

## AI will play a key role in defence and civilian applications'

*NSTL using it to develop weapons, says Director*

Visakhapatnam: Naval Science and Technological Lab Director O.R. Nandagopan on Saturday said artificial intelligence is going to play a key role in both defence and civilian applications.

He was speaking at an international conference on intelligent systems and green technologies organised by the Hyderabad section and Vizag Bay sub section of Indian Institute of Electrical and Electronics Engineers (IEEE) here at Y.V.S. Murthy Auditorium.

Mr. Nandagopan said NSTL, a premier DRDO lab, was using AI extensively for designing and developing various defence weapons. He said green technologies were also being used to put the environmental impact at bare minimum.

Referring to Varunastra, heavyweight torpedoes developed by NSTL, he said after successful trials, production order for an amount of ₹ 1,187 crore was recently awarded to Bharat Dynamic Limited. He said BDL had set up a dedicated facility in the city for manufacturing of torpedoes.

He said NSTL had developed several weapons with cutting-edge technology using intelligent systems. In the next two years, a few more weapons would be developed, he stated. Mr. Nandagopan said in three to four years, intelligent systems would be installed in all most all the vehicles in the country to reach international standards. He said maturity had been achieved in the use of sensors and communications devices over the years.

He said the war scenario would also change with the adoption of more autonomous underwater vehicles. He said in the fully automated situation, the required manpower have to function under an extremely challenging environment and mentioned how when computers were introduced, there were protests. But the situation had come to such a pass that without computers no work could be done now.

IEEE Hyderabad section chair N. Venkatesh, general chair Abraham Varughese, Vizag Bay sub section chair K.V. Sriram and organising chair S. Lakshminarayana were present.

<https://www.thehindu.com/news/national/andhra-pradesh/ai-will-play-a-key-role-in-defence-and-civilian-applications/article28231457.ece>

## **NDRF, DRDO must develop equipment indigenously: Shah**

New Delhi: Union Home Minister Amit Shah on Saturday hailed the work done by the National Disaster Response Force (NDRF) and its agencies and said that efforts should now be made to develop indigenous equipment to combat disasters in collaboration with the Defence Research and Development Organisation (DRDO).

Addressing a two-day annual conference on capacity building of State Disaster Response Forces, Shah said: "Since its formation, the NDRF has participated in 3,000 rescue operations and saved the lives of over one lakh people, which is a great achievement. It has also done a very good job in disasters not only in India but also in many other countries."

"In a major natural calamity in 1999, over 10,000 people died in a cyclone in Odisha. In same state reduced the number of casualties in this year's cyclone Fani to 67," he said.

Shah said disaster management was largely ignored in the country before 2000. "It was in 2001, after the devastating earthquake in Gujarat, that then Chief Minister Narendra Modi laid the foundation of the Gujarat Disaster Management Department. From there, work on disaster management in the country started in totality," he said.

"During the earlier NDA government, former Prime Minister Atal Bihari Vajpayee set up the National Disaster Management Committee and made a very good start by making Sharad Pawarji its Chairman," the Minister said.

"On the lines of the NDRF, now 24 State Disaster Response Forces (SDRF) have been set up. Nagpur is also going to have a very big centre soon," he said.

The Home Minister asserted that disaster management challenges could be solved only if all the parties were well equipped. "There are no two opinions that all your needs will be met. You will get gadgets, resources, buildings and infrastructure. But disaster management is not done by buildings. Unless there is feeling, it will not yield the right results," he said.

He said in the next five years, the NDRF must aim to upgrade its equipment and develop it in indigenously with the DRDO. "Time has come for equipment to combat disasters to go from India to Nepal, Sri Lanka and Bangladesh," he added.

Shah also urged the disaster management agencies to help curb forest fires, which have become rampant due to global warming. "Get experts from other countries and prepare to fight forest fires so that minimum damage is done to the forests and nature," he said. IANS

<http://www.theweekendleader.com/Headlines/30324/nrdf-drdo-must-develop-equipment-indigenously-shah.html>