com.tr](http://www.aselsan.com.tr) actively in order to inform ASELSAN's investors on a timely and accurate basis and has been updating the information given on the web constantly. The electronic platform is being effectively used regarding the issues that may affect exercising of the shareholders rights. The material event disclosures made through Public Disclosure Platform (KAP) incorporated under Borsa İstanbul are being disclosed in Turkish and also in English along with it starting from 26 October 2015, the material event disclosure and other notifications are being published on our corporate website in Turkish and in English on the same day. In general, any changes occurred in the Company structure are immediately announced on our website and the investor presentations are constantly updated. Capital increases and dividend distribution information are also submitted to our investors' knowledge on the website. In addition, notifications regarding the attendance of shareholders to the General Assembly and electronic general assembly principles within the context of the new Turkish Code of Commerce (TCC) are being made.

Full compliance of both Turkish and English chapters on "Investor Relations" on the website with the regulations was achieved.

Within the context of regulations of CMB, in 2017;

- General Assembly documents within legal deadlines,
- General Assembly minutes and participants list,
- 2016 Annual Report,
- The report for the 1<sup>st</sup> six months' period for 2017,
- The investor presentations which are updated every 3 months,
- Disclosure of material events made in 2017,
- Our Company's Consolidated Financial Statements and Basic Performance Indicators for the last 5 years along with the Financial Report,
- Investor Calendar updates

were published on the website in Turkish and English.

Due to the reason that a regulation is present within the TCC numbered 6102 according to which the shareholders will be able to request from the General Assembly the assignment of a special auditor for the inspection and disclosure of the financial status, and due to the reason that the law and the relevant legislation are considered for the issues not present in the Articles of Association of the Company, there is no respective provision with regard to this issue in the Articles of Association. There was no request of any shareholders with respect to the assignment of a special auditor in 2017.

## 2.3. General Assembly Meetings

The agenda and invitation related to the 42<sup>nd</sup> Ordinary General Assembly Meeting dated 15 March 2017 with regard to 2016 operations realized at the Company headquarters were duly announced comprising all the necessary information in a daily newspaper published in Turkey and on the website on 20 February 2017 and in the Turkish Trade Registry Gazette dated 21 February 2017. Furthermore the invitation was sent to the main shareholders and the shareholders who attended the previous meeting by post two weeks before the General Assembly. The General Assembly was held with the attendance of 127 shareholders, 7 physically, 120 electronically representing 896.852.620,738 shares (TL 896.852.620,738 nominal) of 1.000.000.000 total shares. Media members did not participate in the General Assembly Meeting, which was held simultaneously both physically and electronically.

In scope of the Communiqué on Corporate Governance numbered II.17-1 of CMB, three weeks before the Ordinary General Assembly on date 16 February 2017, the Ordinary General Assembly Document including the meeting agenda, place, time, copy of the power of attorney, total number of shares as of 16 February 2017 and the voting rights, the number of shares representing the privileged shares and their voting rights, the reasons for the changes in the members of Board of Directors, which is present in the agenda, the list of independent members of the Board of Directors, the proposal of the Board of Directors with respect to the year 2016 dividend distribution, the CV's of the independent members of the Board of Directors and their statements of independence and explanations regarding the agenda items were disclosed on Public Disclosure Platform and were published on our Company website. The annual report was made available for the review of the shareholders at the headquarters 15 days before the General Assembly and handed to the shareholders participating in the General Assembly and to the ones who made requests.

For the facilitation of physical attendance to General Assembly Meeting in 2017, transportation from central spots to our Akyurt facility was provided for our shareholders, and our shareholders who attended the General Assembly had a site visit.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

In the Ordinary General Assembly Meeting in 2017, the shareholders were informed regarding the presence of managing members, all the Board of Directors members and auditors at the meeting. No proposals were set forth by the shareholders during the meeting regarding the agenda. The shareholders exercised their rights to ask questions regarding the topics in the agenda and the answers to the questions took place in the General Assembly Meeting minutes. There are no questions which has not been answered in the Ordinary General Assembly Meeting and answered by the Investor Relations Department later on. Within the period, there have not been any transactions of which their resolutions were submitted to General Assembly because the confirmative vote of the majority of the independent board members are required where as they have voted negatively. The minutes of the General Assembly Meeting held in 2017 can be accessed from the website of our Company.

No Extraordinary General Assembly Meeting was held during the year 2017.

The shareholders were informed about donations and aids were made in 2016, with a separate agenda item at the 42<sup>nd</sup> Ordinary General Assembly Meeting.

## 2.4. Right to Vote and Minority Rights

In article 25 of the Articles of Association titled "Right to Vote", there is a provision stating that "the Shareholders and their representatives who are present at the Ordinary and Extraordinary General Assemblies shall have one right to vote for each share" and there is no privilege or no upper limit pertaining to the numbers of votes. The right to vote arises as soon as the share is acquired and there is no regulation setting forth that the vote shall be used when a certain time passes after the acquisition date of the share.

The regulations regarding the voting of the shareholders through their representatives are followed by; in the event of a legal representation, it is certified and the open proxy rule is applied.

Particular attention is paid in exercising the minority rights in our Company and the provisions of Turkish Code of Commerce and the relevant legislation regarding minority rights are applied as is. All shareholders are treated equally in our Company, including the minority and foreign shareholders.

There are no prevailing partners in our Company. In the Articles of Association, there is no provision with respect to the representation of the minority shares in the management and their accumulated casting of votes. Due to the voluntary implementation of this issue regarding the capital market legislation, provision with respect to the current General Assembly quorum is applied.

## 2.5. Dividend Rights

There are no privileges with respect to the participation in the profit gained by the Company. The dividend policy was revised in 2015 and was submitted to General Assembly meeting. The dividend policy published on our website is given below.

"The dividend amounts which shall be calculated considering the sustainable growth rate, market capitalization, net working capital requirements, dividend yield and cash flows, equity ratio, with the relevant legislation and the provisions of the articles of association over the distributable profit amount calculated taking the period profit as the basis which is shown on the financial statements of our Company prepared pursuant to the existing legal regulations (after the compulsory legal reserves are reserved and the taxes, funds and financial liabilities and losses of the previous year, if any, are deducted and the donations are added), the profit distribution proposal which shall be prepared by the Board of Directors in order for the shares which shall be issued by means of adding the cash or the dividend on the capital on the date(s) determined pursuant to the regulations of the Capital Markets Board to be distributed targeting at least 10% of net profit in cash in the defined amounts or as bonus shares or partly in cash, partly as bonus shares in defined amounts, shall be submitted to the approval of the General Assembly. Following the approval of the General Assembly, the determined dividends are distributed to the shareholders within the legal periods on the date determined by the General Assembly.

There is no privilege to participate to the profit of our Company. The dividends are distributed equally regardless of all the existing shares and their issue and acquiring dates.

In case of a revision made on the Dividend Policy, the resolution of Board of Directors regarding this revision and the reason for revision shall be publicly announced with respect to the legislation of Capital Markets Board."

As per the decision taken in the General Assembly pursuant to the provisions of the Articles of Association and to the Capital Market Law and other legal regulations in 2017 and within the legal periods, out of the profit gained from 2016 operations, the gross amount of TL 75.500.000 (7,55 Kurus TL per 1 TL of share, gross 7,55% over the capital) (net TL 64.175.000 - 3,6 Kurus TL per TL 1 of share, net 3,6% over the capital), TL 25.500.000 of which was distributed on 8 June 2017, TL 25.000.000 of which was distributed on 14 September 2017 and TL 25.000.000 of which was distributed on 14 December 2017 to our shareholders as cash dividend.

## 2.6. Transfer of Shares

The transfer of the nominated Group A shares representing majority part of the capital and which are not traded in Borsa İstanbul has been restricted with the provision of article 6 of the Articles of Association stating "Group A shares shall not be sold or transferred without the consent of the Board of Directors; in the event that these shares are transferred or sold to third parties partially or completely without the consent of the Board of Directors, the Board of Directors is entitled to abstain from recording this sale in the records without stating a reason".

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## CHAPTER III - PUBLIC DISCLOSURE AND TRANSPARENCY

### 3.1. Company Website and Its Content

In order to inform our shareholders in a timely and accurate manner within the context of public disclosure and transparency; the website of the Company at the address [www.aselsan.com.tr](http://www.aselsan.com.tr) in Turkish and English is actively used and the information published on the web are updated regularly.

The section “Investor Relations” is included on our website also comprising the issues listed in article 2.1.1 of the corporate governance principles of Communiqué on Corporate Governance numbered II-17.1 issued by CMB on 3 January 2014.

Under “Investor Relations” section;

#### 1. Corporate Governance

- 1.1 Shareholder Structure and Privileged Shares
- 1.2 Board of Directors
- 1.3 Key Resolutions of Board of Directors
- 1.4 Board Committees
- 1.5 Articles of Association
- 1.6 Company Profile and Trade Register Information
- 1.7 Policies
- 1.8 Ethical Principles
- 1.9 Corporate Governance Rating
- 1.10 General Assembly Meeting
- 1.11 Compliance with Corporate Governance Principles

#### 2. Sustainability

#### 3. Stock Info

- 3.1 Stock Info
- 3.2 Capital Increases
- 3.3 Analyst Coverage
- 3.4 Registration Statement and Public Offering Circular
- 3.5 Dividend Info

#### 4. Investor Calendar

#### 5. Annual Reports

#### 6. Financial Data

- 6.1 Financial Reports
- 6.2 Financial Highlights
- 6.3 Investor Presentations
- 6.4 Board of Directors Reports

#### 7. BİST Disclosures

#### 8. Frequently Asked Questions

#### 9. Contact

chapters exist. Necessary records and information are included under these titles. The information given on the Turkish website under “Investor Relations” section is included entirely on the English website.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 3.2. Annual Report

The Board of Directors prepare the annual report in detail regarding the operations of the Company and enable the public to reach complete and accurate information that can be comprehensive. The 2016 annual report of our Company was prepared as per the Turkish Code of Commerce numbered 6102, the Regulation Regarding the Determination of the Minimum Content of the Annual Reports of Companies issued by the Ministry of Customs and Trade, the Communiqué Regarding the Principles Related to Financial Reporting in the Capital Market and the Communiqué Regarding the Determination and Implementation of the Corporate Governance Principles, both issued by the CMB.

## CHAPTER IV - STAKEHOLDERS

### 4.1. Informing the Stakeholders

The information requests of stakeholders are keenly handled and attention is paid in responding these accurately and in an understandable manner. Our employees are informed with an employeehand book and informative presentations over the intranet; continuous access to data and support is provided through help desk application over the intranet. Nonetheless, general and personal data that can be necessary outside the company are provided to access over the internet.

As for our suppliers, in order to provide efficient information transfer, ASELSAN Supplier Portal started to be used and by this way, monitoring and reporting of the data process/content between ASELSAN and its suppliers has been provided within Enterprise Resource Planning (ERP) system. On the other hand, information is also shared by ASELSAN website, joint organizations/workshops and face to face meetings.

High quality standards and high technological solutions are offered for services or delivered products with regard to customer needs and expectations so as to meet customer satisfaction. Requirements of these quality standards are met and inspections, tests are applied through every process from projects' start till the delivery phases. Our all processes are administered by directives, quality plans, standards, audits and test instructions. Our processes have been certified by internationally accepted standards such as AS9100, ISO 9001, AQAP and CMMI so that our products and services are secured to protect quality standards. These certificates are renewed every year with the audits performed. Changes and improvements of international standards are being followed and our processes are developed accordingly. Customer satisfaction, which is the primary objective, is evaluated and reported for the access of related executives. In addition, results and trends are evaluated by the upper management in an annual basis and required recovery activities are planned.

It is possible to increase the quality of product and service correspondingly increasing customer satisfaction by supplying the materials used in products from the right and trusted sources. For this purpose, suppliers are subject to product and/or field of activity based selection and evaluation processes. These activities that target continuous improvement and high quality standards for suppliers are regarded as playing an important role in eventual product quality. In this direction, trainings, technology/equipment transfers, on the job trainings are for creating a high quality supplier portfolio. All information is shared within the context of confidentiality with our suppliers, who have the status of our business partners, and it is not permitted to share this information with unauthorized persons and third party firms. Through related directives, handling any kind of relations between ASELSAN and the suppliers within the scope of law and ethical values, minimizing the occurrence of unsuitable conditions for protecting parties and securing the justice and transparency.

ASELSAN Magazine, published every 4 months, provides information regarding the activities, technical issues and up-to-date social events. Hardcopies of ASELSAN Magazine is delivered to the end users of ASELSAN products, shareholders who participated to the General Assembly Meeting, company employees and other related parties and uploaded to the website right after it is published.

The Compensation Policy can be accessed from our Company's website under Corporate Governance title.

The members of the Board of Directors and the executives do not perform any activities that may cause shareholders to incur losses or may diminish the Company assets. The subject that no debt shall be given, no loans shall be granted or no pledges such as guarantees in favor thereof may be extended to any members of the Board of Directors or to any employees through the use of ASELSAN assets, is declared within the "ASELSAN Ethical Principles, Values and Conduct Rules Document", which is available on our Company's website.

The e-mail mechanism for the stakeholders to report their complaints regarding the transactions of the company which are against the legislation or deemed unethical, is stated in the ASELSAN Ethical Principles Policy, which was revised last on 7 January 2016. The policy has been published on the Turkish and English web site following the approval of the policy. Within the context of the policy, the Ethics Committee is informing the Corporate Governance Committee.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 4.2. Participation of Stakeholders in the Management

In the Articles of Association, there are no provisions regulating the participation of the stakeholders in the management. However, their participation to management shall be supported provided that it does not corrupt the Company activities.

The corporate governance structure of the Company gives the opportunity to all stakeholders including the employees and representatives to convey their worries with regard to transactions, which are inappropriate in terms of legality and ethics.

Our Board of Directors resolved on 30 September 2015 that; employee representatives shall attend the Board of Directors meetings at least once a year for submitting their opinions, suggestions and requests, in order to further comply with the article “Supporting the Participation of the Stakeholders in the Corporation’s Management” of Corporate Governance Principles of Capital Board, numbered II-17.1. Within this context, by the coordination of the Corporate Governance Committee, the employee representatives have attended to the Board of Directors meeting on 26 December 2017 and have submitted their opinions, suggestions and requests.

In ASELSAN, an Employee Representative is formed in order to increase the motivation and the sense of identity through providing the ASELSAN employees with the opportunities to,

- Submit their expectations and problems to upper management,
- Share the decisions related with themselves timely and accurately,
- To participate in the decision making processes
- Increase communication with upper management.

The resolution of our Board of Directors dated 30 September 2015 is included in the Employee Representative Directive, which became effective on 17 November 2015. As per the directive published, within the new structure;

- Electing of representatives shall be made by the involvement of all employees to the election process once in every two years via Intranet Portal,
- 1 personnel representative shall be representing every 100 employees,
- A fractional bottom-up structure shall be formed that includes sub-committees and a supreme board,
- Problems shall be first solved by the relevant units in-house, and only the ones that could not be solved shall be transferred to the Supreme Board,
- Filter mechanisms shall be developed for agenda setting,
- Representatives shall attend to the Board of Directors meeting at least once a year.

Coordination of representative meetings is held by the Corporate Services Vice Presidency, where the meeting chairman is the CEO. Nevertheless, Human Resources Management Vice Presidency is represented at least at the level of Director.

The elections for the Employee Representative was made in April 2016, and the tasks of the sub-committees and supreme boards are being performed in compliance with the related internal regulations.

## 4.3. Human Resources Policy

The human resources policy of our Company is to adopt an understanding which adds successful and dynamic talents to ASELSAN family required pursuant to the vision of ASELSAN, which contributes to the sustainable success of ASELSAN with employee oriented approaches, adds value and which takes side of its employee at all times.

Within this scope and pursuant to the vision, mission and the principles of the Company, regulations have been set out pertaining to the working conditions of the personnel, their qualifications, recruitment, promoting, remuneration, rewarding, dismissal, disciplinary treatments, rights, tasks and liabilities and other personal rights.

59% of our employees stand for the engineering group, 29% for the technician group, 7% for the administrative group, 3% for the office personnel and 2% of the worker group.

There were no complaints related to discrimination from the employees in 2017. Performance and rewarding policies are announced to all of our employees through Company directives.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 4.4. Ethical Rules and Social Responsibility

### 4.4.1. Ethical Rules

The ethical rules of our Company have been written and were published on our website. Furthermore, in order to integrate and develop the ethical rules with the implementations, an Ethical Committee was established to meet the evaluation, direction, consulting and recommendation requirements and create shared knowledge.

“ASELSAN Ethical Principles, Values and Conduct Rules” document is announced to all ASELSAN personnel with all its exhibits and the personnel makes a written commitment that s/he acknowledges the information and ethical values. When an amendment or an update is made on this document, the changes are made known to all the personnel and training programs about these changes are organized if deemed necessary.

Ethical Committee comprises of five members, the chairmanship of the Committee is executed by the Human Resources Management Vice President and the secretariat is handled by Human Resources Director.

Other members consist of the representatives of Legal Affairs Department, Central Procurement Department or Financial Management Vice Presidency, charged by the approval of the CEO, and and two personnel; one shall have at least 15 years, other shall have at least 5 years of ASELSAN experience among the Top 5 ranked nominees with the votes of ASELSAN personnel and assigned by the Board of Directors. If there are no changes in the organization, the Ethical Committee members serve at least for two years.

Ethical Committee meets once a month unless an application or disobedience is present. However, Committee, Board of Directors, Corporate Governance Committee, CEO or the Chairman of the Ethical Committee can call a meeting. Beyond evaluating applications, Ethical Committee represents reason and conscience of ASELSAN and works to increase the awareness about ethical values in ASELSAN family.

When there is an application, ethical committee conducts the required assessment and submit a report to the CEO. At the end of this investigation, necessary steps are taken in accordance with relative law and ASELSAN regulations and directives. The applications for last six months and assessment result is reported to Board of Directors each year within the months January and July.

In the year 2017, Disciplinary Procedures and Practices at ASELSAN were updated in order to create a harmonious and productive work environment and to be able to pursue our business targets as they should normally be. With the updated procedures, the operations and actions that require disciplinary action are defined; describing in detail how those disciplinary actions will be applied. These updates were announced to the employees through ASELSAN intranet system.

### 4.4.2. Social Responsibility

An independent British institution, Carbon Disclosure Project (CDP) which reports how the risks of climate changes are managed by the companies announced the 2017 results of the Turkey Carbon Transparency Project. ASELSAN is placed in the B list, among the firms that most successfully manage climate change risks through production process and has the highest gas emission performance on the outcome of the research conducted by evaluating big firms including firms listed on Borsa İstanbul.

In ASELSAN, where decreasing carbon emission is one of the strategic goals, carbon emission has been monitored since 2009. Also, ASELSAN is the first and only company that is ranked with the highest initial score among Defence Industry firms in Turkey by participating in CDP survey.

ASELSAN has decreased carbon emission significantly through its efforts, and continues its operations by increasing momentum in the fields of increasing energy efficiency in production, giving priority to production technologies that decrease carbon emission, switching to use of energy that does not cause carbon emission.

Having certifications for ISO 14001 Environmental and OHSAS 18001 Work Health and Safety Integrated Management System; we will proceed to take part in pioneer applications through actualization of national and international initiatives.

In November 2014, Borsa İstanbul (BIST) has launched Sustainability Index that display the performance of January-March 2014 time period for BIST-30 firms in the fields of financial, environmental, social issues and corporate governance. With respect to that, as of this date, ASELSAN started publishing sustainability reports. As a result of the evaluation of our Company on the ASELSAN Sustainability Report, published in Turkish and English for the first time before the Index assessments, ASELSAN was among the 15 firms that were approved to be included in BIST Sustainability Index. In November 2017, ASELSAN kept its place in the index as a consequence of the re-evaluation of ASELSAN Sustainability Report that was published in June, 2017.

Sustainability reports that are published on our website ([www.aselsan.com.tr](http://www.aselsan.com.tr)) include the details of sustainable applications in the fields of strategic governance, corporate governance, ethical principles, internal audit, bribery and corruption, risk management, communication with stakeholders, supply chain, information systems, facility management, employee development, human rights, occupational health and safety, environmental management.

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In the year 2017, our company supported the following events through sponsorship:

- Turkish Armed Forces Rehabilitation and Healthcare Center's Disability Sports Club's sport activities,
- The event "5,500 people, consisted of the Gendarmerie General Command personnel and the students of the Coast Guard Academy, reading the same page of the same book all at the very same time" organized by the Gendarmerie General Command on the occasion of 19 May the Commemoration of Atatürk, Youth and Sports Day, which also set a Guinness World Record,
- ROBOİK-Unmanned and Autonomous Land Vehicles Design Contest which was organized for the first time this year by the Undersecretariat for Defense Industries.

## CHAPTER V - BOARD OF DIRECTORS

### 5.1. Structure and Formation of the Board of Directors

In our Company, 3 members of 9 members of Board of Directors are independent members. The duties of Nomination Committee are executed by Corporate Governance Committee. The report regarding the evaluation of the list of Independent Members of Board of Directors prepared by Corporate Governance Committee on 28 December 2016 was presented to Board of Directors on 29 December 2016. Within the scope of CMB's Communiqué on Corporate Governance numbered II.17-1, CMB has not stated any adverse opinion on the nominees list and the evaluation report, which were submitted to CMB on 12 January 2017. The CV's and independence statements of the 9 nominees were announced to public on our website on 16 February 2017. As a result of the voting at the General Assembly Meeting on 15 March 2017, 3 nominees were elected as Independent Members of Board of Directors. There were no cases to eliminate the independency of the Independent Members of the Board of Directors in 2017.

The CVs of the Members of the Board of Directors are included in the 2016 annual report and the information with respect to their duty terms is provided in the table below.

Name Surname	Duty	Election Date
İbrahim ÖZKOL	Chairman / Independent Member	March 2017
Mustafa Murat ŞEKER	Vice Chairman / Managing Member	May 2013
Murat ÜÇÜNCÜ	Member / Managing Member	May 2013
Ziya AKBAŞ	Independent Member	March 2014
Ercümend ARVAS	Independent Member	March 2016
Bayram GENÇCAN	Member	March 2017
Haluk GÖRGÜN	Member	March 2017
Emin Sami ÖRGÜÇ	Member	March 2017
Ercan TOPACA	Member	March 2017
Faik EKEN	CEO	May 2014

In article 13 of the Articles of Association titled "Duties and Authorization of the Board of Directors", the duties and authorization of the Board of Directors have been defined. Besides, the Board of Directors Working Directive also describes the Duties and Authorization of the Board of Directors. With the article 14 of the Articles of Association titled "Assignment of the Authorization to the CEO", the assignment of the authorization of the Board of Directors to the CEO has been set out. The duties and authorization of the executives are described in the "Duties and Responsibilities Directive" formed within the Company.

The duties of the Members of the Board of Directors and of the CEO carried out outside the Company, information regarding the term of office and the statements of the board of members with respect to their independencies:

- There are no members of Board of Directors carrying out an executive duty.
- The statements of independence of the Independent Members of the Board of Directors have been provided at the annex of the Compliance Report.
- The Members of the Board of Directors fulfill their duties without any interest or benefit and pursuant; to the liabilities and authorizations undertaken by the Board of Directors and to the regulations of the Turkish Code of Commerce and CMB.
- Members of the Board of Directors, in accordance with the Working Directive of Board of Directors, are liable not to enter into any commercial treatments directly or indirectly with the Company that coincides with the Company objectives, on their behalf or on behalf of others without the consent of the General Assembly.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 5.2. Principles of Activity of the Board of Directors

Board of Directors carries out its duties and responsibilities determined with reference to TCC, Capital Market Law and Articles of Association. In this context, the basis of duties and operations are indicated in details in ASELSAN Board of Directors Working Directives.

The agenda of the Board of Directors meetings is formed with the proposals of the Members of the Board of Directors and the committees and the CEO, it is afterwards evaluated by the Board of Directors Chairman and finalized. The subjects emerged as urgent and which are considered worthwhile to discuss may be added to the agenda during the Board of Directors meeting.

As per article 10 of the Articles of Association, the Board of Directors assemble when required and at least once a month. The number of Board of Directors Meetings in 2017 was 50, where 34 of the decisions in the meetings are interim decisions. 90% of the Members of the Board of Directors attended 88% of the meetings.

The place, date, time and agenda of the next meeting is decided at the Board of Directors Meetings. Documents pertaining to the meeting agenda are sent to the members of Board of Directors at least 3 work days before the meeting by the Presidency.

The Members of the Board of Directors attend the meetings and fulfill their duties as per their authorization and responsibilities. The members who do not attend the meetings submit their excuses.

Board Office is established under Board of Directors in order to coordinate necessary issues in the name of the Board, particularly the relationships with the Presidency and TAFF, to execute planning and support the Board of Directors' operations.

All members have one right to vote, including the chairman. If the numbers of votes are equal, the vote of the chairman does not change the result. Abstaining is not possible, either rejection or acceptance is voted. The vote of the abstaining member is considered as a rejecting vote. The member casting a reject vote states the ground for this in the meeting minutes and undersigns it. According to the article 11 of the Articles of Association titled "Quorum of Meeting and Decision Making"; "The provisions of the TCC, Capital Market Law, regulations of the Capital Markets Board in connection with corporate governance and other relevant legislation are taken into account with respect to the meetings and decision making quorums of the Board of Directors as well as with respect to any Board of Directors members assuming duties and positions outside the Company. Any action and resolutions taken by the Board of Directors without complying with the Corporate Governance Principles, which are made mandatory as to be complied by the Capital Markets Board, are invalid and considered as in contrary to the Articles of Association". In the operation year 2017, there were no related party transactions or any other significant issue, which had to be submitted to the approval of the general assembly, since they were not approved by the Independent Members of the Board of Directors.

The signed decisions are made available to the follow up of the Members of the Board of Directors and Executive Committee Members in the electronic platform.

In accordance with the article 4.2.8 of Capital Markets Board Corporate Governance Communiqué; Executive Liability Insurance Policy was signed for Board of Directors members on 17 July 2017 with the total liability amount of USD 75.000.000,- which corresponds to more than 25% of the paid-in-capital of our Company, with a validity period of 1 year.

## 5.3. Number of Committees Formed in the Board of Directors with Their Structures and Independency

As per the title "Committees Formed in the Board of Directors" in the Communiqué Regarding Determination and Implementation of Corporate Governance Principles by the Capital Markets Board, our Company's Board of Directors, in the meeting dated 10 April 2012, formed an Audit Committee, Corporate Governance Committee and Early Detection and Management of Risk Committee and announced this to the public. There are no Nomination and Remuneration Committees within the Board of Directors and the duties of these are carried out by the Corporate Governance Committee.

The directives of Audit Committee, Corporate Governance Committee and Early Detection and Management of Risk Committee are made available at the website of our Company. The Independent Members of the Board of Directors have duties in more than one committee. This is because it is mandatory that all members of the Audit Committee and the chairman of the other committees should be Independent Members of the Board of Directors.

Boards of Directors have made the annual evaluation of the committees composed under its structure and the evaluation report is available in 2016 Annual Report.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## AUDIT COMMITTEE

### Committee Members (January - March 2017)

Ziya AKBAŞ:	Chairman / Independent Member of Board of Directors
Nazım ALTINTAŞ:	Member / Independent Member of Board of Directors
Ercümend ARVAS:	Member / Independent Member of Board of Directors

### Committee Members (April - December 2017)

Ziya AKBAŞ:	Chairman / Independent Member of Board of Directors
Ercümend ARVAS:	Member / Independent Member of Board of Directors

The main duties of the Audit Committee that were set out in the “ASELSAN Audit Committee Work Directives” regulating the working principles of Audit Committee are as follows;

- To enable the disclosure of the financial data of ASELSAN, to pursue the operation and efficiency of the accounting system, independent audit, internal audit and internal control system of the company,
- To assemble at least every 3 months, to share the meeting minutes with the Board of Directors

Meetings were held by Audit Committee on dates 20 February 2017, 8 May 2017, 21 August 2017 and 31 October 2017 regarding the financial statements with the participation of the relevant independent audit company in 2017.

In order to increase the efficiency of internal audit, attention was paid to strengthen the cooperation with Internal Audit Presidency and to the supervision of internal audit activities, direct and continuous communication was established between Audit Committee and Internal Audit Presidency. A dimension of this communication; Audit Committee-Internal Audit Presidency coordination meetings, were held eleven times on dates 20 January 2017, 10 February 2017, 21 March 2017, 10 April 2017, 15 May 2017, 12 June 2017, 18 July 2017, 14 August 2017, 18 September 2017, 4 December 2017 and 18 December 2017.

The Committee was active in two main topics in 2017.

### i. Independent Audit Activities and Works Regarding the Audited Financial Statements:

“Communiqué on Financial Reporting in Capital Markets” Serial: II, 14.1 regulated the preparation of financial reports and their basis, principles of presentation to the relevant parties. December 2016, March 2017, June 2017 and September 2017 financials and Board of Directors reports were prepared in accordance with the communiqué numbered II, 14.1, and submitted to Board of Directors by Audit Committee and presented to the public via Public Disclosure Platform.

The procurement process for independent audit services for the year 2016 as per the CMB’S communiqué numbered II-14:1, was handled by the Procurement Department and the purchasing decision that the service shall be provided by “AKİS Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.” (KPMG) was taken by Board of Directors. The resolution was submitted for approval on the General Assembly Meeting dated 15 March 2017 and was accepted.

### ii. Internal Audit Presidency:

Within the scope of the internal audit activities of the Company, the relations between the Internal Audit Presidency and the Board of Directors have been carried out through Audit Committee. A direct and continuous contact between Audit Committee and Internal Audit Presidency is present.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## CORPORATE GOVERNANCE COMMITTEE

### Committee Members (2017 January - March)

Ercümend ARVAS:	Chairman / Independent Member of the Board of Directors
Murat ÜÇÜNCÜ:	Member / Board of Directors Vice Chairman
Turan EROL:	Member / Member of the Board of Directors
Pınar ÇELEBİ:	Member / Investor Relations Manager

### Committee Members (2017 April- December)

Ercümend ARVAS:	Chairman / Independent Member of the Board of Directors
Haluk GÖRGÜN:	Member / Member of the Board of Directors
Emin Sami ÖRGÜÇ:	Member / Member of the Board of Directors
Pınar ÇELEBİ:	Member / Investor Relations Manager

The main duties of the Corporate Governance Committee were set out in the “ASELSAN Corporate Governance Committee Work Directives” as follows:

- To carry out studies for the implementation of Corporate Governance Principles in the Company,
- To observe whether the Corporate Governance Principles have been implemented or not and if not implemented to determine the grounds for this and the conflicts of interest arising due to not complying with these principles and to make proposals for improving the status,
- To monitor the activities of the Investor Relations Department.
- Corporate Governance Committee assembles every 3 months and in every situation when necessary. The meeting minutes are submitted to the Board of Directors.

The Corporate Governance Committee assembled eight times within the activity year 2017 on dates, 25 January 2017, 11 April 2017, 17 April 2017, 16 May 2017, 22 June 2017, 23 November 2017, 19 December 2017 and 26 December 2017. The meeting minutes of the Committee may be reached on our website. The committee was active in three respective tasks in 2017:

### i. Operations of Investor Relations Department

Investor Relations Department have attended all the meetings in 2017, performed secretariat procedures of the committee with regard to “ASELSAN Corporate Governance Committee Working Directive” and informed the committee periodically about the tasks carried by investor relations department.

In 2017, the subjects discussed and tasks carried by the Corporate Governance Committee within the context of the meetings made are given below:

- Independent Board Member election process,
- Preparation of ASELSAN 2016 Corporate Governance Compliance Report and the submission of the report to Board of Directors,
- Corporate Governance Committee Evaluation Report,
- Corporate Governance Rating,
- Preparation of ASELSAN Corporate Governance 2016 Report and the submission of the report to Board of Directors,
- Tasks carried for the revision of the score cards of Sector Presedencies and Vice Presedencies,
- BİST Sustainability Index, sustainability tasks performed in ASELSAN and the draft ASELSAN 2016 Sustainability Report,
- Discussing the revision proposal for Human Resources Directive,
- Discussing the results of the internal control processes and the action plan,
- Fluctuations observed in ASELSAN stock,
- Discussing Industry 4.0 issue,
- Discussing Project Management issue,
- Discussing the tasks carried out by the General Directorate within the context of ASELSAN’s export development strategies,

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

- Resolving on the Independent Board Member candidates to be submitted to the approval of the Board of Directors,
- The assignment to be made to UGES Sector Presidency,
- Investor Relations Department and its operations

## ii. Corporate Governance Rating

The evaluation of corporate governance rating performed by SAHA Corporate Governance and Credit Rating Services were concluded during the last quarter of 2017. According to the review, as a result of the enhancements made throughout 2017, the score of 12 December 2016, 9,15 out of 10, was revised as 9,20 out of 10 on 12 December 2017.

Our Company's share has been listed in the corporate governance index since the date 14 December 2012, which it first entered the index. Rating reports can be accessed on the company website.

## iii. Election of Independent Board Members

As given by Corporate Governance Principles, the responsibility of evaluating and reporting the nominations and their independency status is given to the Nomination Committee, in companies where this committee is not formed because of the structure of the Board of Directors, the responsibility is given to Corporate Governance Committee. Within this context, the evaluation of nominations which were made until 28 December 2016 was carried on by the Committee and the resulting nominee list was presented at the Board of Directors meeting on 28 December 2016.

CMB has not stated any opposing opinions regarding the nominees list and evaluation report which was submitted by the Board of Directors on 12 January 2017. The list was submitted to shareholders' voting on General Assembly Meeting on 15 March 2017 and as a result, Ziya AKBAŞ, Ercüment ARVAS, and İbrahim ÖZKOL were elected as independent members to serve for 1 year.

## EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE

ASELSAN Board of Directors established the "Early Detection and Management of Risk Committee" with the resolution dated 10 April 2012 and numbered 720/1. The Committee executes as per the directive numbered ASY-01-066.

### Committee Members (2017 January - March)

Ziya AKBAŞ:	Chairman / Independent Member of the Board of Directors
İsmail GÜMÜŞTEKİN:	Member / Member of the Board of Directors
Sedat NAZLIBİLEK:	Member / Member of the Board of Directors

### Committee Members (2016 April - December)

Ziya AKBAŞ:	Chairman / Independent Member of the Board of Directors
Bayram GENÇCAN:	Member / Member of the Board of Directors

In 2017 the Committee continued to identify the risks which prevent ASELSAN from reaching its goals; manage the risks in accordance with the company's risk-taking profile; report the risk activities; build risk aware decision mechanisms and internal control. Risks identified through risk management processes are prioritized depending on their probability and impact. It is ensured that important risks are monitored and reported. In this respect, in 2017 the Committee held 6 meetings at 16 January 2017, 27 March 2017, 22 May 2017, 24 July 2017, 22 September 2017 and 27 November 2017. Committee's activities are summarized below:

- "2016 Evaluation Report" was prepared and submitted to Board of Directors in January 2017.
- "Corporate Risk Evaluation Report" was prepared and submitted to Board of Directors in January 2017, March 2017, May 2017, July 2017, September 2017 and November 2017. In the reports;
  - Important risks of ASELSAN were evaluated and monitored. The risk classification, explanation, rating, strategy, owner/responsible, current control operations and relevant indicators were included in the report.
  - Warning levels of benchmarks for risk indicators were determined and the risk indicators which divert from the benchmark and can signal the poor performance of a goal during the reporting period were also reported.
- Risk management chapters in the annual report and the other reports set by the legal authorities were prepared.
- Special reports were prepared for specific risks related to recent incidents.

The secretariat formalities of the Committee were performed by Corporate Risk Management and Internal Control Department of Finance Directorate.

# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## 5.4. Risk Management and Internal Control Mechanism

Internal audit operations and corporate governance are facilitated via risk management and development of efficiency of internal control procedures in ASELSAN. The most important role of internal audit operations is assuring the Audit Committee and Board of Directors that the risks are being managed effectively. Annual audit plan and work programs are prepared on a risk basis and audit results are reported periodically to Audit Committee. Harmonization with legal and firm regulations, the status of application of ethical principles and the effectiveness of risk mitigation is evaluated by Internal Audit Department.

## 5.5. Strategic Objectives of the Company

The Board of Directors is the top level body to make strategic decisions and to execute and represent. As per the Articles of Association of the Company, the Board of Directors is responsible to determine the strategic plans and control their implementations.

Strategic management process is a part of Corporate Governance and is managed by the CEO in the name of Board of Directors, following the approval of the Strategic Plan, prepared with the coordination of Strategic Management Directorate. Reaching ASELSAN's long term goals and sustaining success can be achieved through environment friendly strategies.

ASELSAN's vision is to be a reliable, competitively preferred, environment-friendly and human conscious technology firm which preserves its sustainable growth in the global market via the values created for stakeholders, as well as serving its establishment purposes. Within this concept, annually updated 5 year Strategic Plan and Business Plans and 3 year budgets are prepared. With this methodology, short and middle term targets are specified by considering long term goals. The operations to be carried out for these targets are executed by Sectors Presidencies/Vice Presidencies and performance evaluations are made based on Balanced Scorecard method, which is widely used in the world.

## 5.6. Financial Rights

Remuneration procedures for Board of Directors Members and Managers with Executive Responsibility, which are set in written form in accordance with the Corporate Governance Principles, are published on our Company's website.

The remuneration and all other benefits provided to board members are explained on an individual basis in the 2016 annual report.

Monthly remunerations provided to our Members of the Board of Directors are determined by the General Assembly and no other benefits are granted apart from the monthly remuneration. Pursuant to the resolution taken at the 42<sup>nd</sup> Ordinary General Assembly held on 15 March 2017, the Members of the Board of Directors are paid TL 3.000,- per month. As for the determination of the financial rights of the board members, no reward system is applied to reflect the Company performance and which is based on the performance of the Members of the Board of Directors.



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Statement of Independence

TO THE BOARD OF DIRECTORS OF ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.

ANKARA

Date: 30 November 2016

With respect to the corporate governance principle numbered 4.3.6 of the Capital Markets Board's Communiqué on Corporate Governance numbered II-17.1, in order for me to be selected as an Independent Board Member of ASELSAN Elektronik Sanayi ve Ticaret (Company), I hereby agree, represent and undertake that I;

- a) do not have a relationship in terms of employment at an administrative level to take upon significant duty and responsibilities within the last five years, do not own more than 5% of the capital or voting rights or privileged shares either jointly or solely or do not have established a significant commercial relation between the corporation, companies on which the corporation hold control of management or significant effect and shareholders who hold control of management of the corporation or have significant effect in the corporation and legal entities on which these shareholders hold control of management and myself, my spouse and my relatives by blood or marriage up to second degree,
- b) have not been a shareholder (5% and more), an employee at an administrative level to take upon significant duty and responsibilities or member of board of directors within the last five years in companies that the corporation purchases or sells goods or service at a significant level within the framework of the contracts executed, especially on audit (including tax audit, statutory audit, internal audit), rating and consulting of the corporation, at the time period when the corporation purchases or sells services or goods,
- c) have professional education, knowledge and experience in order to duly fulfill the duties assigned for being an independent board member,
- d) will not be serving as a full time employee at public authorities and institutions after being elected, except being an academic member at university provided that is in compliance with the relevant legislation,
- e) am residing in Turkey in accordance with the Income Tax Law (I.T.L) dated 31.12.1960 and numbered 193,
- f) am capable to contribute positively to the operations of the corporation, to maintain my objectivity in conflicts of interests between the corporation and the shareholders, have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,
- g) am able to allocate time for the corporation's business in order to follow up the activities of the corporation and duly fulfill the allocated duties,
- h) have not conducted membership of board of directors more than a term of six years in the last ten years,
- i) am not the independent member of the board of directors in more than three of the corporations as such; the corporation or the controlling shareholders of the corporation who hold the control of management corporations and in more than five corporations in total which are admitted to the trading on the exchange,
- j) have not been registered and announced as a board member representing a legal entity.

I hereby submit this to the knowledge of the Board of Directors, shareholders and all relevant parties.

Sincerely yours,

Ziya AKBAŞ



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Statement of Independence

TO THE BOARD OF DIRECTORS OF ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.

ANKARA

Date: 02 December 2016

With respect to the corporate governance principle numbered 4.3.6 of the Capital Markets Board's Communiqué on Corporate Governance numbered II-17.1, in order for me to be selected as an Independent Board Member of ASELSAN Elektronik Sanayi ve Ticaret (Company), I hereby agree, represent and undertake that I;

- a) do not have a relationship in terms of employment at an administrative level to take upon significant duty and responsibilities within the last five years, do not own more than 5% of the capital or voting rights or privileged shares either jointly or solely or do not have established a significant commercial relation between the corporation, companies on which the corporation hold control of management or significant effect and shareholders who hold control of management of the corporation or have significant effect in the corporation and legal entities on which these shareholders hold control of management and myself, my spouse and my relatives by blood or marriage up to second degree,
- b) have not been a shareholder (5% and more), an employee at an administrative level to take upon significant duty and responsibilities or member of board of directors within the last five years in companies that the corporation purchases or sells goods or service at a significant level within the framework of the contracts executed, especially on audit (including tax audit, statutory audit, internal audit), rating and consulting of the corporation, at the time period when the corporation purchases or sells services or goods,
- c) have professional education, knowledge and experience in order to duly fulfill the duties assigned for being an independent board member,
- d) will not be serving as a full time employee at public authorities and institutions after being elected, except being an academic member at university provided that is in compliance with the relevant legislation,
- e) am residing in Turkey in accordance with the Income Tax Law (I.T.L) dated 31.12.1960 and numbered 193,
- f) am capable to contribute positively to the operations of the corporation, to maintain my objectivity in conflicts of interests between the corporation and the shareholders, have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,
- g) am able to allocate time for the corporation's business in order to follow up the activities of the corporation and duly fulfill the allocated duties,
- h) have not conducted membership of board of directors more than a term of six years in the last ten years,
- i) am not the independent member of the board of directors in more than three of the corporations as such; the corporation or the controlling shareholders of the corporation who hold the control of management corporations and in more than five corporations in total which are admitted to the trading on the exchange,
- j) have not been registered and announced as a board member representing a legal entity.

I hereby submit this to the knowledge of the Board of Directors, shareholders and all relevant parties.

Sincerely yours,

Ercüment ARVAS



# Report of the Board of Directors for the Period Between 1 January - 31 December 2017

## Statement of Independence

TO THE BOARD OF DIRECTORS OF ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.

ANKARA

Date: 16 December 2016

With respect to the corporate governance principle numbered 4.3.6 of the Capital Markets Board's Communiqué on Corporate Governance numbered II-17.1, in order for me to be selected as an Independent Board Member of ASELSAN Elektronik Sanayi ve Ticaret (Company), I hereby agree, represent and undertake that I;

a) do not have a relationship in terms of employment at an administrative level to take upon significant duty and responsibilities within the last five years, do not own more than 5% of the capital or voting rights or privileged shares either jointly or solely or do not have established a significant commercial relation between the corporation, companies on which the corporation hold control of management or significant effect and shareholders who hold control of management of the corporation or have significant effect in the corporation and legal entities on which these shareholders hold control of management and myself, my spouse and my relatives by blood or marriage up to second degree,

b) have not been a shareholder (5% and more), an employee at an administrative level to take upon significant duty and responsibilities or member of board of directors within the last five years in companies that the corporation purchases or sells goods or service at a significant level within the framework of the contracts executed, especially on audit (including tax audit, statutory audit, internal audit), rating and consulting of the corporation, at the time period when the corporation purchases or sells services or goods,

c) have professional education, knowledge and experience in order to duly fulfill the duties assigned for being an independent board member,

d) will not be serving as a full time employee at public authorities and institutions after being elected, except being an academic member at university provided that is in compliance with the relevant legislation,

e) am residing in Turkey in accordance with the Income Tax Law (I.T.L) dated 31.12.1960 and numbered 193,

f) am capable to contribute positively to the operations of the corporation, to maintain my objectivity in conflicts of interests between the corporation and the shareholders, have strong ethical standards, professional reputation and experience to freely take decisions by considering the rights of the stakeholders,

g) am able to allocate time for the corporation's business in order to follow up the activities of the corporation and duly fulfill the allocated duties,

h) have not conducted membership of board of directors more than a term of six years in the last ten years,

i) am not the independent member of the board of directors in more than three of the corporations as such; the corporation or the controlling shareholders of the corporation who hold the control of management corporations and in more than five corporations in total which are admitted to the trading on the exchange,

j) have not been registered and announced as a board member representing a legal entity.

I hereby submit this to the knowledge of the Board of Directors, shareholders and all relevant parties.

Sincerely yours

İbrahim ÖZKOL



## Report of the Board of Directors for the Period Between 1 January - 31 December 2017

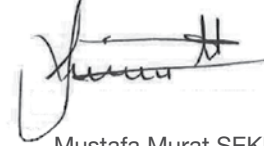
### SIGNATURE SECTION OF ANNUAL REPORT OF THE BOARD OF DIRECTORS FOR THE PERIOD BETWEEN 1 JANUARY - 31 DECEMBER 2017



İbrahim ÖZKOL  
Chairman of the Board of  
Directors



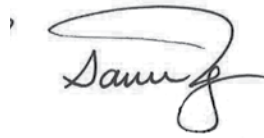
Ercüment ARVAS  
Member of the Board of  
Directors



Mustafa Murat ŞEKER  
Vice Chairman of the Board of  
Directors



Ziya AKBAŞ  
Member of the Board of  
Directors



Emin Sami ÖRGÜÇ  
Member of the Board of  
Directors



Bayram GENÇCAN  
Member of the Board of Directors



Haluk GÖRGÜN  
Member of the Board of  
Directors



Murat ÜÇÜNCÜ  
Member of the Board of  
Directors



Ercan TOPACA  
Member of the Board of Directors



# INDEPENDENT AUDITOR'S REPORT FOR THE ANNUAL REPORT OF THE BOARD OF DIRECTORS



KPMG Bağımsız Denetim ve  
Serbest Muhasebeci Mali Müşavirlik A.Ş.  
The Paragon Tower, Kızılırmak Mah.  
Ufuk Üniversitesi Cad. No:2 Kat:13  
Çukurambar 06550 Ankara  
Tel +90 312 491 7231  
Fax +90 312 491 7131  
www.kpmg.com.tr

## CONVENIENCE TRANSLATION INTO ENGLISH OF THE INDEPENDENT AUDITOR'S REPORT RELATED TO ANNUAL REPORT ORIGINALLY ISSUED IN TURKISH

To the Board of Directors and Shareholders of Aselsan Elektronik Sanayi ve Ticaret  
Anonim Şirketi

### Report on the Audit of Board of Directors' Annual Report Based on Standards on Auditing

#### Opinion

We have audited the accompanying annual report of Aselsan Elektronik Sanayi ve  
Ticaret Anonim Şirketi (the "The Company"), for the period 1 January 2017 to 31  
December 2017.

In our opinion, the financial information included in the annual report and the  
analysis of the Board of Directors about the financial position of the Company are  
consistent, in all material respects, with the audited complete set of financial  
statements and information obtained during the audit and provides a fair  
presentation.

#### Basis for Opinion

We conducted our audit in accordance with the standards on auditing issued by  
the Capital Markets Board of Turkey and Standards on Auditing which is a  
component of the Turkish Auditing Standards ("TAS") issued by the Public  
Oversight, Accounting and Auditing Standards Authority ("POA") ("Standards on  
Auditing issued by POA"). Our responsibilities under those standards are further  
described in the Auditor's Responsibilities for the Annual Report section of our  
report. We declare that we are independent of the Company in accordance with  
the Code of Ethics for Auditors issued by POA (POA's Code of Ethics) and the  
ethical requirements in the regulations issued by POA that are relevant to audit of  
financial statements, and we have fulfilled our other ethical responsibilities in  
accordance with the POA's Code of Ethics and regulations. We believe that the  
audit evidence we have obtained is sufficient and appropriate to provide a basis  
for our opinion.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.,  
a Turkish corporation and a member firm of the KPMG network of independent  
member firms affiliated with KPMG International Cooperative, a Swiss entity.

# INDEPENDENT AUDITOR'S REPORT FOR THE ANNUAL REPORT OF THE BOARD OF DIRECTORS



## Auditor's Opinion on Complete Set of Financial Statements

We have expressed an unqualified opinion on the complete set of financial statements of the Company for the period 1 January 2017 to 31 December 2017 on 20 February 2018.

## Board of Directors' Responsibility for the Annual Report

In accordance with the Articles 514 and 516 of the Turkish Commercial Code Numbered. 6102 ("TCC") and Regulation on the Principles and Procedures Concerning the Preparation of and Publishing Annual Reports by the Company "Regulation" published in the Official Journal dated 1 November 2006 and No. 26333, the Company's management is responsible for the following regarding the annual report:

- a) The Company's management prepares its annual report within the first three months following the date of statement of financial position and submits it to the general meeting.
- b) The Company's management prepares its annual report in such a way that it presents accurately, completely, directly, true and fairly the flow of annual operations and financial position of the Company. In this report, the financial position of the Company is assessed in accordance with the Company's financial statements. The annual report shall also clearly state the details about the Company's development and risks that might be encountered. The assessment of the board of directors on these matters is included in the report.
- c) The annual report also includes:
  - Significant events after the reporting period,
  - The Company's research and development activities.
  - Employee benefits such as wages, premiums and bonuses paid to board members and key management personnel, appropriations, travel, accommodation and representation expenses, cash and cash facilities, insurance and similar guarantees.

When preparing the annual report, the board of directors also consider the related regulations issued by the Ministry of Customs and Trade and related institutions.

## Auditor's Responsibility for the Audit of the Annual Report

Our objective is to express an opinion on whether the financial information included in the annual report and analysis of the Board of Directors in relation to the financial position of the Company are consistent with the audited financial statements of the Company and the information obtained during the audit and give a true and fair view and form a report that include this opinion in accordance with the TCC and the Regulation.

## INDEPENDENT AUDITOR'S REPORT FOR THE ANNUAL REPORT OF THE BOARD OF DIRECTORS



We conducted our audit in accordance with Standards on Auditing issued by POA. Those standards are required that compliance with ethical requirements and planning of audit to obtain reasonable assurance on whether the financial information included in the annual report and analysis of the Board of Directors for the financial position of the Company are consistent with the financial statements and the information obtained during the audit and provides a fair presentation.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik Anonim Şirketi  
A member firm of KPMG International Cooperative



Hakkı Özgür Sivaci  
Partner  
20 February 2018  
Ankara, Turkey

## STATEMENT OF RESPONSIBILITY

TO THE PRESIDENCY OF

BORSA ISTANBUL

**Date:** 20/02/2018

**No:** AS011-2018-0002

ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.

BOARD OF DIRECTORS MEETING ON APPROVAL OF FINANCIAL TABLES AND ANNUAL REPORTS

DATE OF RESOLUTION: 20/02/2018

RESOLUTION NUMBER: 975

STATEMENT OF RESPONSIBILITY AS PER SECTION TWO, ARTICLE 9 OF THE CAPITAL MARKETS BOARD COMMUNIQUE SERIAL NUMBERED II, NUMBERED 14.1

We hereby declare that;

a) We have examined the consolidated balance sheet dated 31 December 2016 and comparative consolidated balance sheet dated 31 December 2017, consolidated income statement issued for the period 1 January 2016 - 31 December 2016 and comparative consolidated income statement issued for the period 1 January 2017 - 31 December 2017, consolidated additional financial tables, all audited independently, notes dated 31 December 2017 and annual report of the Board of Directors issued for the period ending on 31 December 2017,

b) As per the information we obtained in line with our duties and responsibilities at the company, the financial tables and annual report of the Board of Directors do not include any comments which materially misrepresent the facts and any missing data which might be misleading as of the announcement date,

c) As per the information we obtained in line with our duties and responsibilities at the Company, the consolidated financial statements prepared in accordance with the CMB Communiqué Serial II, No:14.1, accurately represents the assets, liabilities, financial position and profit or loss informations of the Company and the companies in the scope of consolidation; the annual report accurately represents the development and performance of the business, the financial position of the Company and the companies in the scope of consolidation and the significant risks and uncertainties which may company faces.

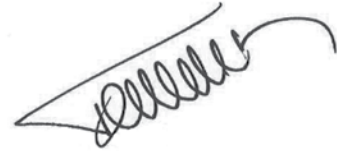
Regards,



**Ziya AKBAŞ**  
Audit Committee Chairman



**Prof. Dr. Ercüment ARVAS**  
Audit Committee Member



**Okan TURAN**  
Chief Financial Officer Vice President



## ASELSAN BOARD of DIRECTORS

### ASSESSMENT REPORT REGARDING COMMITTEE ACTIVITIES IN 2017

In accordance with the title “Committees Formed within the Structure of Board of Directors” of Capital Markets Board’s (CMB) “Communiqué on Determination and Application of Corporate Governance Principles”; Audit Committee, Corporate Governance Committee and Early Detection and Management of Risk Committee were formed and disclosed to public in our Company’s Board of Directors meeting held on 15.03.2017. There are no Nomination and Remuneration Committees within the formation of Board of Directors and in accordance with the Communiqué the duties of these are carried out by the Corporate Governance Committee.

At our Company’s Board of Directors meeting held on 15.03.2017 following the Ordinary General Assembly Meeting; in accordance with the Communiqué of CMB it was resolved that,

- Independent Member of Board of Directors Ziya AKBAŞ shall be assigned as the chairman and Independent Member of Board of Directors Ercüment ARVAS shall be assigned as member of the Audit Committee,
- Independent Member of Board of Directors Ercüment ARVAS shall be assigned as the chairman and Haluk GÖRGÜN, Emin Sami ÖRGÜÇ and pursuant to Capital Markets Board’s Communiqué on Corporate Governance numbered II-17.1, Investor Relations Manager Pınar ÇELEBİ shall be assigned as the members of Corporate Governance Committee,
- Independent Member of Board of Directors Ziya AKBAŞ shall be assigned as the chairman and Bayram GENÇCAN shall be assigned as the member of the Early Detection and Management of Risk Committee.

While resolving on the forming of committees, Board of Directors paid attention for the members of the Audit Committee; the chairmen of Corporate Governance Committee and Early Detection and Management of Risk Committee to be chosen from the independent members of the Board of Directors and Investor Relations Department executive is a member of the Corporate Governance Committee within the framework of Capital Markets Board regulation.

The work directives, which regulate the field of activities and working principles of the committees, are approved by the Board of Directors and are submitted to public information in our Company website.

In 2017, each Board of Directors Committee fulfilled its duties and responsibilities and worked efficiently, with regard to Corporate Governance Principles and their own work directives.

Audit Committee assembled four times with the participation of authorities from the financial table related audit company within the year 2016 on dates 20.02.2017, 08.05.2017, 21.08.2017 and 31.10.2017. The issues submitted to the information and assessment of Audit Committee and the tasks carried out within the scope of the meetings held, are summarized below:

- The discussion of financial tables dated 31.12.2016, 31.03.2017, 30.06.2017 and 30.09.2017 and their submission to Board of Directors.
- The discussion of 2016 dividend distribution proposal.
- Assessments regarding the election of the independent audit company which will carry the audit task in year 2017 and its submission to Board of Directors.

In order to maintain the efficiency of internal audit, coordination meetings were held with the Internal Audit Presidency to strengthen the communication and establish direct and continuous communication between Audit Committee and Internal Audit Presidency. Audit Committee-Internal Audit Presidency coordination meetings are the most important factor in communicating between Audit Committee and Internal Audit Presidency and in this direction, eleven meetings were conducted on dates 20.01.2017, 10.02.2017, 21.03.2017, 10.04.2017, 15.05.2017, 12.06.2017, 18.07.2017, 14.08.2017, 18.09.2017, 04.12.2017 and 18.12.2017 within the year 2017.

## ASELSAN BOARD of DIRECTORS

### ASSESSMENT REPORT REGARDING COMMITTEE ACTIVITIES IN 2017

Corporate Governance Committee assembled eight times within the year 2017 on dates 25.01.2017, 11.04.2017, 17.04.2017, 16.05.2017, 22.06.2017, 23.11.2017, 19.12.2017 and 26.12.2017. The issues submitted to the information and assessment of Corporate Governance Committee and the tasks carried out within the scope of the meetings held, are summarized below:

- Independent Board Member election process,
- ASELSAN 2016 Compliance with the Corporate Governance Principles Report
- Corporate Governance Committee Evaluation Report,
- Corporate Governance Rating,
- Corporate Governance Committee 2016 Report,
- Tasks carried for the revision of ASELSAN score cards,
- BİST Sustainability Index and sustainability tasks performed in ASELSAN,
- The change offer for the Human Resources Administration,
- The results of the internal control processes and the action plan,
- Fluctuations in ASELSAN stocks,
- Industry 4.0 issue,
- Project Management issue,
- ASELSAN's export development strategies' carried out by the General Directorate
- Independent Board Member candidates to be submitted to the approval of the Board of Directors,
- The assignment to be made in person with the UGES Sector Presidency,
- Investor Relations Department and its operations

Corporate Governance Committee, which was formed in order to monitor our Company's compliance to Corporate Governance Principles, to conduct studies about the enhancement of compliance and to propose suggestions to the Board of Directors; have detected whether Corporate Governance Principles are applied in our Company or not, and if not, the reason for it along with the conflicts occurring because of not complying fully to these principles; have submitted proposals for improvement of Corporate Governance practices to the Board of Directors and monitored the activities of Investor Relations Department.

Early Detection and Management Risk of Committee has the duties of identifying and assessing the risks that may affect ASELSAN from reaching its goals; managing these risks in conformity with our company's risk taking profile, reporting them, include them in the decision mechanisms and in this direction, auditing and executing the activities for establishing internal control systems. For this reason, Early Detection and Management of Risk Committee assembled six times within the year 2017 on dates 16.01.2017, 27.03.2017, 22.05.2017, 24.07.2017, 22.09.2017 and 27.11.2017. The tasks carried out by Early Detection and Management of Risk Committee and assessment of Early Detection and Management of Risk Committee are summarized below:

- "2016 Evaluation Report" was prepared and submitted to Board of Directors in January 2017.
- "Corporate Risk Evaluation Report" was prepared and submitted to Board of Directors in January 2017, March 2017, May 2017, July 2017, September 2017 and November 2017. In the reports;
  - Important risks of ASELSAN were evaluated and monitored. The risk classification, explanation, rating, strategy, owner/responsible, current control operations and relevant indicators were included in the report.
  - Warning levels of benchmarks for risk indicators were determined and the risk indicators which divert from the benchmark and can signal the poor performance of a goal during the reporting period were also reported.
- Risk management chapters in the annual report and the other reports set by the legal authorities were prepared.
- Special reports were prepared for specific risks related to recent incidents.

## AUDIT COMMITTEE WORK DIRECTIVES

### PURPOSE

The purpose of These Directives is to determine duties, authorities, responsibilities and work principles of the Audit Committee.

### SCOPE

These Directives cover the works and activities to be performed by the Audit Committee as per the related regulations.

### DEFINITIONS

**3.1 Independent Auditing Firm (IAF):** Firms meeting the requirements of the Capital Markets Board Communiqué and granted with the authority of independent audit on the capital market as per Article 22, 4/c of the Act.

**3.2 Auditor:** Auditor titles of any seniority and rank assigned to make audits by the Independent Auditing Firms.

**3.3 Audit Committee:** Committee appointed among the company's Board of Directors as per Capital Markets Board Communiqué Serial numbered X, numbered 22.

**3.4 Audit Committee Secretariat:** ASELSAN personnel arranging operations and meetings of Audit Committee, archiving correspondences and coordinating communication between the members.

**3.5 Financial Tables:** Balance sheets and incomes statements issued as interim and annual documents, including the footnotes, and tables enclosed to such documents.

**3.6 Financial Reports:** Reports including financial tables, Board of Directors activity reports and states of responsibility.

**3.7 Internal Auditor:** Personnel assigned for internal auditing activities.

**3.8 Internal Audit Department (IAD):** ASELSAN Department in charge of internal audit activities.

**3.9 Executives:** Persons having titles such as under Financial Management Vice Presidency, Vice President, Director and Managers that are authorized to represent and bind the company.

**3.10 Stakeholders:** In achieving the objectives of the Company or with an interest in the activities of employees, creditors, customers, suppliers, various non-governmental organizations as well as individuals, institutions or interest groups.

### RELATED REFERENCE DOCUMENTS

**4.1** Capital Markets Board Communiqué on Independent Audit on Capital Market dated 12.06.2006, Serial numbered X and numbered 22.

**4.2** Capital Markets Board Communiqué on Determination and Practice of Corporate Governance Principles dated 03.01.2014, Serial numbered II and numbered 17.

**4.3 ASELSAN Board of Directors Work Directives numbered ASY-01-060.**

**4.4** Turkish Commercial Code (TCC).

### DUTIES AND RESPONSIBILITIES

#### 5.1. BOARD OF DIRECTORS' DUTIES AND RESPONSIBILITIES REGARDING THE AUDIT COMMITTEE

**5.1.1.** Appointing Audit Committee members,

**5.1.2.** Authorizing Committee Members,

**5.1.3.** Making separate Board of Directors Resolution for approving interim and annual financial tables and reports evaluated by the Committee and submitted to the Board of Directors,

**5.1.4.** Taking necessary actions for facilitating operations of Audit Committee members.

#### 5.2. DUTIES, AUTHORITIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE

##### 5.2.1. GENERAL DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE

**5.2.1.1.** The Audit Committee shall ensure; company's accounting system, public disclosure of financial information, independent audit of the Company's internal control and makes supervision of the operation and effectiveness of the internal control system. Selection of independent audit company, prepared independent audit contracts and the initiation of the audit process and the independent auditors' work in each stage is carried out under the supervision of Audit Committee.

**5.2.1.2.** The Audit Committee notify, their duties and responsibilities identified in the field and their evaluations and recommendations on the subject immediately to the Board of Directors.

## AUDIT COMMITTEE WORK DIRECTIVES

**5.2.1.3.** The Audit Committee's duties include reviewing, settling the complaints forwarded to the Company about ASELSAN's accounting, internal audit system and independent audit; determining the methods and criteria to be practiced on assessing company personnel's statements on company's accounting and independent audit as per the confidentiality principles are determined by Audit Committee.

**5.2.1.4.** The Audit Committee might seek assistance of independent consultants on matters required for its operations provided that the costs shall be covered by ASELSAN. But in this case the person who received services / organizations with information about these people / organizations of any relationship with the company on the issue of whether information is given in the annual report.

**5.2.1.5.** The duties and responsibilities of the Audit Committee shall not relive Board of Directors from its responsibilities imposed by the Turkish Commercial Code.

### 5.2.2. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING INDEPENDENT AUDIT OF ASELSAN

**5.2.2.1.** The Audit Committee shall determine the services to be provided by the Independent Auditing Firm and services and submit to the Board of Directors approval.

**5.2.2.2.** It shall ensure signing a contract with IAF.

**5.2.2.3.** It shall monitor compliance with contract provisions during IAF operations.

**5.2.2.4.** It shall always be in contact with the independent auditor for monitoring any incidents having an impact on the independency or objectivity of the independent auditor and shall ensure elimination of such incidents, if any, and efficient performance of the auditor.

**5.2.2.5.** It shall evaluate the outcomes of audits performed by IAF and financial tables at the joint meetings to be scheduled.

**5.2.2.6.** It shall evaluate the important findings received from IAF about ASELSAN accounting policy and practices and the auditor's suggestions.

**5.2.2.7.** It shall obtain the correspondences made between IAF and ASELSAN Management from the Firm.

**5.2.2.8.** It shall ensure that Independent Audit activities are included on the Board of Directors agenda minimum every 3 months for the purpose of determining efficiency of IAF operations.

**5.2.2.9.** IAF shall immediately inform the Audit Committee in written about important issues related to ASELSAN's accounting policy and practices, alternative implementation and public disclosure options from Public Oversight Accounting and Auditing Standards Authority as per the firm's accounting standards and accounting principles previously declared to the Company management and possible outcomes, practice suggestions as well as important correspondences made with the Company management.

### 5.2.3. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING THE FINANCIAL REPORTS

**5.2.3.1.** The Audit Committee shall consult the company's authorized executives and IAF about interim and annual financial reports to be disclosed to the public in terms of compliance to the Company's accounting principles and to the actual figures and shall inform the Board of Directors in written with its own evaluation.

**5.2.3.2.** It shall sign the interim and annual financial tables, activity reports controlled and undersigned by the ASELSAN's authorized executives as well as the statement of responsibility enclosed as Annex-A quarterly and ensure public disclosure of these.

**5.2.3.3.** Financial Reports approved by the Audit Committee and Board of Directors shall be disclosed to the public on the Public Disclosure Platform and Company's website.

### 5.2.4. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO INTERNAL CONTROLS

**5.2.4.1** It shall monitor efficiency and adequacy of the internal control system adopted by the company and its subsidiaries and ensures its acknowledgement by the personnel and support of the management.

**5.2.4.2.** It shall evaluate auditor and internal auditor suggestions related to internal control and whether or not the necessary ones are applied.

**5.2.4.3.** It shall monitor the process of forming a mechanism for reviewing and settling complaints received from Stakeholders related to company transactions, which violate the regulation and are unethical, and its operations as per the confidentiality principle.



## AUDIT COMMITTEE WORK DIRECTIVES

### 5.2.5. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO THE INTERNAL AUDITS

**5.2.5.1.** It shall review efficiency of IAD directives, structure and activities and ensure settlement of particulars limiting the internal audit operations.

**5.2.5.2.** It shall monitor the coordination and communication between the IAD and Company's other departments, subsidiaries and independent audits for ensuring smooth processes.

### 5.2.4. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO INTERNAL CONTROLS

**5.2.4.1** It shall monitor efficiency and adequacy of the internal control system adopted by the company and its subsidiaries and ensures its acknowledgement by the personnel and support of the management.

**5.2.4.2.** It shall evaluate auditor and internal auditor suggestions related to internal control and whether or not the necessary ones are applied.

**5.2.4.3.** It shall monitor the process of forming a mechanism for reviewing and settling complaints received from Stakeholders related to company transactions, which violate the regulation and are unethical, and its operations as per the confidentiality principle.

### 5.2.5. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO THE INTERNAL AUDITS

**5.2.5.1.** It shall review efficiency of IAD directives, structure and activities and ensure settlement of particulars limiting the internal audit operations.

**5.2.5.2.** It shall monitor the coordination and communication between the IAD and Company's other departments, subsidiaries and independent audits for ensuring smooth processes.

**5.2.5.3** It shall evaluate the audit plans and internal audit reports issued by IAD.

### 5.3. DUTIES AND RESPONSIBILITIES OF AUDIT COMMITTEE SECRETARIAT

**5.3.1.** It shall provide communication between the members, prepare committee meetings, keep meeting minutes and duly archive correspondences.

**5.3.2.** It shall plan, realize and follow up formalities before, during and after the Committee meetings in order to ensure utmost efficiency.

**5.3.3.** It shall ensure timely communication all of kinds of information to the committee members.

**5.3.4.** It shall always keep the records available to the members.

### 5.2.4. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO INTERNAL CONTROLS

**5.2.4.1** It shall monitor efficiency and adequacy of the internal control system adopted by the company and its subsidiaries and ensures its acknowledgement by the personnel and support of the management.

**5.2.4.2.** It shall evaluate auditor and internal auditor suggestions related to internal control and whether or not the necessary ones are applied.

**5.2.4.3.** It shall monitor the process of forming a mechanism for reviewing and settling complaints received from Stakeholders related to company transactions, which violate the regulation and are unethical, and its operations as per the confidentiality principle.

## AUDIT COMMITTEE WORK DIRECTIVES

### 5.2.5. DUTIES AND RESPONSIBILITIES OF THE AUDIT COMMITTEE REGARDING TO THE INTERNAL AUDITS

**5.2.5.1.** It shall review efficiency of IAD directives, structure and activities and ensure settlement of particulars limiting the internal audit operations.

**5.2.5.2.** It shall monitor the coordination and communication between the IAD and Company's other departments, subsidiaries and independent audits for ensuring smooth processes.

**5.2.5.3** It shall evaluate the audit plans and internal audit reports issued by IAD.

### 5.3. DUTIES AND RESPONSIBILITIES OF AUDIT COMMITTEE SECRETARIAT

**5.3.1.** It shall provide communication between the members, prepare committee meetings, keep meeting minutes and duly archive correspondences.

**5.3.2.** It shall plan, realize and follow up formalities before, during and after the Committee meetings in order to ensure outmost efficiency.

**5.3.3.** It shall ensure timely communication all of kinds of information to the committee members.

**5.3.4.** It shall always keep the records available to the members.

### STRUCTURE OF THE AUDIT COMMITTEE

**6.1.** The Audit Committee shall be as a member of Board of Directors and have minimum 2 (two) members. If the committee has two members the both members shall be Board of Directors Non-executive independent members If there are more than two members, then the same rule shall be applicable for majority of the members. Members of the Audit Committee should have experience at least five (5) years at audit / accounting and finance subject.

**6.2.** As per the Capital Markets Board regulations, the Audit Committee shall be formed and authorized on the first Board of Directors Meeting held after the Annual Ordinary ASELSAN General Assembly Meeting.

**6.3.** At least two Audit Committee members shall be required for the committee meetings and at least two members are required for decisions.

**6.4.** The Audit Committee shall convene minimum every 3 months and four times a year and outcome of the meeting connecting with the minute submitted to the Board of Directors. The audit committee's activities and about the outcome of the meeting must be disclosed in the annual report. During the period how many times the audit committee makes written notification to the Board shall indicated in the annual report.

**6.5.** The Committee's secretariat duties related to the financial tables shall be performed by the Chief Office of Capital Markets Board Financial Control and Reporting attached to the Accounting Department and the secretariat duties related to internal control and internal audit activities shall be performed by IAD.

### ENFORCEMENT

These Directives have been approved by the Board of Directors as per the resolution dated 22.09.2003 and numbered 443/16 and came into force as of 25.09.2003

### EXECUTION

The Audit Committee shall be responsible for executing the provisions listed on these Directives.

### CIRCULATION PLAN

The document shall be circulated as per ASELSAN PLAN A. It shall be published to all users via intranet and internet.

## AUDIT COMMITTEE WORK DIRECTIVES

### Annex- STATEMENT OF RESPONSIBILITY

TO THE PRESIDENCY OF  
BORSA ISTANBUL

.././20xx

AS300-16M-

ASELSAN ELEKTRONİK  
SANAYİ VE TİCARET A.Ş.

BOARD OF DIRECTORS MEETING ON APPROVAL OF FINANCIAL TABLES AND ANNUAL REPORTS

DATE OF RESOLUTION:

RESOLUTION NUMBER:

STATEMENT OF RESPONSIBILITY AS PER SECTION TWO, ARTICLE 9 OF THE CAPITAL MARKETS BOARD COMMUNIQUE  
SERIAL NUMBERED II, NUMBERED 14

We hereby declare that;

a) We have examined the consolidated balance sheet dated .././20xx and comparative consolidated balance sheet dated .././20xx, consolidated income statement issued for the period .././20xy - .././20xy and comparative consolidated income statement issued for the period .././20xx - .././20xx, consolidated additional financial tables, all audited independently, notes dated .././20xx and annual report of the Board of Directors issued for the period ending on .././20xx,

b) As per the information we obtained in line with our duties and responsibilities at the company, the financial tables and annual report of the Board of Directors do not include any comments which materially misrepresent the facts and any missing data which might be misleading as of the announcement date,

c) As per the information we obtained in line with our duties and responsibilities at the Company, the consolidated financial statements prepared in accordance with the CMB Communiqué Serial II, No:14.1, accurately represents the assets, liabilities, financial position and profit or loss informations of the Company and the companies in the scope of consolidation; the annual report accurately represents the development and performance of the business, the financial position of the Company and the companies in the scope of consolidation and the significant risks and uncertainties which may company faces.

REGARDS,

ASELSAN A.Ş.

AuditCommittee Chairman

Audit Committee Member

Audit Committee Member

Deputy General Manager

# BOARD OF DIRECTORS' EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE WORK DIRECTIVES

## 1. PURPOSE

The purpose of these directives is to determine the duties, authorities, responsibilities and work principles of the Early Detection and Management of Risk Committee, which is established under Article 378 of the Turkish Commercial Code numbered 6102 and Board of Directors Resolution dated 10.04.2012, as per the Turkish Commercial Code and Corporate Governance Principles announced by the Capital Markets Board.

## 2. SCOPE

These directives cover works and actions to be performed as per the Turkish Commercial Code and Corporate Governance Principles by the Early Detection and Management of Risk Committee and/or Company personnel not a member of the Committee but assigned by the Committee.

## 3. DEFINITIONS

**3.1. Independent Auditing Firm (IAF):** Firms meeting the requirements of the Capital Markets Board Communiqué and granted with the authority of independent audit on the capital market as per Article 22/d of the Act.

**3.2. Auditor:** Auditor titles of any seniority and rank assigned to make audits by the Independent Auditing Firms

**3.3. Early Detection and Management of Risk Committee (Committee):** A committee to be appointed by the Board of Directors among the Board of Directors members or third parties specialized in certain areas for the purpose of fulfilling the liabilities listed on the Turkish Commercial Code for systematic early detection and management of company risks and executing, coordinating related risks.

**3.4. Early Detection and Management of Risk Committee Secretariat (Secretariat):** ASELSAN personnel arranging operations and meetings of Early Detection and Management of Risk Committee, archiving correspondences and coordinating communication between the members.

**3.5. Capital Markets Board:** Public legal entity established as per Article 17 of the Capital Market Law.

**3.6. Company:** ASELSAN Elektronik Sanayi ve Ticaret A.Ş.

## 4. RELATED REFERENCE DOCUMENTS

**4.1.** Turkish Commercial Code.

**4.2.** Capital Markets Board Regulations.

**4.3.** Corporate Governance Principles published by the Capital Markets Board

**4.4.** Regulations, provisions and principles on ASELSAN Articles of Association

## 5. DUTIES AND RESPONSIBILITIES

### 5.1. DUTIES AND RESPONSIBILITIES OF ASELSAN EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE

**5.1.1.** The main function of the Early Detection and Management of Risk Committee is early detection of risks threatening existence, development and sustainability of ASELSAN as well as taking action for the risks determined and trying to manage the risks determined.

**5.1.2.** The Committee shall determine, identify the potential risks having an impact on ASELSAN beforehand and ensure duly management of the risks according to the risk-taking approach of the company.

**5.1.3.** It shall evaluate the situation by means of a report to be submitted to the Board of Directors every two months as well as pointing out the threats, if any, and suggesting solutions.

**5.1.4.** It shall review the changes suggested to the risk management systems by the Financial Analysis and Enterprise Risk Monitoring Department under Finance Directorate as often as the agenda permits but minimum once a year.

**5.1.5.** The Committee shall advise the Board of Directors on internal audit systems including risk management and information systems and processes minimizing the risks and related impacts to be suffered by the shareholders and company stakeholders.

**5.1.6.** The Committee shall prepare an annual assessment report, including meeting frequency of Committee members and activities performed, which shall be included in the Annual Company Activity Report and basis to the Board of Directors assessment related to the work principles and Committee's efficiency.

**5.1.7.** The resolutions taken at the meetings shall be documented and undersigned by the Committee Members and archived by the Secretariat.



# BOARD OF DIRECTORS' EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE WORK DIRECTIVES

## 5.2. DUTIES AND RESPONSIBILITIES OF THE EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE SECRETARIAT

**5.2.1.** It shall provide communication between the members, prepare committee meetings, keep meeting minutes and duly archive correspondences.

**5.2.2.** It shall plan, realize and follow up formalities before, during and after the Committee meetings in order to ensure utmost efficiency.

**5.2.3.** It shall ensure timely communication all of kinds of information to the committee members.

**5.2.4.** It shall always keep the records available to the members.

## 6. STRUCTURE AND AUTHORITIES OF THE EARLY DETECTION AND MANAGEMENT OF RISK COMMITTEE

### 6.1. COMMITTEE'S STRUCTURE

**6.1.1.** The Committee shall be formed and authorized at the first Board of Directors meeting held after the Annual Ordinary General Assembly Meeting of the company, as per the Capital Markets Board regulations.

**6.1.2.** The Committee shall have minimum two members. If the committee has two members then both members shall be Board of Directors members not having executive function and if there are more than two members, then majority of the members shall not have executive functions. Third parties specialized in certain areas can also be appointed as Committee members. The Committee chairman shall be appointed among Independent Members of Board of Directors.

**6.1.3.** The Chief Executive Officer / General Manager shall not take office in the committee.

**6.1.4.** The secretariat formalities of the Committee including the preparation of the report submitted to the Board of Directors shall be performed by Financial Analysis and Enterprise Risk Monitoring Department under Finance Directorate.

**6.1.5.** One more than half of the total members shall be required for committee meetings and majority is required for decisions.

**6.1.6.** The Committee shall convene once every two months, unless otherwise is required, and, if required, it shall convene at the Company's registered office following a call to be made by the Secretariat on behalf of the Committee Chairman. The Committee Chairman might offer to reschedule the meeting date, hour and place provided that the Committee Members are informed beforehand.

### 6.2. AUTHORITIES OF THE COMMITTEE

**6.2.1.** If required, the Committee shall start special inspections and appoint people specialized in their areas as consultant for the purpose of ensuring assistance in such inspections.

**6.2.2.** If required, the Committee shall hold meetings with representatives of Company's related parties and specialists, including Company personnel or subsidiaries; and under the provision of the Board of Directors and coordinated with the General Manager, it shall seek external and professional consultancy service.

**6.2.3.** The Committee shall act according to its authorities and responsibilities and make recommendations to the Board of Directors however the Board of Directors shall always have the final decision making responsibility and the Committee shall not relieve the Board of Directors from its duties and responsibilities arising from the Turkish Commercial Code.

## 7. ENFORCEMENT

These directives have been approved by the Board of Directors as per the resolution dated 29.11.2012 and numbered 750/4.3.e and came into force as of 29.11.2012.

## 8. EXECUTION

ASELSAN Early Detection and Management of Risk Committee shall be responsible for executing the provisions listed on these directives.

## 9. CIRCULATION PLAN

The document shall be circulated as per ASELSAN PLAN A. It shall be published to all users via intranet and internet. The document shall be circulated as per ASELSAN PLAN A. It shall be published to all users via intranet and internet.

# BOARD OF DIRECTORS' CORPORATE GOVERNANCE COMMITTEE WORK DIRECTIVES

## 1. PURPOSE

The purpose of these directives is to determine the duties, authorities, responsibilities and work principles of the Corporate Governance Committee established as per the Corporate Governance Principles announced by the Capital Markets Boards (CMB).

## 2. SCOPE

These directives cover works and actions to be performed as per the Corporate Governance Principles by the Corporate Governance Committee and/or Company personnel not a member of the Committee but assigned by the Committee.

## 3. DEFINITIONS

**3.1. Corporate Governance:** Index of relations between the Board of Directors, shareholders and other stakeholders of a company.

**3.2. Corporate Governance Committee (Committee):** A committee to be appointed by the Board of Directors among the Board of Directors members or third parties specialized in certain areas for the purpose of executing and coordinating Corporate Governance Principles related formalities of the Company, provided that majority of the members are from the Board of Directors and the executive of Investor Relations Department shall be appointed as a member of the Committee.

**3.3. Corporate Governance Committee Secretariat (Secretariat):** ASELSAN personnel arranging operations and meetings of Corporate Governance Committee, archiving correspondences and coordinating communication between the members.

**3.4. Capital Markets Board:** Public legal entity established the Capital Market Law numbered 6362.

**3.5. Company:** ASELSAN Elektronik Sanayi ve Ticaret A.Ş.

## 4. RELATED REFERENCE DOCUMENTS

**4.1.** Capital Markets Board Regulations.

**4.2.** Corporate Governance Principles published by the Capital Markets Board.

**4.3.** Prepared as per the regulations, provisions and principles on ASELSAN Articles of Association.

## 5. DUTIES AND RESPONSIBILITIES

### 5.1. DUTIES AND RESPONSIBILITIES OF ASELSAN CORPORATE GOVERNANCE COMMITTEE

**5.1.1.** The Corporate Governance Committee shall mainly work on implementing corporate governance principles at the Company.

**5.1.2.** The Committee shall determine whether or not the Corporate Governance Principles are implemented and if not implemented, the Committee shall determine the reasons as well as conflicts of interest caused by failing to fully comply with these principles.

**5.1.3.** It shall monitor the operations of Investor Relations Department.

**5.1.4.** It shall play a leading part in maintaining effective communication between the Board of Directors, Company and shareholders, eliminating and settling any possible disputes as well as advising the Board of Directors accordingly.

**5.1.5.** The Committee shall advise the Board of Directors on due effectiveness of infrastructures related to management applications aiming at improving company performance as well as acknowledgement by the personnel and support of the management.

**5.1.6.** The Committee shall issue the Company's Corporate Governance Compliance Report.

**5.1.7.** The Committee shall revise the Company's Activity Report to be disclosed to the public and checks whether or not the information included in the Report conform to the information possessed by the Committee.

**5.1.8.** The Committee shall prepare an annual assessment report, including meeting frequency of Committee members and activities performed, which shall be included in the Annual Company Activity Report and basis to the Board of Directors assessment related to the work principles and Committee's efficiency.

## **BOARD OF DIRECTORS' CORPORATE GOVERNANCE COMMITTEE WORK DIRECTIVES**

**5.1.9.** The Committee shall make suggestions ensuring compliance to the law and regulations, company's Information Policy in terms of public disclosures to be made.

**5.1.10.** The Committee shall present its operations and suggestions to the Board of Directors in the form of a report.

**5.1.11.** The resolutions taken at the meetings shall be documented and undersigned by the Committee Members and archived by the Secretariat.

**5.1.12.** If Nomination Committee and Remuneration Committee cannot be established separately due to the structure of the Board of Directors, the Committee shall perform the duties assigned to these committees as per the Corporate Governance Principles published by the Capital Markets Board.

**5.1.13.** Within the scope of the responsibilities of Nomination Committee; the Committee carries the duties on creating a transparent system for the evaluation of the nominees for Board of Directors and the nominees for the executives with administrative responsibility, their training and setting out policies and strategies regarding these matters. In this context, the Committee also regularly makes assessments on the structure and efficiency of Board of Directors and presents suggestions for improvement related to these issues.

**5.1.14.** Within the scope of the responsibilities of Remuneration Committee; the Committee determines and monitors the principles, criteria and the practices for the remuneration of the members of Board of Directors and executives with administrative responsibility, considering the long term objectives of the Company. In this context, the Committee also presents suggestions about the remuneration of the members of Board of Directors and executives with administrative responsibility, taking the level of achievement regarding the remuneration criteria met into account.

### **5.2. DUTIES AND RESPONSIBILITIES OF THE CORPORATE GOVERNANCE COMMITTEE SECRETARIAT**

**5.2.1.** It shall provide communication between the members, prepare Committee meetings, keep meeting minutes and duly archive correspondences.

**5.2.2.** It shall plan, realize and follow up formalities before, during and after the Committee meetings in order to ensure utmost efficiency.

**5.2.3.** It shall ensure timely communication all of kinds of information to the Committee members.

**5.2.4.** It shall always keep the records available to the members.

**5.2.5.** It shall periodically submit reports on investor questions and content.

### **6. STRUCTURE AND AUTHORITIES OF THE CORPORATE GOVERNANCE COMMITTEE**

#### **6.1. COMMITTEE'S STRUCTURE**

**6.1.1.** The Committee shall be formed and authorized at the first Board of Directors meeting held after the Annual Ordinary General Assembly Meeting of the company, as per the Capital Markets Board regulations.

**6.1.2.** The Committee shall be formed by at least 3 (three) members; two of whom shall be members of Board of Directors and one shall be the Investor Relations Department Executive. The majority of the members of Board of Directors in the Committee shall not have executive functions. Investor Relations Department Executive must have the "Capital Markets Activities Advanced Level" and "Corporate Governance Rating Expertise" certificates and must be working full time in the Company.

**6.1.3.** Third parties specialized in certain areas who are not members of Board of Directors can also be appointed as Committee members. The Committee Chairman shall be appointed among Independent Members of Board of Directors.

**6.1.4.** The Chief Executive Officer / General Manager shall not take office in the Committee.

**6.1.5.** The secretariat formalities of the Committee shall be performed by Investor Relations Department.

**6.1.6.** One more than half of the total members shall be required for Committee meetings and majority is required for decisions.

**6.1.7.** The Committee shall convene every 3 (three) months as a principle and, if required, it shall convene at the Company's registered office following a call to be made by the Secretariat on behalf of the Committee Chairman. The Committee chairman might reschedule the meeting date, hour and place provided that the Committee Members are informed beforehand.

## **BOARD OF DIRECTORS' CORPORATE GOVERNANCE COMMITTEE WORK DIRECTIVES**

### **6.2. AUTHORITIES OF THE COMMITTEE**

**6.2.1.** If required, the Committee shall start special inspections and appoint people specialized in their areas as consultant for the purpose of ensuring assistance in such inspections.

**6.2.2.** If required, the Committee shall hold meetings with representatives of Company's related parties and specialists, including Company personnel or subsidiaries; and it shall seek external and professional consultancy service.

**6.2.3.** The Committee shall act according to its authorities and responsibilities and make recommendations to the Board of Directors however the Board of Directors shall always have the final decision making responsibility.

### **7. ENFORCEMENT**

These directives have been approved by the Board of Directors as per the resolution dated 23.02.2006 and numbered 529/2.d and came into force as of 30.05.2006.

### **8. EXECUTION**

ASELSAN Corporate Governance Committee shall be responsible for executing the provisions listed on these directives.

### **9. CIRCULATION PLAN**

The document shall be circulated as per ASELSAN PLAN A. It shall be published to all users via intranet and internet.



## DIVIDEND DISTRIBUTION TABLE

ASELSAN A.Ş. ELEKTRONİK SANAYİ VE TİCARET A.Ş. 2017 DIVIDEND DISTRIBUTION TABLE (TL)			
1-	Issued Capital		1.000.000.000,00
2-	First Legal Reserve (According to Legal Records)		0,00
Information regarding the privileges on profit distribution as per the Company Articles of Association, if there are any		There are no privileges.	
		SPK'ya Göre	Yasal Kayıtlara (YK) Göre
3-	Profit for the Period	1.171.022.865,24	889.747.940,32
4-	Taxes Payable (+) <sup>(1)</sup>	216.826.250,00	0
5-	<b>NET PROFIT FOR THE PERIOD (=) <sup>(2)</sup></b>	<b>1.387.770.035,24</b>	<b>889.747.940,32</b>
6-	Accumulated Loss (-)	0	0,00
7-	First Legal Reserve (-)	44.487.397,02	44.487.397,02
8-	<b>NET DISTRIBUTABLE PROFIT FOR THE PERIOD (=)</b>	<b>1.343.282.638,22</b>	<b>845.260.543,30</b>
9-	Donations Made throughout the Year (+)	10.000,00	
10-	<b>Net Distributable profit for the period, donations included</b>	<b>1.343.292.638,22</b>	
11-	First Dividend to Shareholders	50.000.000,00	50.000.000,00
	- Cash	50.000.000,00	50.000.000,00
	- Non paid-up share	0	0
	- Total	50.000.000,00	50.000.000,00
12-	Dividends distributed to Preferred Shareholders	0	0
13-	Dividends distributed to;	0	0
	- Members of the Board of Directors	0	0
	- Employees	0	0
	- Others than Shareholders	0	0
14-	Dividends distributed to Holders of Usufruct Right Certificates	0	0
15-	Second Dividend to Shareholders	34.600.000,00	34.600.000,00
16-	First Legal Reserve	3.460.000,00	3.460.000,00
17-	Statutory Reserve	0	0
18-	Special Reserve	0	0
19-	<b>EXTRAORDINARY RESERVE</b>	<b>1.255.222.638,22</b>	<b>757.200.543,30</b>
20-	Other resources to be distributed	0	0

<sup>(1)</sup> Our Company has gained Continuing Operations Tax Income valuing TL 216.826.250,- within the scope of the Law regarding the Support of Research and Development Activities, numbered 5746.

<sup>(2)</sup> The net profit for the period attributable to equity holders of the parent valuing TL 1.387.849.115,24. is used, since TL 79.080,- of the net profit for the period corresponds to non-controlling interests, where our Company's net profit for the period is TL 1.387.770.035,24.

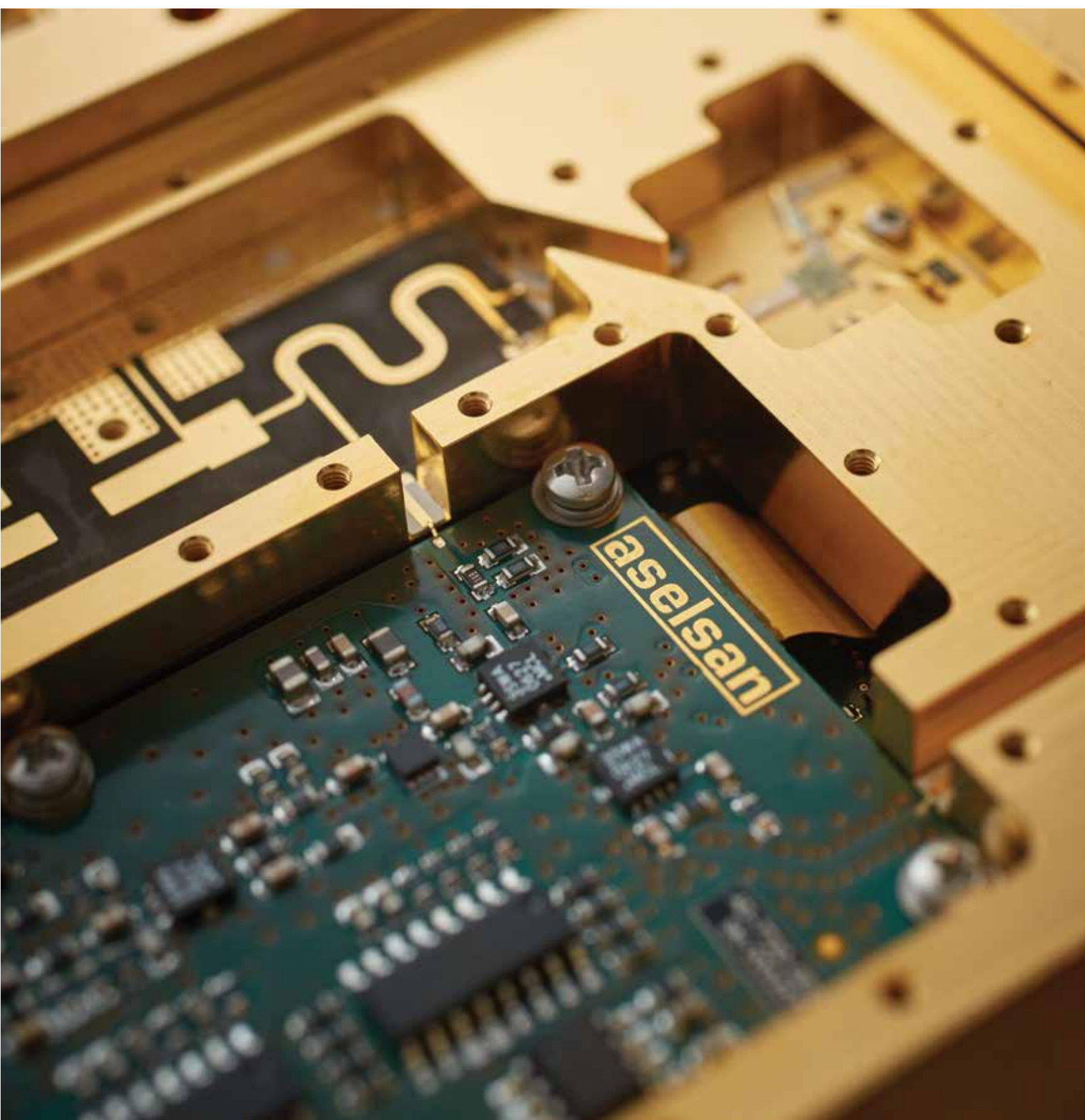
As presented in the table above, of the net profit generated by our company from its 2017 activities;

- In accordance with Article 519/(1) of the Turkish Commercial Code, General Legal Reserves amounting to TL 44.487.397,02 is going to be allocated,
  - Net distributable profit to the shareholders for the period, calculated in the framework of the profit distribution regulations and decisions of the Capital Markets Board is proposed as: Gross profit, TL 84.600.000 (Kuruş 8,46 per share of TL 1 and 8,46% on the basis of the capital) (net profit TL 71.910.000 - Kuruş 7,191 per share of TL 1 and 7,191% on the basis of the capital) as in the form of cash,
  - In accordance with Article 519/(2) of the Turkish Commercial Code, General Legal Reserves amounting to TL 3.460.000 is going to be allocated,
  - The remaining profit is going to be allocated as Extraordinary Legal Reserves,
- and distribution of the dividends to the shareholders are planned to be distributed as of 19 June 2018, 13 September 2018, and 13 December 2018 in three equal installments.

Yours Faithfully,  
Board of Directors

## NOTES

# RELIABLE TECHNOLOGY



# aselsan

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ASELSAN is a company of Turkish Armed Forces Foundation.