**Press Release October 2023**

**National Systems Protect Turkish Warships Against**

**Chemical, Biological and Nuclear Threats**

*Türkiye’s first CBRN Detection and Identification System, which has been developed using national resources, is providing round-the-clock protection to warships against chemical, biological, radioactive and nuclear threats. The national CBRN D&I System is in operation aboard more than 10 platforms, including Turkish warships and vessels constructed under foreign military ship projects.*

Having played a significant role in Türkiye’s “fully independent defence industry” goal by developing innovative and national systems for the Turkish defence industry, STM Savunma Teknolojileri Mühendislik ve Ticaret A.Ş. is continuing in its efforts to indigenise the production of critical systems.

STM has worked in collaboration with its strong ecosystem in the field of naval platforms to indigenise the production of this critical system in Türkiye, being a technology that previously had to be sourced from abroad. The development of the CBRN D&I System, which when integrated into naval platforms protects them against chemical, biological, radioactive and nuclear threats, was launched in 2014 as a collaboration between STM and MAKEL Teknoloji A.Ş.

**Integration into National Vessels, Exports have Begun**

Developed with contributions by the Turkish Naval Forces, the system was first integrated into the Ada-Class corvettes constructed under the MİLGEM programme – Türkiye’s first national corvette project, in 2015. TCG BURGAZADA and TCG KINALIADA, the third and fourth corvettes to be constructed under the MİLGEM programme, were the first vessels to be fitted with the national CBRN D&I system. Thereafter, the system was successfully integrated into TCG UFUK – the Test and Training Ship constructed under the main contractor of STM, and TCG İSTANBUL, Türkiye’s first national frigate.

The national CBRN system has since been integrated into TCG ALEMDAR and TCG BAYRAKTAR of the Turkish Naval Forces, and into the ships constructed under the Pakistan MİLGEM Project, representing the first export of the system. The system will also be integrated into the two MİLGEM Class Corvettes being constructed under an export project under the main contractor of STM.

**High-Level Protection Against CBRN Threats**

Conventional CBRN weapons, which are an ever-evolving threat, and toxic industrial hazards are among the primary threats to warships. The indigenously developed CBRN Detection and Identification System allows the detection of chemical, biological, radioactive and nuclear threats by vessel commands. The system comprises five different pieces of hardware, including the CBRN Detection and Identification System Main Console, a Biological Agent Detection Device, a Biological Sampling Device, a Radioactive Detection Sensor, and a Detection and Identification Device for Chemical Warfare Agents and Toxic Industrial Agents, along with other indigenous software.

The system provides a fast and reliable warning in the event of a chemical, biological or radioactive threat being detected by the state-of-the-art sensors, allowing the ship personnel to take the necessary defensive measures. The indigenous CBRN D&I system can operate around the clock in the most challenging of environmental conditions, and can simultaneously monitor for the presence of various chemicals, biological agents and toxic industrial materials. The system can detect and analyze the threatening substance, whether in a liquid, solid or gaseous form, and boasts a broad detection range and a continuous data recording function. Threats detected by the CBRN D&I System can be monitored on both the main console of the system and via the vessel’s Integrated Platform Management System (IPMS).

**Güleryüz: System Detects Unseen Threats**

Özgür Güleryüz, General Manager of STM, reminding that many critical systems had been indigenised under the MİLGEM Project and foreign export projects, said:

“A few weeks ago, we announced that we had developed a Helicopter Visual Landing Support Lighting System (HEGIDAS) and Fin Stabilizing System for the first time in Türkiye. The first indigenous and national CBRN D&I System of our country has been operating successfully on various platforms since 2015. This system was developed in collaboration with our subcontractors, in accordance with NATO standards, and has been certified by internationally recognized bodies. It has an advanced detection range in recognition of the requirements identified by our Naval Forces. As we can indigenously perform the calibration and maintenance of the indigenous CBRN D&I System, we have not only ended our foreign dependency in this field but have also facilitated the export of the system. We take pride in bringing high value-added products to our country.

**About STM**

STM has been serving the Turkish defence sector for over a quarter of a century in such areas as engineering, technology and consultancy, working in fields that are critical for Türkiye and its allies. It applies its advanced capabilities and technologies to a broad range of strategic fields, ranging from naval platforms to tactical mini UAV systems, from satellite works to cybersecurity, and from big data analytics to artificial intelligence applications.

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