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## ONUR VCS/VRS Systems Provide Convenience and Additional Capabilities in Terms of Use, Maintenance and Operation

**In our Interview, General Manager of ONUR - Noyan Dede discusses the efficient and functional VCS/ BRS systems that run in an IP-based digital environment. As Experts in their field, ONUR is willing to establish systems at over 40 more airports with support from DHMI for the needs that may arise both at airports and air traffic control centers.**

**✈️ Aviation Turkey:** Mr. Noyan Dede, could you inform us on the current structure, number of employees, and services offered by ONUR Mühendislik A.Ş. The company was

established in 1980 to operate in the defense industry and civil aviation fields and was accredited as an R&D Center in August 2016. We'd like to learn more about the company's technology know-how and vision.

**Noyan Dede:** Our experience spans 40 years full of learning and development... With our team of 130 staffs, we are specialized in producing voice communication systems for Turkey's mission-critical applications. Today, we undertake the life cycle management of our own systems, including system design, software development, production,

integration and after-sales services. We started in this journey with contract work, then we extended to integration and then to the development of our own systems. Our vision is to become one of the strong competitors for these systems globally.

**✈️ Aviation Turkey:** What would you like say about the 2019 performance and 2020 targets for ONUR Mühendislik, a well-respected company that has been serving defense industry and public institutions for 40 years in our country?

**Noyan Dede:** 2019 was a milestone for us. In 2019, we completed some of

our critical projects and we reached the home stretch in other projects. Multitasking at the same time in engineering and system development is a capability that most of our competitors do not have.

Also, 2019 has another meaning for us. In the last period of the year, we have signed a contract for the first time to deliver our voice communication systems developed for air traffic control to an overseas client.

**✈️ Aviation Turkey:** ONUR Mühendislik has created public awareness mostly with its projects realized in the defense industry, but with the introduction

of the communication solutions you have developed for military use with national resources in recent years, civil aviation sales also started to get a substantial share in the Company's turnover. Do you have a new structure that will increase the investments in the field of Civil Aviation in the upcoming period? Could you share with us your short and medium-term goals in this regard?

**Noyan Dede:** In the field of Civil Aviation, we follow the regulations with the Directorate General of Civil Aviation (DGCA) regarding the new needs that have emerged due to the increased usage rate of unmanned systems, in particular. On the air traffic control side, we continue to hold talks with the General Directorate of State Airports Authority (DHMI) to further expand our domestic and national systems and minimize foreign dependency.

We continue to present our projects not only for our airports, but also for air traffic control centers and unmanned aircraft traffic.

During the period that we had gained momentum abroad, the Covid-19 outbreak hit and impacted global trade. We are holding for the effects of the outbreak to fade in the world, and we are maintaining our position.



**Aviation Turkey:** What would you like to say about ONUR Mühendislik's ongoing export activities, the most important export markets, the tenders and needs currently followed and the share of export in the Company's turnover?

**Noyan Dede:** Since 2017, we have been following the opportunities with our own systems ready for export. We are confident enough in our systems and our competitiveness.

Through the contract we signed with the civil aviation authority of the Kingdom of Morocco in 2019, we are eager to accelerate our export activities by increasing our recognition level abroad.

**Aviation Turkey:** Engaging in 4 major activity fields as Voice Communication Systems, Air Traffic Control Systems, Network Enabled Communication Systems and Cyber

Security Systems, ONUR Mühendislik is one of the few companies having the competence to perform as the main contractor in meeting the needs of the General Directorate of State Airports Authority (DHMI) especially in the field of Air Traffic Control Systems, the Presidency of Defense Industries (SSB) and the Turkish Armed Forces (TAF). Could you inform our readers on your capabilities in the field of Air Traffic Control Systems for civil and military customers and your ongoing major activities?

**Noyan Dede:** Our voice communication system and recording and replay system, which we designed and produced with domestic and national resources under the ONUR brand in the field of Air



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Traffic Control Systems, have the capability to meet all the needs of both airports and air traffic control centers. Currently, the communication in military airspace of our country which is quite intense is carried out with ONUR systems. This actually indicates the high level of competency that we have achieved as a company.

We are also confident in civil airspace management and control. We continue our talks for further use of our own systems, which are developed in our country and provide 24/7 support, instead of the foreign-origin systems used so far.

As you know, Voice Communication Systems (VCS) are now evolving to operate compatible with Internet Protocol (IP) numerically. The US Federal Aviation Administration (FAA) and the European Organization for the Safety of Air Navigation (EUROCONTROL) are in the process of setting standards and rules for this brand-new application. We, as ONUR Mühendislik, participate in the standard-setting process with the invitation of the aforesaid institutions and we represent our country. This detail alone is sufficiently acknowledges the level of our competence.

**Aviation Turkey:** What would you like to tell us about your Mobile



**Air Traffic Control Tower (OMT-M2000) solution in your Air Traffic Control Systems product range which is in compliance with both civil and military air traffic safety standards?**

**Noyan Dede:** Today, Mobile Air Traffic Control Towers are the systems frequently used for air traffic control in emergencies or special conditions. In short, these are the systems that can be transported anywhere with a carrier vehicle and become operational within 1 hour. Currently, there are two ONUR OMT-M2000s in the inventory of the Turkish Air Forces Command. They successfully perform their tasks at home and across the border. Our negotiations continue for the use of these systems in international projects.

**Aviation Turkey:** Could you inform us on the new IP based Voice Communication System (IP-VCS) OCS-NG4000 developed for air traffic control communication?

**Noyan Dede:** We can easily say that our Voice Communication System (OCS-NG4000), developed and produced indigenously, is the most capable and competitive product in terms of its features and price in its own market.

We have secured a tender in 2019, we are now carrying out the first export activity of this system, currently used in 37 airports in Turkey (11 of which are civilian), for the 5 airports in the Kingdom of Morocco.

**Aviation Turkey:** Under the contract you signed with DHMI in November 2015, leaving all international competitors behind, you established and IP-Based Voice Communication (VCS) and IP-Based Recording and replay System (VRS) for the towers of Adana-Gaziantep-Siirt-Muş Airports and delivered them to DHMI. With the project, the final acceptance of which was completed in January 2018, the indigenous

communication solutions you developed for military use with national facilities have started to be used in civil aviation for the first time. What feedback have you received from the end-users regarding VCS and VRS that are in use at these airports and which are in compliance with the EUROCAE ED-137 standard?

**Noyan Dede:** With these projects, DHMI was provided with a domestic and national product in compliance with the ED-137 standard for the first time. In this way, the systems previously used as analog at DHMI were gathered to be more lean/efficient and functional in an IP-based digital environment. In general, DHMI operators and maintenance staff in the field have given positive feedback that ONUR VCS/VRS systems provide great convenience and additional capabilities especially in terms of use, maintenance and operation.

In addition, as a local company, one of our most important added value areas is our ability to respond to all kinds of support and improvement requests in the shortest possible time.

**Aviation Turkey:** ONUR Mühendislik won the "New Generation Voice Communication and Recording Systems

Tender”, which was conducted by DHMI in 2018, involving the establishment of VCS and VRS systems at 7 airports, as the only domestic manufacturer, because foreign companies refused to bid on a TL basis and the contract took effect on October 19, 2018. Could you please inform us on the latest status of the installation activities and the technical features of the VCS and VRS systems established?

**Noyan Dede:** After our intense efforts in this project, we have completed the deliveries for 7 airports. With the start of 2020, our systems started to be commissioned.

Our Voice Communication, Recording and Replay Systems installed at the airports have many superior features. For example, the systems are able to support all kinds of telephone and radio interfaces, match the radio systems with phone calls, they allow the system components to be installed at different locations over the network and allow all calls to be recorded with time stamps.

**Aviation Turkey:** Considering the fact that there are more than 50 airports in Turkey, is it also probable to extend these VCS and VRS systems to other airports? Are there any ongoing talks with DHMI on this topic?



**Noyan Dede:** This is a very good question. We have established our IP-Based Voice Communication System at 11 civil airports so far. We continue our support activities for such systems on a 24/7 basis.

We have nearly 40 more new airports and we, as the expert in this field in our country, are willing to establish our systems at all of these airports. For the needs that may arise both at airports and air traffic control centers, we expect support from DHMI, as other countries give to their own manufacturers.

**Aviation Turkey:** What would you like to say about the Factory Technical Training given by ONUR Mühendislik to DHMI personnel for the VCS and VRS systems that will be put in use at 11 airports operated by DHMI? How many personnel have been trained so far? With this training, has DHMI reached the competency level that can perform

the maintenance of the delivered VCS and VRS systems on its own? What could you tell us about the training planned for 2020?

**Noyan Dede:** Within the scope of the projects realized, system maintenance training was given to the maintenance staff located at all relevant airports. In addition, user training was also provided to user operators.

**Aviation Turkey:** Could you inform our readers about the other projects your company is currently working on in the civil aviation field?

**Noyan Dede:** I have referred to our projects for 4+7 airports for which we are responsible to DHMI. We are also willing to conduct the modernization project of DHMI for its air traffic control centers and we expect its support to companies having domestic and national solutions. Our systems seamlessly operate under the control

of the military airspace of our country. We also want to prove ourselves in the civil aviation field.

**Aviation Turkey:** In the field of civil aviation, you previously delivered a tower to Erbil Airport in Iraq in full operation, after the supply and integration of all navigation systems. Have you awarded similar contracts abroad during the recent period?

**Noyan Dede:** As a company with 40 years of experience, we have gained significant know-how and seasoned experience during this 40-year period. Our journey started first with contract work and then it extended to integration and now we develop our own systems.

ONUR Mühendislik is one of the few companies in the world that has the know-how to integrate all systems at airports. We have recently undertaken the integration of ILS systems of Sabiha Gökçen Airport's existing and new

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runways and we continue our activities in this project.

We are in search of establishing partnerships with the foreign navigation systems manufacturers, in which ONUR Mühendislik will assume an integrator role.

**✈️ Aviation Turkey:** Could you inform us on the overseas projects of your company that are currently underway or being followed?

**Noyan Dede:** As I mentioned previously, we have an ongoing project in the Kingdom of Morocco. This export is an important step for us. With this achievement, we are now able to meet the qualification requirements of many tenders. We believe that we can be exceptionally competitive in every region under the conditions of fair competition. Therefore, we keep a close watch on all kinds of tenders appropriate to our conditions, in Eastern Europe, Turkic Republics and the Middle East.

**✈️ Aviation Turkey:** What would you like to say about your company's competence in the field of Cyber Security systems and the ongoing activities?

**Noyan Dede:** As I previously mentioned, transition of communication systems to an IP-based structure makes them more "vulnerable" to cyber threats, while providing ease of use and flexibility. For this reason, we are working on



new capabilities towards requests received from our users to make our systems more robust and secure against cyber threats.

**✈️ Aviation Turkey:** Could you inform us on the R&D approach of ONUR Mühendislik, which was certified as an R&D Center in August 2016, the number of R&D personnel, the amount of resources allocated to R&D studies and the ongoing R&D activities?

**Noyan Dede:** Many of the projects executed by our company are R&D projects. All the products that are developed and produced under these projects are indigenous products and incorporate critical innovation.

The majority of our ongoing R&D activities are based on gaining cyber security capabilities to the products that I mentioned earlier.

**✈️ Aviation Turkey:** What would you like to say about ONUR Mühendislik's expectations and goals for the next decade?

**Noyan Dede:** During the next 10 years, we want to become a regional power center and a global competitor with brand awareness and value in the sector.

Within our company, we aim to achieve a shorter design-production-delivery cycle and further increase customer satisfaction.

**✈️ Aviation Turkey:** What would you like to say about ONUR Mühendislik's participation in domestic and international fairs in 2020?

**Noyan Dede:** Our top priority is the IDEF fair within the country, but you know it will be held next year, in 2021.

Unfortunately, the international fairs we planned to attend were canceled due to the Covid-19 outbreak.

**✈️ Aviation Turkey:** Do you have any messages you would like to convey to our readers?

**Noyan Dede:** Our Presidency of Defense Industries shows the most determined stance to support domestic and national solutions in our country, and thanks to this stance, many large- and small-scale enterprises, and most importantly, our country has acquired an indigenous product with high added value in its field. Our greatest wish is that other public institutions also give priority to indigenous and national products in conducting their supply plans, with the same sensitive approach 🇹🇷