

**ADDRESS BY THE CHIEF OF THE NAVAL STAFF, ADM. NIRMAL VERMA,
AT THE INTERNATIONAL HYDROGRAPHIC SEMINAR (*HYDROIND 2011*)
IN NEW DELHI - 03 MAR 2011**

Honourable Raksha Mantriji, Shri AK Anthony, Honourable Minister of Shipping, Shri GK Vasan, Vice Admiral Alexandros Maratos, President International Hydrographic Bureau, Vice Admiral BR Rao, Chief Hydrographer to the Government of India, industry partners, distinguished members of the hydrographic community from participating nations, ladies and gentlemen :



1. It gives me immense pleasure to be in the midst of eminent hydrographers from across world at this international seminar, which I think has a theme that is both apt and appropriate. In my view, hydrography is indeed an important instrument for regional cooperation and maritime safety and I compliment the Indian Naval Hydrographic Department for conceiving and conducting this important event. The seminar clearly reflects the Department's efforts to bring together hydrographers from across the world to support a significant common purpose.
2. To my mind, the ever-increasing attention paid by most states to the maritime dimensions of national security and well-being is a defining feature of the 21st century international environment. The seas today provide nations the means to not only enhance their economic prosperity and physical security, but to also combine efforts to counter common challenges and exploit opportunities to enhance the common good. Being a relatively non-intrusive, but extremely useful and necessary discipline, hydrography has extremely high potential as an element of international collaboration.
3. You would be aware that exchange of nautical information as a phenomenon is probably as old as man's association with the sea itself. Well before the advent of governmental hydrographic services, sailors in the Indian Ocean acquired and passed on to each other nautical information of interest through word of mouth and charts of varying accuracy and complexity. In the modern era, hydrographic activity and international hydrographic cooperation achieved a more organised character with the establishment of national hydrographic services.
4. Why is hydrographic cooperation a genuine necessity in today's world?
5. In my view, it is because a collaborative and integrated national and regional approach to hydrographic services has an inherent economic, humanitarian and scientific logic that cannot be ignored.
6. First, the economic dimensions. The wave of globalisation from the late 19th to the early 20th century established global maritime trade as the harbinger of prosperity. Navigational safety, a pre-requisite for maritime trade, was, therefore, a stimulus for cooperation. The collective international concern for maritime safety brought nations together to codify this cooperation and form the International Hydrographic Organisation in 1921 - in many ways, an endeavour that emulated what was an ancient mariner's natural instinct.

7. Today, the importance of maritime trade in sustaining the global economic system cannot be overstated. 90% of world trade by volume and 70% by value continue to ply over the surface of the seas. The enduring attributes of maritime transportation, namely low cost, high access and large carrying capacities, will continue to drive growth in this sector. By providing a rapid and commercially profitable means of transportation, ships have not only enhanced trade, but also intensified the processes of economic interdependence and globalization.

8. Infact, the very nature of today's mercantile marine symbolises globalisation and interconnectedness. A modern merchant ship is a global enterprise - built in one country; registered in another; owned by a company in a third; manned by a crew of probably different nationalities; and carrying cargo to and from many other nations spread across the world. A navigational accident would, therefore, impact stakeholders of varying nationalities simultaneously. This makes hydrographic services an element of common purpose.

9. Merchant fleets need updated hydrographic and marine safety information for the areas they are likely to visit or transit through. The sheer volume and complexity of efforts involved in compiling and disseminating this implies that no single agency or nation has the resources to ensure this on its own. Even if resource constraints were overcome, the issue of standardizing data-representation by transcending linguistic and cultural barriers would remain. Nations, therefore, have to pool resources and share nautical information and, in the interest of global trade and commerce, view enhancing safety and preventing accidents at sea as a collective maritime responsibility.

10. Second, the humanitarian dimensions. Cooperation in hydrography is particularly relevant to regions that are vulnerable to natural disasters and have large populations living on the coastline. Parts of South and South East Asia clearly fall into this category, going by recent experience. While hydrographic services play an important role in coastal zone management and enable the planning of coastal infrastructure in a way that reduces the likely humanitarian and economic consequences of a natural disaster, their role in restoring port and harbour services after such a disaster strikes cannot be undermined. This is particularly important since large volumes of aid and relief can only come by the sea. In this regard, I would like to cite the stellar role played by hydrographic services in the aftermath of the 2004 Tsunami in the Indian Ocean.

11. Cooperation is also driven by a third aspect - technology. Today's technology impacts how the hydrographer collects, processes and collates data and pieces them together into products for use by mariners. Emerging technology provides the means and tools that enhance the efficiency of hydrographic survey and allow regular and frequent updating of nautical information. It also requires hydrographers to interact frequently with all users and stakeholders to be able to do so.

12. Global positioning and satellite surveillance systems used extensively in hydrography today, and digital navigational products such as Electronic Chart Display and Information Systems and Electronic Navigation Charts, are too expensive to be owned, operated or manufactured by all users individually. Besides, hydrography itself has grown beyond making charts and facilitating navigational safety, into a wide range of critical maritime services such as port and harbour maintenance, coastal engineering, coastal zone management, offshore resource development, marine habitat management and pollution control. By themselves specialist fields, these call for a larger level of cooperation and interaction among all users, stakeholders and practitioners that are spread beyond national or regional boundaries.

13. I have highlighted what I thought was a strong economic, humanitarian and technological rationale for hydrographic cooperation. There is, however, another factor that cannot be lost sight of — that of capacity building. Not all regions and nations have the ability today to provide the required hydrographic services within their jurisdictions. There still remains much to be done in building and sustaining the capacities of all states to do so. This is particularly true for the Indian Ocean littoral.

14. You are all aware that surveys and resurveys are ongoing processes that enable us to understand shifts in marine geography and cater to the ever-changing requirements of maritime safety. The continuous exploitation of the seabed, coupled with the compulsions of oil and gas economics, has created new cruising patterns in the approaches to many ports and harbours. Simultaneously, under keel clearances have also continued to reduce. These have made new demands on our hydrographic agencies and defined new hydrographic requirements. It is in common interest to enable coastal states to provide credible hydrographic services in the areas under their control. I hope this forum will focus its efforts in identifying new ways to do so.

15. In this connection, I take the opportunity to highlight here the commitment of the Indian Naval Hydrographic Department to national and regional capacity building. The Department has, over the years, contributed significantly to international maritime requirements by furnishing accurate and reliable hydrographic services that have enhanced offshore development and safety at sea. It undertakes extensive surveys in coastal and inland waters and the deep seas, to ensure navigational safety, and facilitate oceanographic and environmental observation; pipeline and cable routing; and EEZ, continental shelf and maritime boundary delineation. Its many products are used not just by mariners, but increasingly by research organisations and other marine corporations. We are proud of its effort to promote hydrography in the region - perhaps even beyond it - and of its endeavour to increase the ability and capacity of maritime neighbours to provide necessary hydrographic support in the region. We look at the Department continuing to be an important element of the Indian Navy's regional engagement initiatives in the decades to come.

16. I conclude my remarks by making two broad points: first, cooperation in the hydrographic domain can no longer be seen as a matter of choice: it is an endeavour for common good and ought to be seen as such; and second, hydrographic cooperation has broader geopolitical benefits: while primarily promoting maritime safety, it serves as an instrument of international confidence building and friendship.

17. That is why a seminar of this nature is relevant to all of us. It permits meaningful interactions that enable all stakeholders to meet and exchange views that improve and enhance our hydrographic capabilities and performance. It also brings together practitioners and stakeholders to debate the role of hydrography in furthering maritime safety and regional cooperation. Importantly, it gives the surveyor, the modern maritime explorer of sorts, an opportunity to meet his compatriots from other nations and brainstorm on how his trade could be further expanded and enriched.

18. It has been a pleasure to be with all of you this morning. I hope you would find the proceedings of this seminar interesting and engaging. I take this opportunity to wish you the very best in your endeavours. And particularly for our friends from foreign navies - I sincerely hope you have an enjoyable and professionally fulfilling experience during your stay in India.

Thank you

Note : See over Admiral Nirmal Verma , Chief of the Naval Staff biography.