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Message of the Chairman of the Board

“SaSaD Members will get first-hand information about the activities of our Association and developments in the sector”

Dear Members;

Founded in 1990 by the leading 12 industrial organizations of our sector and upon the recommendation of our TAF General Staff and with the support of the Ministry of National Defense, our Association has been successfully representing the defense and aerospace sector at home and abroad for 28 years in parallel with its mission. It continues to contribute to the development and international competitiveness of players in the sector. SaSaD, founded by 12 leading companies in Defense Sector in 1990, currently has attained a total of 193 members. Thus, it has strengthened its corporate position in the Turkish Defense and Aerospace Industry due to your support and that of the relevant public institutions and organizations.

Our Board of Directors have decided to publish a newsletter that will enable our members to be informed of SaSaD activities and developments in the sector first-hand, and to share this newsletter with our stakeholders via electronic, printed media and through social media such as LinkedIn.

Our newsletter will be published quarterly and will contain sector developments and the activities within our Association. We will also make an effort to include articles that are related to our areas of interest. We believe that the content of our newsletter will become further enriched with your support and contributions and we look forward to your participation as well as your constructive criticism.

I would like to take this opportunity to announce that the full-day Ordinary General Assembly is scheduled to be held on the 24th of April 2018. During the first session, main contractors will present information on sub-systems and components that they currently import and are willing to indigenize. In addition, the Undersecretariat for Defense Industries (SSM) Sectoral Strategy Document will be presented for the period of 2018-2022 and the Indigenization of Nationalization Projects. The second session will continue with General Assembly Meeting including election of Board of Directors and the Industry Awards Ceremony.

I hereby wish you success in your continued and future endeavors.

Sincerely yours,

Temel KOTİL
Chairman of the Board

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Turkish Defense Industry Assembly's Meeting Report

The 35th Meeting of the Turkish Defense Industry Assembly was held on the 19th of December 2017 at TOBB Twin Towers under the presidency of the Chairman of the Assembly Mr. Yılmaz Küçükseyhan, with the participation of the Undersecretary for Defense Industries Prof. İsmail Demir, representatives of the Ministry and assembly members in order to inform members on the short, medium and long term projects of the Undersecretariat for Defense Industries and to assess the expectations of the industry in 2018.

Agenda I – Opening Speech and Introduction

TOBB Defense Industry Assembly Chairman Mr. Yılmaz Küçükseyhan opened the meeting by sharing the meeting agenda with Assembly members. In his speech, Mr. Küçükseyhan stated that there were 61 industries within their Industry Assembly and that the Defense Industry Assembly was at the top of the list of most crucial assemblies. He stated that the industry's turnover growth rate was 22% in 2016 – 2017 and noted that it was an industry that was constantly developing and progressing. Underlining that there was an increase of 33% due to governmental incentives for R&D expenses, Mr. Küçükseyhan highlighted the industry's impressive improvement from 2004 – 2005 until today. Mr. Küçükseyhan made a detailed presentation to the members of the Assembly regarding the Assembly's activities, views shared, meetings attended as the Presidency Council of the Assembly and the visits paid within 2017. Expressing his gratitude to the Undersecretary for Defense Prof. İsmail Demir and to the Deputy Undersecretary for Defense Industries Dr. Celal Sami Tüfekçi for the continuous support they have provided to the Assembly and for their participation in



the meeting, Mr. Küçükseyhan left the floor to the Undersecretary for Defense Prof. İsmail Demir for his remarks.

Agenda II – The Turkish Defense Industry's Performance Assessment for 2017, Thoughts on Projects and Expectations from Industrialists

In his assessment of the Turkish Defense Industry and expectations from industrialists, Undersecretary for Defense Industries Prof. İsmail Demir emphasized that the industry needs to accomplish more than expected in order to achieve a truly "Powerful Turkey" and added that the defense industry must unconditionally implement President Mr. Recep Tayyip Erdoğan's instructions for mobilization.

Stating that there were 300 projects conducted by the Undersecretariat for Defense Industries during his assignment in 2014, Prof. Demir stated that this figure currently has reached 600 projects. Prof.

Demir also mentioned that only 50 of these projects were launched in 2017 and added that in addition to the 22 decrees made by the Defense Industry Executive Committee, 40 projects are currently being held at the signature stage.

Stressing that critical deliveries were made for the Armored Personnel Carriers and Combat Vehicles, Prof. İsmail Demir stated that they covered important ground in the development and production of essential ammunition such as smart munitions, winged guided kits, precision guided kits, laser guided kits, penetrating bombs, etc. and that they launched the delivery of such products. Prof. Demir pointed out that in order to fulfil the engine and transmission requirements through national resources, they initiated development projects in related areas and added that the delivery of the National Modern Infantry Rifle was at full steam.

Noting that numerous R&D projects have been launched under the auspices of the Undersecretariat, Prof. Demir stated that in addition to the currently popular procurement of the S-400 Air Defense Systems, activities for the National Air Defense Missile System were launched and that the related shareholders are working on this issue. Prof. Demir added that test and development activities for unique and national systems such as Hisar-A, Hisar-O and Hisar-U continue with national resources as well.

Prof. Demir stated that so far, over 1,100 Mine-Resistant Ambush Protected "Kirpi" vehicles, more than 300 Armored Personnel Carrier "Kobra" Vehicles and over 230 "Ejder Yalçın" Armored Combat Vehicles have been delivered to the Turkish Armed Forces



Command and he stated that they collected proposals from relevant companies in respect to the mass production of the Altay Main Battle Tank. He said that mass production would be launched upon completion of the evaluations. Moreover, Prof. İsmail Demir noted that the 26th T129 "Atak" helicopter was delivered to the Land Forces Command and the preparations for the delivery of the 27th helicopter continues.

Prof. Demir said that 43 Unmanned Air Vehicles consisting of 38 Tactical Class and 5 MALE Class UAVs were launched into operation by the Turkish Armed Forces and that nearly 10 of these systems were an armed configuration. Undersecretary Prof. İsmail Demir added that they conducted various studies toward fulfilling the human resources needs of the industry and that they will be adding new ones in the upcoming future.

Prof. Demir also stated that they will be organizing new contests similar to that of the Unmanned and Autonomous Land Vehicles Design Competition and he added that they expect the support and contribution of the business community and entrepreneurs in these types of projects.

Underlining that one of the most important phases of investments made in human resources was the realization of technologies with remarkable effects and the importance of creating an environment suitable for this, Prof. Demir said that taking part in the defense industry should be approached with a spirit of mobilization, emphasizing that it is essential for everyone and mostly our industrialists to feel this spirit.

Prof. İsmail Demir concluded his speech by saying: "Being an industrialist is in a sense equal to being a hero. Where there are a series of areas in which to easily make money, investing capital in the defense industry and expecting great revenues requires courage and dedication."



The assembly meeting continued with a Q&A session among the participants and the Undersecretary Prof. İsmail Demir.

Agenda III – Projects Being Conducted, Short, Medium and Long-Term Projects

Following the networking break, the Head of the Department of Industrialization at the Undersecretariat for Defense Industries, Mr. Bilal Aktaş shared a detailed presentation on the medium and long-term projects, industrialization activities, plans for sector management, R&D and technology activities.

Mr. Aktaş stated that subjects are categorized by areas of responsibility and he elaborated that the workload that is to be essentially accomplished by the Undersecretariat falls under category A, category B contains the export of defense and aerospace products, and category C is composed of technological capability acquisition and investments.

Mr. Aktaş added that technological sub system ownership is the primary objective toward achieving a sustainable defense industry and in order to further this they are focusing on a model of domestic development. Mr. Aktaş underlined the vital importance of acquiring sub systems to the industry, the sub systems that do not exist in Turkey, and the importance of the utilization of capabilities acquired in future projects as well as maintaining the participation of domestic companies in the industry by being involved in new projects.

Mr. Aktaş stated that the continuity of industry participation offset applications in the next five years will be maintained, the activities regarding support credits for qualified products and infrastructural support will continue and that they are contemplating an increase for the credit volume in accordance with these activities. Moreover, Mr. Aktaş pointed out that without making regional distinctions in industry investments (in event that the investment is made in the defense industry), it would be possible to benefit from the fifth-degree regional incentive implementation throughout the country.

Expressing their expectations from the industry as the Undersecretariat, Industrialization Department Head Mr. Bilal Aktaş underlined that exports were amongst the sine-qua-non subjects and added that the products manufactured must have sufficient quality, certification and must be able to compete internationally. Also noting that the support and incentive mechanisms granted

by the government should be used efficiently, Mr. Aktaş said that in order to maintain this, they established the Industrial Strategy and Investment Planning Department within the Undersecretariat and underlined the importance of the participation of all companies in the sector clusters. Furthermore, Mr. Aktaş stated that companies should own institutional integrated software systems and have in-depth knowledge in how to fulfil the requirements stipulated by signed contracts. Mr. Aktaş advised all companies to become members of the portal and touched upon the importance of keeping data updated within the portal, such as the requirement of entering information such as post-graduate and PhD degrees and relative areas of staff expertise employed at a given company.

Mentioning the R&D road map, Mr. Aktaş said that their primary target at this point is to reach toward the foundations of technology, he informed the audience that priority programs such as autonomous and control technologies, advanced material, innovative platform systems and concepts, energy and impact systems, sensors, signal image processing, CBRN, Electronic Warfare, destruction technologies, communication technologies, informatics and cyber security projects are on the R&D road map.

Mr. Aktaş concluded his presentation by underlining the impossibility of speaking of an independent country without achieving superiority in technology and stated that he believed this superiority should be achieved through an extended supply chain.

Addressing participants with the closing statement, Deputy Undersecretary Dr. Celal Sami Tüfekçi expressed that 2017 was a busy year for the industry and added that they expected 2018 to be even more efficient. In closing Dr. Tüfekçi thanked participants for their contributions.



Strategic Product Support Program

With the restructuring of political borders in the world, the establishment of commercial blocks, trade agreements and constantly changing macroeconomic data, the issues of indigenization and nationalization have become important agenda items for the ecosystem. Turkey has also initiated work on these issues and renewed its Development Plans, Strategic Roadmap by taking these elements into consideration. In this framework, by supporting investments that contribute toward reducing the current account deficit problem, activities have been focused toward encouraging local production of intermediate goods with a high-import rate, adding value to the national economy, increasing the domestic input ratio in the manufacturing industry and developing the domestic manufacturing industry.

The Republic of Turkey is disposed toward indigenization within the Turkish Industry to be able to attain the goal of becoming "one of the world's 10 largest economies." As such, a new problem-solving approach, the "Strategic Product Support Program" was developed to address the various challenges faced by SMEs that play an important role in industry development. With this program which will be conducted by KOSGEB, it is expected that the domestic production of imported products in Turkey is ensured, the current account deficit will be reduced and accordingly there will be a contribution to Turkey's economic performance. It is important for Turkey to satisfy the current deficit so that the ambitious vision of 2023 can be realized. When the current account balance is analyzed, this aim can only be achieved by the indigenization of intermediate goods with a high import rate, which are referred to as strategic products, and by the nationalization of technology and serial production.

The Strategic product support program encompasses investments that will contribute toward the reduction of the current account deficit via the indigenization of strategic products that have a high rate of import. This will be actualized through the increase of technological production capabilities, the production of domestic and national products that are determined within the framework of Government Programs and Annual Programs, and the utilization of higher domestic input in production.

Within this scope, the "Strategic Product Support Program Framework Cooperation Protocol" was signed between KOSGEB and SaSaD on 29 November 2017 and according to this protocol it was decided that the parties will cooperate with each other on the following issues and carry out joint studies;

- a) To conduct joint studies to determine the products to be supported under the Strategic Product Support Program,
- b) To establish joint production/sales collaborations within the scope of the Strategic Product Support Program with the determination of Large Enterprises and/or SMEs,
- c) To perform necessary studies by parties to promote the Strategic Product Support Program and raise awareness of the support program amongst SMEs,

d) To establish project evaluation committees within the scope of the Strategic Product Support Program,

e) To conduct joint studies in order to perform technical and financial analyses within the scope of the Strategic Product Support Program,

f) To undertake the necessary activities to facilitate and speed up the work and operations of the parties in follow-up and coordination of projects,

g) To conduct monitoring activities by the parties to monitor the feasibility of joint studies to be conducted,

h) To conduct studies in order to exchange information and data.

The "Strategic Product Support Program" for enterprises is very significant. Not only for the development of production capacity but also for the comprehensive feasibility studies that KOSGEB requests from enterprises prior to the project application as well. As a result of the feasibility studies, enterprises will obtain macro data such as current status analysis, market analysis of the sector in which they are performing, strategic plan, feasibility of the project and the project risk analysis. This data constitutes a road map for future forecasts of enterprises.

CRITERIA	Small Scale SME	Medium Scale SME
Number of Personnel	< 50	< 250
Annual Net Sales Revenue	< 8 Million TL	< 40 Million TL
Annual Financial Balance Sheet Total	< 8 Million TL	< 40 Million TL

Small and Medium Scale Enterprises can benefit from this support. The enterprise can apply for this program individually, or by partnering with the stakeholder or large scale enterprises. It is necessary that the enterprises that have applied for support are performing activities in at least one of the 9 strategic areas that are designated as Strategic Products.

20- Manufacturing of chemicals and chemical products

21- Manufacturing of basic pharmaceutical products and materials

23- Manufacturing of nonmetallic mineral products (provided that there is a cooperation with the defense industry)

26- Manufacturing of computers, electronic and optic products

27- Manufacturing of electrical equipment

28- Manufacturing of machinery and equipment not elsewhere classified

- 29- Manufacturing of motor land vehicles and semitrailers
- 30- Manufacturing of other transportation vehicles (except for 30.99)
- 32- Manufacturing of medical and dental tools and equipment

The maximum limit of support that will be granted under the SME Strategic Product Support Program is 5,000,000 TL refundable and/or nonrefundable. Support rates will be 70% nonrefundable and 30% refundable within the scope of Machinery-Equipment Support and 70% nonrefundable for other support items. 15% will be added to the nonrefundable support rates for products purchased with a domestic goods certificate for machine-equipment as well as software expenses. In this case, a 15% reduction is applied to the refundable support rate. Thus, the rate of nonrefundable support increases to 85%.

Enterprise Scale	Support Items	Support Rates
Small and Medium Scale Enterprises	Machinery-Equipment Support	70% (Nonrefundable) 30% (Refundable)
	Other Support	70% (Nonrefundable)

The support categories are as follows: Machinery-Equipment Support, Software Expense Support, Personnel Expense Support, Information Transfer Support, Test-Analysis, Calibration and Reference Sample Support and Service Procurement Support.

The applications for the first period are to be received between **1 January and 31 March 2018**. The application dossier, Preliminary Evaluation and Technical-Financial Reports will be submitted by 15 May 2018. The Board's evaluation will be held between 16 May and 30 June 2018.

The applications for the second period are to be received between **1 July and 30 September 2018**. The application dossier, Preliminary Evaluation and Technical-Financial Reports will be submitted by 15 November 2018. The Board's evaluation will be held between 16 November and 31 December 2018.

In the SME Strategic Product Support Program, the maximum duration of an investment project is 36 (thirty-six) months.

Technological Product Investment Support Program

In recent years global competition has gained momentum and our enterprises have been struggling to survive under intense market pressure both nationally and internationally. In order for them to survive, it is imperative to maintain a competitive advantage which is a fundamental economic rule. However, with advancements in technological development and the progress gained with each passing day, this superiority must be achieved not through a production volume increase, but through R&D and innovation. In today's challenging and competitive environment, the enterprises that ensure the continuity of R&D activities and those that realize their innovations can achieve and maintain a sustainable competitive advantage. Countries that have acquired a sustainable competitive advantage can become wealthy, amassing a high level of economic and social welfare. For this purpose, particular importance has been placed upon research incentives in the world. Turkey has also been following the global trend on this issue. Significant R&D expenditures are being made to support R&D and innovation projects as well as the promotion of innovative ideas both by the government and through various other sources.

Our expectation, as a result of these expenditures, is that this spending will be transformed into high technology products that will add value to our country and contribute to the increase of our competitive power in international markets.

In this respect, the Ministry of Science, Industry and Technology has announced the "Techno-Investment" program for Large Enterprises. With the success of the program, KOSGEB has made a new announcement of the "Techno-Investment" program for SMEs with the motto: "We will provide the necessary support to all our SMEs that produce innovative, technological and high added value products, those that want to focus on exports and transfer these products to the international markets."

Within this scope, the "SMEs Technological Product Investment Support Program Framework Cooperation Protocol" was signed between KOSGEB and SaSaD on 20 October 2017. According to this protocol it was decided that the parties will cooperate with each other on the following topics and carry out joint studies:

- a) To establish project evaluation committees within the scope of the SMEs Technological Product Investment Support Program,
- b) To conduct joint studies in order to perform technical and financial analyses within the scope of the SMEs Technological Product Investment Support Program,
- c) To perform necessary studies to facilitate and speed up the work and operations of parties involved in the follow-up and coordination of the projects,
- d) To conduct monitoring activities by the parties to monitor the feasibility of joint studies to be conducted,
- e) To conduct studies in order to exchange information and data.

The objective of this program is to commercialize new products that emerge as a result of R&D and innovation activities in priority technology areas, transforming the country's economy into a structure that can compete at an international level, creating a value-add to the country's economy, leading the export of technological products by participating in international markets, and supporting investment of enterprises in our country.

Investment items to be supported:

- a) Technological products that emerge from research and innovation projects supported by KOSGEB and other public institutions and organizations, foundations established by law or international funds
- b) Technological products that emerge as a result of R&D and innovation projects in foreign technology zones / research centers / institutes / science parks / incubation centers / accelerators
- c) Technological products that emerge as a result of R&D and innovation projects that companies conclude related to domestic technology development in the region
- d) Technological products that emerge as a result of R&D activities in public research institutes / centers
- e) Technological products protected by a patent specification,
- f) Technological products that emerge from doctorate studies
- g) Technological products that are certified with a Technological Product Certificate of Experience
- h) Owners of the technological products, the prototype studies of which have been completed or enterprises that have taken over the right of use from the right holder through a contract

The enterprise should have a certificate verifying that technological product has emerged successfully. Within 5 (five) years from the date of finalization, the applicant is provided with support for the technological product. Owners of the technological products, the prototype studies of which have been completed or enterprises that have taken over the right of use from the right holder through a contract are able to benefit from this program. For technological products protected by a patent specification, it is required that the patent has been transferred by the Turkish Patent Institute and Trademark Office.

Micro, Small and Medium Scale SMEs can benefit from this support. The maximum limit of support that will be granted under the SMEs Technological Product Investment Support Program is 5,000,000 TL (five-million), as refundable and/or nonrefundable.

Support rates for micro-scale enterprises will be 70% nonrefundable and 30% refundable for machinery-equipment, molding and software expenses; 60% nonrefundable and 40% refundable for small and medium scale enterprises. For expenses other than machinery-equipment, molding and software, 70% nonrefundable support is granted to micro-scale enterprises and 60% to small and medium scale enterprises.

Early payment can be made at a rate of 25% of the total amount of support as set forth in the initial board decision. If the technological product subject to investment is considered to be at a high technology level, 5% is added to nonrefundable support rates. If the machinery, equipment and software to be purchased for the related investment project are classified / differentiated with a domestic goods certificate, 15% is added to the nonrefundable support rates. Within the scope of refundable support, nonrefundable support is granted for securities / guarantees requested by KOSGEB, regardless of the upper limit of 100% support as Security / Guarantee Expenses.

CRITERIA	Micro Scale SME	Small Scale SME	Medium Scale SME
Number of Personnel	< 10	< 50	< 250
Annual Net Sales Revenue	< 1 Million TL	< 8 Million TL	< 40 Million TL
Annual Financial Balance Sheet Total	< 1 Million TL	< 8 Million TL	< 40 Million TL

Support Items (Granted during the Investment Project)

- a. Machinery-equipment and software expense support
- b. Personnel expense support
- c. Training and consultancy support
- d. Rental / Leasing support

Support Items (Granted following the Investment Project)

Enterprises that have completed their investment projects can benefit for a duration of 1 year.

- Operating Expense Support
 - a. Personnel Expenses
 - b. Utility Expenses
 - c. Maintenance-repair Expenses

Enterprise Scale	Support Item	Support Rates
Micro Scale Enterprise	Machinery, equipment, molding and software expenses	70% (Nonrefundable) 30% (Refundable)
	Personnel, training, consultancy, rental/leasing support	%70 (Nonrefundable)
Small and Medium Scale Enterprises	Machinery, equipment, molding and software expenses	%60 (Nonrefundable) %40 (Refundable)
	Personnel, training, consultancy, rental/leasing support	%60 (Nonrefundable)

Applications will be received **on a regular basis throughout the year**. In the SME Technological Product Investment Support Program, the duration of the investment project is maximum of 36 (thirty-six) months. An additional period of six (6) months can be given by the Board decision.

Unmanned Autonomous Systems for Land Vehicles

Yılmaz KÜÇÜKSEYHAN, SaSaD Deputy Secretary General, TOBB Defense Industry Sector Assembly President

There is a saying in the Armed Forces: "Victory is at the bayonet cap of the Infantry." This phrase generally is related to experience acquired in battles. It is said that the land forces must set foot on a battlefield in order to achieve physical control, without this, these places are not yours. Superior technological capability have come into play among today's symmetrical and asymmetrical threats. Asymmetrical threats experienced within borders, symmetrical and asymmetrical threats experienced beyond boundaries are causing losses to our armed forces and the people of the region who are involved in these struggles.

New technological advantages have been made available to security forces for use in high risk areas as a result of military losses experienced. In this context, technologies that can fulfill various missions and enable the minimization of losses have achieved success in battlefields. The unmanned systems which are on the agenda of many countries have added a new dimension to land vehicles. Unmanned land vehicles, which can be controlled remotely or have autonomous features and be produced according to specifications to effectively serve in challenging areas. Currently, autonomous systems such as unmanned aerial vehicles and limited bomb disposal robots are successfully being used by security forces and patrols for tasks such as warning and surveillance, target detection and destruction.

Our Undersecretariat for Defense Industries has accelerated their efforts to raise awareness about unmanned autonomous systems and to direct design and research activities toward this field. In this context, 310 projects were announced and 20 of them were shortlisted in January 2017. The "Roboik Unmanned and Autonomous Land Vehicles Design Contest Award Ceremony" and "Unmanned Autonomous Systems Workshop" were held in Ankara on 14 December 2017.

Industrialists expect that concepts related to autonomous systems are set forth by the TAF and other security forces. It is obvious that autonomous systems, which are widely



used in the Defense and Aerospace Industry, will provide a competent infrastructure for activities carried out to meet the requirements of the TAF.

Unmanned autonomous systems can be utilized in any environment where vehicles of the armed forces and security forces are used. The first priority is to neutralize the target without causing any casualties. It may not be possible to use these autonomous systems in very rough, rocky terrains or dense woodlands. It is essential to use airborne forces in these types of terrain. Unmanned autonomous land vehicles that are to be produced in line with these particular capabilities should be considered.



In the 1990s, asymmetric threats were used against police stations/patrols and a significant number of people were martyred. With Autonomous Unmanned Systems (UAV, Remote Controlled Surveillance and Armed Forces Systems), terrorists first turned to residential areas from rural areas, and then to transportation through improvised explosives. Casualties will diminish considerably with the use of unmanned autonomous systems against these terrorist threats that are commonly exercised today,

additionally increasing success in terms of the morale factor. The Unmanned Land Vehicles to be used must be integrated with UAVs in particular.

It is not possible to successfully and effectively use unmanned autonomous systems in environments where Armored Vehicles cannot be used due to land conditions. Air and Naval Unmanned Autonomous Systems are left out of the scope. Initially, even if guided autonomous vehicles are successful on roads trapped by improvised explosives, the threat will perceive this quickly and set a new tactic. This also needs to be taken into consideration in the concept to be set forth. These systems will also reduce casualties in areas of contaminated land.

The Turkish Defense and Aerospace Industry has a strong technological infrastructure in the design and production of unmanned autonomous systems. Mission Computer software plays a very important role in Unmanned Autonomous Systems. This competency also exists in our sector. What kind of autonomous system does the TAF and other security forces need in terms of capabilities and mission? What are the concepts in this regard? We should discern these details and manufacture robots and unmanned systems. The future soldier is in no circumstances to be a cyborg although the emerging advance technologies.



“Roboik” Unmanned and Autonomous Land Vehicles Design Contest Award Ceremony held in Ankara

The “Roboik Unmanned and Autonomous Land Vehicles Design Contest Award Ceremony” was held in Ankara on 14 December 2017 with the participation of Undersecretary for Defense Industries Prof. İsmail Demir where awards were granted to those ranking the highest out of 20 shortlisted projects among 310 projects.

Addressing the participants before the “Unmanned and Intelligent Systems Workshop” and “Unmanned and Autonomous Land Vehicles Design Contest Award Ceremony” held under the auspices of the Undersecretariat for Defense Industries, Undersecretary for Defense Industries Prof. İsmail Demir shared important messages about how the contest concept was created, the vision and future plans on this subject. Prof. Demir: “This year’s first ‘Roboik-Unmanned and Autonomous Land Vehicles Design Contest’ was planned by taking the objectives and priorities into consideration as a result of the comprehensive analysis of the conditions and vision of the country. With this contest we used the motto ‘Defend your imagination’. Within a short period of time, more than 500 project applications came in from all over the country, from Van to Edirne and Sinop to Antalya. 310 of them were reviewed at the evaluation camp held in Ankara on November 23-25. After the detailed and multi-stage evaluation process by the expert jury delegation, 20 projects were shortlisted.”

Emphasizing the increasing importance of unmanned and autonomous systems in the recent period, Prof. Demir said that they should establish channels to those who say “I have an idea”. Underlining that they will offer all kinds of support for the maturity and realization of these ideas, Prof. Demir

also stated that the wheel would be spun by sector representatives, researchers and young people, and gave the good news of a more dynamic and participatory competition season for ‘Roboik’ which will be announced in the first month of 2018.

The Unmanned and Autonomous Land Vehicles Design Competition, organized for the first time this year by the Undersecretariat for Defense Industries under the name of “Roboik”, aims to design unmanned systems to contribute toward increasing the operational capabilities of both internal security and the military field by using advanced technologies, to minimize the error margin, to prevent possible personnel casualties or to reduce it to a minimum level, and to provide added value to the sector by the broad participation of young and productive minds with appropriate incentives.

20 out of 310 Projects shortlisted – “Efe Modular Autonomous Vehicle Project” received the grand prize

The planning studies for the Roboik-Unmanned and Autonomous Land Vehicles Design Competition were initiated in January 2017. The announcement of the contest was made on 12 June 2017 and the applications were received by 19 October 2017.

310 projects were evaluated by the jury following the application process, which was finalized on October 19, 2017.

A software-based evaluation was conducted by the jury during the evaluation camp held on 23-25 November. In this 3-day evaluation camp, where the owners of the projects were not known by the jury, 20 projects were shortlisted. The owners of the projects

ranking the highest among the 20 projects were given awards at a ceremony held after the “Unmanned and Intelligent Systems Workshop.”

Uğraş Akpınar received the Roboik Competition Grand Prize of 100,000 TL for the “Efe Modular Autonomous Vehicle Project”. The 2nd Prize was given to Çağrı Demirbaş for the “Dost Autonomous Robot Project” and the 3rd prize was granted to Hakan Cavit Yıldız for the “Otosar Halka-Province Project.”

The honorable mention awards within the scope of the contest were given to Levent Tuna and Cengiz Akarsu for the “Mergen Project”, Volkan Gökalgp the “Atılgan-1 Project”, Tolga Yaşar Yılmaz for the “Gergedan Project”, Utku Yücelmiş and Nurullah Taşkın for the “YUNT-6x6 Tactical Wheeled Unmanned Land Vehicle Project.”

The jury’s encouragement award was given to Barış Bumin, Abdulkadir Uruç and Sayit Alişan for the “Baykuş Project.”

Prototypes to compete in 2018

A contest is scheduled to take place with two categories following the Unmanned and Autonomous Land Vehicles contest in 2018. The aim is to develop prototypes for companies through this contest by giving algorithm-oriented, performance-based tasks to individual participants attending this contest from universities. Projects preselected within this format will progress to the next stage and prototypes of selected projects will be produced with financial support and incentives provided by SSM. In addition, contests for Unmanned Land Platforms, Unmanned Air, Underwater and Surface Vehicles are also planned to be realized by SSM in the future.



Responsibility Area of TSSÖDYP Formed by the Life Cycle Management Main Group and Study Groups under the Main Group



As it is already known, studies are being conducted on the application of the Life Cycle Management approach, which takes into consideration the Logistics Support Period and the Supply Period as a whole, in our country's defense programs / projects. Studies in related countries, both in NATO and developed countries, are closely followed and with active participation by the Chief of General Staff, Ministry of National defense, the TAF, Undersecretariat for Defense Industries,

related public sector units and defense industry companies.

In order to integrate the know-how gained from such studies with the practices and approaches in our country, it is considered necessary to establish a platform where all relevant stakeholders can work together in order to develop country-specific models on Life Cycle Management.

To this end, the "Turkish Defense Industry Life Cycle Management Platform (TSSÖDYP)" was established under the roof of SSM in order to conduct studies with the joint effort of stakeholders regarding life cycle management models, processes, methods, analyzes, standards, expenses, logistics planning and Depot Level Maintenance (DSB) Capability Acquisition, Public-Private Sector Collaborations, etc.

The Responsibility Area of TSSÖDYP formed by the Main Group responsible for platform management and Study Groups under the Main Group has been determined as follows:

- To increase the level of general knowledge / experience between stakeholders in order to conduct scientific / practical studies on effective Life Cycle Management required by defense systems / platforms,

- To put forward approaches that can be the basis of the application, to work toward more cost efficiency / resources and program / project management and to prepare the required documentation,

- To develop approaches regarding conceptual issues and make recommendations for solutions in required areas

- To contribute to the immediate completion of related issues by the provision of two-way communication by functioning as a focal point for the institutions the platform members are affiliated with

- To follow national and international studies, actively participate in such studies, organize training programs, seminars and workshops

- To work with the study groups to be created at the level of expert personnel

Within the scope of the TSSÖDYP Job Description, the names of the Main Group members to represent SaSaD which will be responsible for the management of the platform have been identified. The study groups required under this Main Group will be established and the necessary documents will be prepared by these groups and presented to the Main Group.



3rd International Cyber Warfare and Security Conference Held in Ankara

The 3rd annual Cyber Warfare & Security Conference was held in Ankara, on November 27-28, 2017 under the auspices of the Undersecretariat for defense Industries; supported by the Prime Ministry, the Ministry of Transport, Maritime Affairs and Communications, the Ministry of Science and Technology, the Ministry of Development, Information Technologies and Communication Authority, TÜBİTAK and organized by Defence Turkey Magazine and SaSaD with the main theme of "Strengthening the Cyber Security Ecosystem and the Cyber Security Cluster", with the participation of approximately 400 representatives and officials from public institutions, organizations and the private sector.

During the two-day conference, cyber security experts from various countries, managers, NATO officials, Turkish military and defense officials gathered at various panels namely "Cyber Security and Defense Policies of Nations", "Cyber Security Clusters; Collaborations to Strengthen the Cybersecurity Ecosystem", "Emerging Technologies for Cyber Security", "Government, Academia and Industry Cooperation on Cyber Security" and "Strengthening the Cybersecurity Ecosystem with a New Turkish Cybersecurity Cluster."

The Undersecretariat for defense Industries shared the model studies for the establishment of a security cluster in Turkey which was developed as a result of the Public, University, Private sector workshops realized prior to the conference. The main theme was identified as "Strengthening the Cyber Security Ecosystem and the Cyber Security Cluster."



At the 3rd International Cyber Warfare and Security Conference, a goodwill agreement was signed between the Undersecretariat for defense Industries and the Middle East Technical University (METU) and Istanbul University (İTÜ) for the formation of a study group for the cyber security academy for the elimination of human resource deficiencies within the cyber security cluster.

According to the goodwill agreement, for the immediate improvement of Turkey's lack of human resources in the area of cyber security, joint activities are to be conducted by forming a cyber security academy study group in order to inform decision makers regarding the establishment of a model for an academy, identification of a strategy and a road map and the assignment of roles.

During the conclusion of the conference, an announcement was made regarding the initiation of a cyber security cluster in Turkey.

According to the public declaration made by the Deputy Undersecretary for defense

Industries Mr. Mustafa Şeker, it was mentioned that activities for the establishment of a cyber security cluster had been initiated. In furtherance of the establishment of this cyber security cluster, initially a founding board of directors will be formed by the relevant shareholders and by this board the activities for the establishment of a foundation which will be in charge of the management will be launched. Companies conducting product development and providing services through local and national resources will be identified and included in the cluster as per the conditions of becoming a member.

In the short and medium term, an information portal will be formed, and a primary product and technology road map will be determined. Activities and training aimed at increasing domestic and national awareness will be held with the participation of all shareholders. Mechanisms will be built for training personnel. The certification and standardization of companies will be managed by the mechanisms built under the auspices of the cluster as well.



TAI Directorate of Procurement and Industrialization – Processes on Supplier Development and Supply Chain Management

Supplier Development and Supply Chain Management processes are carried out by the reengineering and prototyping department via the following steps:

- To determine the system, subsystem, equipment and consumables required in indigenous projects to be developed/ manufactured by TAI, such as landing gear, hydraulics, air conditioning, fuel, servos, canopies, flight control systems,
- To conduct feasibility studies and risk assessments for design, development, production, testing and certification processes by consolidating similar issues discussed in the coordination meetings held within TAI,
- To determine strategies together with senior management,
- To conduct company inquiries that manufactured or are to manufacture these with existing domestic facilities in Turkey (Capability inquiries are carried out with support from the Undersecretariat for defense Industries, Aerospace Clusters, Chambers of Industry, other institutions of TAFF and similar institutions). Within this scope, one-to-one meetings are held with the manufacturer companies through various organizations.
- To entirely define the requirements for the determined company or companies (Technical specifications, required quantities, first date of delivery, test and quality acceptance conditions are determined within TAI by coordinating with the related program management and design units),
- To sign nondisclosure agreement with the companies,
- To inspect the aircraft with the representatives of the company if necessary, to visit assembly lines and to hold technical meetings with design teams,
- To request technical information / proposal from the company, (RFTI, RFI, RFP processes),
- To conduct capability and technical evaluations,
- To create the calendar / schedule and price negotiations,
- To determine investment needs of the company if necessary (Presently, it is sought that there are no similar investments made in Turkey)
- To conduct trial production on subject matters where no investment is needed,
- To evaluate the Quality Management System and Airworthiness Processes of eligible companies and to conduct the approval processes by TAI,
- When the manufacturability is understood, the completion of contract negotiations and the commencement of work orders by posting orders,
- To initiate the project by issuing purchase orders upon the finalization of contract negotiations after the company's capability to manufacture is recognized,
- The design processes of the companies in the work packages that require design and development are evaluated together with TAI technical teams within the determined milestones.
- Delivery of completed equipment / systems together with test reports in accordance with the acceptance / test procedure to be approved by TAI,
- To provide KOSGEB support following the contract award if it is determined that investment support is required for production and that the company can achieve it,
- Work packages that are requested to be outsourced due to their statement of work (SOW) are evaluated by TAI Manufacturing Engineering by taking into consideration many criteria such as scope, project type, production quantities, technical complexity level, material type, bench requirement and special process approvals,
- To determine the appropriate supplier list among the TAI approved suppliers and manage the RFP processes with the TAI PMS software system,
- To meet immediate delivery needs by using alternative outsource processes such as bench leasing and etc.
- To supply equipment not related with the product index such as test equipment, etc.
- To manage application and evaluation processes by applying the procedures announced on TUSAŞ's webpage if there is a need to work with a new company,
- To determine suitable firms by evaluating cost, capacity, past quality and delivery performance and technical capability qualifications in the bid evaluation process,
- At the end of each year, the companies are certified in the range of Bronze-Platinum certifications by evaluating the above-mentioned performance of companies.
- The number of "strategic subcontractors" in each type of business is determined by evaluating primarily the business volume, risk and technical ability criteria, as well as financial infrastructure, organizational structure, sustainability, cooperation approach, thus supply chain maturity is increased.
- Sectorial events are organized in order to share information within the framework of Auxiliary Industry Activities of TUSAŞ needs on issues such as outsourcing management processes, new supplier application processes, expectations, aviation/ aerospace requirements, production and quality requirements with Industry Chambers, Aerospace and defense Clusters, Undersecretariat for defense Industries and similar structures.

Auxiliary Industry Operations Directorate

- The Auxiliary Industry Operations Directorate determines the conditions of contracts and transfer for the parts transferred to the programs developed / produced by TUSAŞ among the following business lines and manages the tender processes:
 - Machining,
 - Sheet metal Forming,
 - Composite,
 - Wiring,
 - Assembly / Sub-Assembly,
 - Component,
 - Tool / Device Design and Production

Aselsan Supply Chain Management

Aselsan has been working with SMEs and sub-industry companies since its establishment and places great importance on this issue. According to our policy of benefiting from local sub-industry which is mentioned in our strategic plans and on various platforms; procurement of all kinds of goods and services that can be produced domestically will be provided from domestic sources and new investments will not be made in these areas.

In parallel with the increasing workload and technological developments of sub-industry companies in recent years, turnkey solutions including design activities in addition to production activities are being procured. The objective in this regard has been set as the procurement of system / subsystem-based products from our subcontractors in accordance with industrialization pyramid. In order to achieve this, the aim is to develop corporate subcontractor companies that have their own subcontractor management, project management and configuration management capabilities.

Support programs are being conducted to support the development of approved sub-industry companies. In addition to providing free of charge technical training to companies, transferring idle equipment to sub-industry companies, joint utilization of test equipment within Aselsan with the sub-industry companies and providing technical consultancy; loan facilities under appropriate conditions are provided to companies by making agreements with banks through the supplier financing model developed by Aselsan.

Knowing the importance of the utilization of SMEs and sub-industry companies in fulfilling Aselsan's responsibilities, our continuing activities continue, such as the contribution toward their development by supporting our sub-industry companies and conducting research activities for qualified new sub-industry companies.

Detailed information on this subject and the Aselsan supplier candidate application form can be reached through the Aselsan Supplier Portal on the Aselsan corporate web page. (<http://www.aselsan.com.tr/products/pages/default.aspx>)

TAI Hosts Retired Military Officers Under the Coordination of SaSaD



Nearly 125 retired military officers who served in various positions in the procurement office, military factories and shipyards of the Turkish Armed Forces were hosted by TAI in coordination with SaSaD.

During this visit, retired military officers were given a briefing on TAI's products and capabilities, and a trip was organized to the production and assembly line.

Defense Industry Fairs that Turkey will Attend with National Participation in 2018 Announced

Under the coordination of Undersecretariat for Defense Industries, Turkey will participate in a total of seven international defense fairs in 2018.

As per the list published by the Undersecretariat for Defense Industries for the stakeholders of the sector this year, Turkey will participate nationally in seven International Defense Industry fairs under the auspices of Undersecretariat for defense Industries. The list includes the following international fairs:

- DIMDEX 2018 - Doha / Qatar - 12/14 March 2018

- DSA 2018 - Kuala Lumpur / Malaysia - 16/19 April 2018

- KADEX 2018- Astana/ Kazakhstan - 23/26 May 2018

- EUROSATORY 2018- Paris /France - 11/15 June 2018

- ADEX 2018 - Baku / Azerbaijan - 25/27 September 2018

- INDO DEFENCE – Jakarta / Indonesia - 7/10 November 2018

- IDEAS 2018- Karachi / Pakistan - 27/30 November 2018

SAVTEK 2018

The Defense Technologies Congress (SAVTEK) will be held between June 27 and 29, 2018 by METU-BİLTİR and SaSaD under the auspices of the General Staff, Ministry of National Defense and the Undersecretariat for defense Industries.

It is expected that there will be intense support and participation of SaSaD members for the Congress which will have a high level of

participation from the General Staff, Ministry of National defense and the Undersecretariat for defense Industries.

Detailed information about the Congress can be obtained from our Association or from <http://www.savtek.metu.edu.tr/>