ADSB and Technology Innovation Institute (TII) Collaborate on New Naval Innovation Hub to Advance Naval Technologies

- *ADSB and TII unveil a Naval Technology Innovation Hub to accelerate research, integration, and testing of next-generation naval systems.*
- *The agreement focuses on propulsion, directed energy, autonomy, and advanced analysis services*

Abu Dhabi, UAE – 10 September 2025 – EDGE Group entity, Abu Dhabi Ship Building (ADSB), has signed a collaboration agreement with the Technology Innovation Institute (TII), the applied research arm of Abu Dhabi's Advanced Technology Research Council (ATRC), to expand capabilities in naval maritime technologies.

The agreement includes the launch of a Naval Technology Innovation Hub, an advanced facility that will fast-track research, integration, and testing of next-generation naval technologies, including autonomy, propulsion, materials, and secure systems.

Dr. Najwa Aaraj, CEO of TII, said: "Our collaboration with ADSB reflects our shared commitment to shaping the future of naval capabilities through science-led innovation. By aligning TII's deep research strengths with ADSB's operational expertise, we are laying the

groundwork to rapidly transition advanced technologies from concept to deployment, reinforcing Abu Dhabi’s position in the global maritime landscape."

David Massey, CEO of ADSB, said: “This Innovation Hub, aimed at advancing naval technologies, reflects our commitment to positioning the UAE as a leader in global maritime defence technology and innovation. Through focused expertise and strategic partnerships, we aim to set new standards in naval defence, sustainability, and advanced maritime operations.”

Under the agreement, the two organisations will advance joint initiatives to accelerate innovation in the naval domain. This includes exploring emerging technologies such as quantum magnetic sensing, computational fluid dynamics (CFD) inspired by quantum principles, underwater, autonomous, robotic technologies and advanced materials like anti-corrosion coatings and composite armouring.

The partnership will also support projects in marine autonomy, unmanned underwater systems, diver communication and detection solutions, as well as next-generation sonar and hull treatment techniques. Together, both entities will contribute technical expertise, test facilities, and integration capabilities to bring these innovations from research to real-world application.

Central to the collaboration is the Naval Technology Innovation Hub, a jointly operated and co-funded laboratory environment dedicated to co-developing, evaluating, and integrating cutting-edge maritime systems.

The hub will provide real-world testbeds, a shared technology roadmap, and a framework for talent and knowledge exchange. It will also pave the way forward in creating a unique collaboration model offering top local and global naval players the opportunity to test and validate naval technologies and maritime solutions in real conditions, supported by Subject Matter Experts.

The hub builds on previous successful collaboration between TII and ADSB, notably autonomous and stealth unmanned surface vehicles, an unmanned surface vehicle enhanced with stealth and autonomy features, and the 170 M-detector unmanned vessel, primarily deployed for mine countermeasures and oceanographic missions.

The project combines ADSB’s strengths in design and testing and TII’s integration expertise, demonstrating the type of collaboration the new hub will formalise and expand.

This collaboration underscores Abu Dhabi’s strategic commitment to building robust, innovation-led defence capabilities and highlights TII’s and ADSB’s roles as pioneers in advancing next-generation naval technology.