

Address by CNS at the Inaugural Session of FICCI Seminar on
'Building India's Future Navy:
Technology Imperatives' - 31 May 2017

1. Shri Arun Jaitley, Hon'ble Raksha Mantri, Dr S Christopher, Chairman, DRDO, Shri Rajendra Singh, Director General Indian Coast Guard, Shri Pankaj Patel, President FICCI, Flag Officers, our esteemed veterans, distinguished scientists from R&D organisations, industry representatives from India and abroad, friends from the media, ladies and gentlemen.

2. It gives me immense pleasure to be here in the midst of this august gathering for the inauguration of a Seminar on a subject that is of great significance to the Indian Navy, the defence industry and indeed the nation.

3. At the outset, I would like to thank the Federation of Indian Chambers of Commerce and Industry for having organised this Seminar. FICCI has always played a very positive role in promoting the Indian defence industry. Through this seminar, FICCI has further demonstrated its commitment to the nation's vision of achieving self-sufficiency in building a Navy of tomorrow. A nation that not only possesses cutting edge military technology but also has a *Made in India* stamp on it.

4. Ladies and Gentlemen, rapid technological advances in various fields have increasingly bridged the gap between fact and fiction. Revolution in artificial intelligence, digital computing and tele-communication are shining examples of this.

5. With every new technological innovation, the tools of war-fighting have also witnessed tremendous transformation. This is not just in their lethality but also in the manner in which they are deployed. In order to retain an edge in the battlefield, not only do we need to keep pace with technologies in vogue today, but also keep a watchful eye on the technologies of tomorrow. We, in the Indian Navy, therefore, remain fully committed to harnessing every new technology that could have a bearing on further enhancing our fighting efficiency at sea.

6. Over the last six decades, our country has taken giant strides in the field of indigenous ship design and construction. We have come a long way since 1961 when we commissioned our first indigenously built warship, INS Ajay. Today, we have more than 40 ships and submarines, including an Aircraft Carrier, being built in Indian Shipyards – both public and private. We have thus successfully transitioned from a ‘Buyers’ Navy’ to a ‘Builders’ Navy’.

7. We are, however, confronted by numerous challenges even today. Despite our achievements in indigenous shipbuilding, our dependence on external assistance for niche technologies continues to shackle us. An important aspect in attaining 100% self-reliance in ship design and construction is the indigenous development of high end technologies, their transition into ship-borne equipment and systems, induction into the Service and standardisation. This is no easy task and requires dedicated efforts by researchers, designers and manufacturers. It is, therefore, vital that all of us present here today focus our collective energy on this aspect of development.

8. The Indian Navy has taken the first step in this direction by formally articulating its vision through documents such as the 15-year ‘Indigenisation Plan’ and the 20-year ‘Science and Technology Roadmap’. We hope that these would act as enablers for indigenisation and innovation as well as help in forging path-breaking collaborative initiatives.

9. Ladies and Gentlemen, while we focus on indigenisation, I am also appreciative of the valuable contributions made by our overseas partners. Your continued support in the field of maritime defence production is indeed valuable for all of us here in India.

10. Let me also highlight that the ‘transfer of technology’ process, long used for international partnerships, is set to undergo a paradigm shift with the Strategic Partnership Model. This policy, along with initiatives like Make in India, would go a long way in building sustainable models for development of platforms and equipment requiring niche technologies.

11. I would also like to take this opportunity to briefly talk about four primary expectations which the Indian Navy has with respect to the platforms, systems and equipment we seek to induct. These relate to the cost, delivery timelines, quality and life cycle sustenance.

12. Insofar as the cost of inducting a technology or a product is concerned, suffice to say that any nation's military capability or force structuring is driven as much by its doctrine, existing threats and strategies as by its affordability.

13. The importance of completing developmental projects and delivering the required product in good time needs no explanation or emphasis.

14. The factors of cost and delivery timelines would figure high for any customer, military or civil. It is the additional expectation of the Armed Forces, that of quality and performance, that I would like to particularly stress upon.

15. Ladies and Gentlemen, when a combat unit is deployed at sea, the life of men and women manning that unit as well as the outcome of battle is primarily dependent on the quality and performance of equipment provided to the user. The combatant must have unflinching faith that the equipment will deliver the promised results whenever the need arises. We must, therefore, make every effort to live up to their expectations. Adherence to the highest quality standards should, therefore, be foremost on our minds.

16. A clear understanding of the end user's requirements forms one of the key aspects for achieving the desired level of quality. As the developer moves through the stages of design, development, testing and thereafter production and delivery, he must be fully seized of the deliverables expected by the end user.

17. The fourth expectation of life cycle sustenance, to my mind, is perhaps most vital for building a navy of the future. Most of us know that naval ships being built today are expected to be in service for at least 30 years, if not more. It is over this prolonged service life that the weapons,

sensors and equipment fitted on the ships are expected to perform, or rather outperform the enemy's capabilities.

18. We, therefore, expect equipment manufacturers to remain committed to provide technical support through the life cycle of a military product. Going beyond the basic spares and maintenance support, the technology that we induct today should ideally have an inherent adaptability for 'plug and play' upgrade so that it can remain relevant over the entire service life of the ship. I am certain that the R&D agencies and industry would appreciate the thought behind this expectation and cater for this requirement right from the initial stages of development.

19. I am sanguine that this Seminar will provide an opportunity for all stakeholders to discuss and debate some of the issues that I have highlighted and come up with solutions to address the various challenges that we can foresee.

20. I am also hopeful that various segments of the industry will continue to walk down the path of mutually supportive partnerships and build upon our past achievements. I would like to assure each one of you that the Indian Navy is fully committed to 'Make in India' and will support all initiatives to take the process to its logical conclusion.

21. To conclude, I would like to once again thank the organisers including all those who have sincerely worked behind the scenes for a well-conceived event. I wish this Seminar great success and hope that you have fruitful and result oriented deliberations.

22. Thank you. Śam No Varuᅇaᅇ and Jai Hind.