

Developments in Naval Safety and Assurance

The pioneering goal-based Naval Submarine Code was discussed and approved at the 2014 International Naval Safety Association's (INSA) annual general meeting (AGM) held in Stockholm. The Naval Submarine Code is a goal-based standard setting a minimum level of safety for submarines and providing a framework for further work and development in this field. The benefits of this goal-based standard are that it considers the ultimate safety objective allowing for the consideration of alternative designs that meet the objective. With INSA approval the Naval Submarine Code will now be forwarded to NATO for ratification and publication as a new Allied Naval Engineering Publication (ANEP).

The Naval Submarine Code follows in the footsteps of the Naval Ship Code which was first released as ANEP 77 in 2008. The Naval Ship Code has now reached a stage of maturity which is supported by confirmation from a number of countries that they are applying it to, demonstrate the safety of both existing naval fleet and new build ships. Work for the MoD is ongoing to align Classification and Naval Defence Standards with the requirements of the Naval Ship Code, in order to provide a coherent framework for naval ship assurance.



2014 INSA annual general meeting held in Stockholm

Both the Naval Ship and Submarine Codes are developed and maintained by the International Naval Safety Association (INSA), a funded club of navies and classification societies of which the United Kingdom Ministry of Defence and Lloyd's Register are members. Work on the alignment of the Naval Ship Code with Classification and Naval Defence Standards is being carried out by the Naval Ship Assurance Support Service (NSASS), which is an alliance of Lloyd's Register and BMT Defence Services. NSASS was established to support the UK MoD in the development, and application of the Naval Ship Assurance Framework and to provide management of Naval Authority Certification information through the Naval Authority Knowledge Management Office.

With a revitalised focus on the quality of standards supporting our recent maritime design and acquisition activities the MoD Subject Matter Experts are being put under increasing pressure to ensure that the standards that they are responsible for are fit for purpose. The current projects rely on a technically correct and coherent set of maritime defence standards. The management and sponsorship of all maritime standards now fall to the Naval Technical Policy Committee (NTPC) to ensure that all MoD sponsored maritime standards used in design, manufacture and in-service are available in a timely manner and are of the necessary quality. Here there is increased focus on ensuring that the standards are coherent within themselves and with interfacing documents, processes and procedures.

The recent move to corral the unclassified maritime standards into a single document (the General Naval Standard) ensures coherency within the document as a whole and with interfacing documents such as Lloyd's Naval Ship Rules and the UK National Rules. The UK National Rules provide projects with a pre-endorsed set of tailored Lloyd's Naval Ship Rules. This initiative will ultimately save ship projects time and money when presenting their agreed approach to the application of Naval Ship Classification.

In 2000, the UK MOD put in place policy to formally certify its shipping (ships, submarines and boats) through the creation of the Naval Authority. With the vesting of the first Naval Authority Areas in 2001 it became clear to the MOD that they needed help in managing the information generated by their certification activities and, this requirement was competed as the Naval Authority Knowledge Management Office (NAKMO) contract. BMT won this contract in 2003 and is responsible for managing the certification information on behalf of the Naval Authority and to the benefit of all stakeholders. BMT also provides information to numerous Naval Authority meetings, for which it also acts as secretary and provides secretariat support to the MOD, in developing policy, processes and procedures.

At the heart of the NAKMO, is a web-based information system called the Naval Authority System (NAS). The purpose of the NAS is to be a high integrity communication system of the single point of truth for the status of: Certificates and their supporting documentation; and the safety and certification policy and supporting documents and tools. In a recent survey 94% of users (of 98 responses) agreed that the NAS achieves this purpose.

The NAS reports the certification status of over 130 classes of UK Royal Navy vessels (across 19 certificate types) and over 11,000 original scanned certification related documents that provide both current and historical information. The NAS has over 500 registered users including the Naval Authority officers, Platform Duty Holders, Navy Command, Ships' Staff, industry and organisations authorised to undertake Naval Authority duties. As well as hosting certificates and supporting documentation, the NAS alerts users as to when certificates and conditions of certification are to expire. The NAS also provides an electronic library containing policy documentation, procedures and general reference information. It is the primary source for key documents such as Joint Service Publication 430 - Management of Ship Safety and Environmental Protection.