

Business Development Director / Delta Marine

We want to be a key solution partner in international maritime projects

Delta Marine's aim is to become a key solution partner in design and engineering for national programs as well as international naval projects which could be organized by Turkish or non-Turkish main contractors.

We would like to answer to your questions from the Boat, Landing Craft Tank (LCT), Landing Ship Tank (LST), naval platforms programs perspective rather than a more general scope of activities in relation with Turkish Defense Industry.

First of all, we may claim that Turkish Naval Platform programs have gone through an evolution throughout the years in 20th and 21st century. Purchasing second hand warships from foreign countries left its place to technology transfer projects including transition of the limited engineering and design know-how taken from the very same foreign countries, to build naval ships and submarines in Turkey, especially in naval or governmental shipyards. Further to this period where a considerable experience had been gained, we won't be mistaken if we state that the most important milestone for Turkish Naval Platform programs was MILGEM which required the mosr serious involvement of local content in terms of design, engineering, manufacturing and construction not only by Turkish Navy and governmental bodies but also with private sector. A part from few programs/projects such as TCG Yarbay Kudret Güngör (A-595) or E-Class Training Boats, the close cooperation of Undersecretariat of Defense Industries (SSM) and private Turkish Shipbuilding Industry (main contractors and sub-industry) started with MILGEM program in mid-2000's. MILGEM is the solid proof that Turkey has become a member of a group of countries, able to design, build and operate their own naval ships. In the light of this important step, a synergy which started to occur between SSM and private sector shipyards, resulted as various projects such as New Type Patrol

Submarine Rescue Mother Ship (MOSHIP), Rescue and Towing Ship (RATSHIP), Fast Attack Crafts and lately Multipurpose Amphibious Assault Ship awarded to private shipyards. Turkish Navy is now expanding its inventory with ships designed and built in Turkey. Within the vision for Defense Industry, we are aware that more programs (fleet tanker, dry dock, research ship, tug boat, etc.) are on the way to empower even more the Turkish Navy Fleet. MILGEM program is also the main leverage for Turkey to become an exporter of naval ships and technology. Patrol boats built for Turkmenistan has been followed by two important technology transfer program under process with Pakistan, new building of a Navy Fleet Tanker and modernization of submarines. Finally, Turkey's climax in naval platforms is TCG Anadolu (Multipurpose Amphibous Assault Ship) which will be Navy's flagship when she will be accepted to the inventory. Looking from this perspective, Turkey's vision should stand on efforts for being a sustainable player naval platforms market in terms of design, construction, delivery of various types of units both at national and international level.

We are faced with examples of the success of the private sector

It is obvious that investments in naval section of the Defense Industry require, long-term vision and strategy, patience, hard work and development on ability to learn, apply/innovate new technologies. Building naval ships takes long time and big investment budget. In our era and environment, it is sometimes possible to see that a



new technology emerges during the development of the design or construction stage of such big projects. In the past, state-supported defense industry had always been the driving factor for innovation, invention and progress. Although this is still the case, we encounter examples of commercial sector's achievements which are precluding. Consequently, a better integration of defense industries requirements with commercial sector's agility should be discussed and implemented. Furthermore, defense industry has the effect to discipline its actors in terms of quality, certification, security, project management, etc. In the meantime, it should be considered that sustainability is the key to maintain a strong industry with strong companies. Within this view, the design and implementation of governmental programs on defense need to be arranged to ease the entry of investors aiming to design and/or manufacture while good organizational infrastructure and memory have to be maintained by all interested parties. Financial and regulative incentives may be improved further in favor of especially SME's to encourage their efforts

for R&D and product development. R&D centers and industry clusters would play a key role in this manner.

Utilities to be provided by the main-sub industry communication...

It is a well-known fact for everyone who is involved in defense projects that SSM is the main actor who coordinates various programs. SSM's support and advisory position to establish a strong bond between the main and sub industry members is for sure very useful and beneficial for all interested parties. Main industry or main contractors do not have to incorporate all skills and arrange all infrastructure required to succeed in defense projects. Creating a reliable and sustainable pool of sub industry has always shown its benefits in terms of flexible and gualified production, timely delivery as long as the standards and requirements are well set and applied. SSM could encourage all parties acting in defense industry to establish their own standards at internationally recognizable level, improve their project/program management capability which is one of the most important aspects of successful investments.

We deem necessary that in defense industry more competitive and qualified projects which aim knowledge-based society and lowest possible foreign-**About Delta Marine** source dependency have to be created. Following latest technological developments especially under As Delta Marine, we are proud of having played our role first in the design of E-Class training boats and then in the concept of Industry 4.0 and newer versions to MILGEM as the responsible for detail design activities. come, will have to be one of the obligatory duties of We have performed together with officers of Turkish all parties involved in this business. Moreover, the Navy for more than 5 years in Istanbul Naval Shipyard main target should be to get organized for creating Command for the design of first couple of Ada Class such technologies and implementing them in real Corvettes (TCG Buyukada and TCG Heybeliada). It is life. Energy (especially renewable energy), material our pleasure to state that in 2013, we were awarded science and software should be the least of areas to by STM A.S. as the main designer for Turkey's biggest focus for successful and sustainable improvements.

Looking at interests in naval or maritime sector, Turkey's geopolitical position and all events happening especially in our country's surroundings forced all interested Turkish parties at each level (from government to small SME's), to fasten their investments and focus on creation of national platforms. Needs and demands of Turkish Armed Forces are covered by MoD through SSM in a rational manner. This approach had also affected very positively the sustainability of private shipyards who had gone through a very difficult period soon after the economic crisis happened in late 2008. Specific shipyards who managed to get awarded with contracts to build naval ships have secured their operation, revised their organization and infrastructure to meet MoD's and SSM's requirements. New clusters encouraged by SSM is also very important for Turkish presence in international market because such organizations create more confidence in the eyes of prospective clients in need of naval platforms.



naval technology transfer program in single unit, Pakistan Navy Fleet Tanker. Our latest achievement is to become one of the detail designers together with our partner Ghenova Ingenieria as subcontractor to Navantia, within the new building project of Turkey's biggest naval ship, TCG Anadolu. This project is also important for Turkish ship design environment since it is the biggest ship design service export ever made. It is also noticeable that Mesh Engineering and Software Co., Delta Marine's sister company and solution partner has been performing engineering activities for defense industry especially as subcontractor to Roketsan in their various projects. Mesh's duty has been to carry out engineering analysis to validate and/or improve Roketsan's designs for missile launching structures. Delta Marine's aim is to become a key solution partner in design and engineering for national programs as well as international naval projects which could be organized by Turkish or non-Turkish main contractors.

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