

*Press Information Bureau  
Government of India  
Ministry of Defence  
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## **DRDO celebrates National Technology Day**

The Defence Research and Development Organisation (DRDO), Ministry of Defence celebrated National Technology Day, here today, which was organised by the Defence Science Forum.

Presiding over the function, Dr. G Athithan Distinguished Scientist & Chief Controller R&D (SAM), DRDO presented a road map on DRDO technology innovation. The occasion was also marked by a National Technology Day Oration, where Prof. VK Singh, eminent scientist (Shanti Swarup Bhatnagar Awardee) and Director IISER, Bhopal delivered a lecture titled 'Role of Science Education and Technology for 'Make in India': Challenges'. National Technology Day signifies the glorious achievements of Indian science and technology. DRDO observes this day in all its laboratories/ establishments. Lectures by selected DRDO scientists, Open House Session, Quiz, etc. marked the occasion.

The day also saw release of a DRDO Technology Spectrum (compendium of innovative technological contributions/ methodologies of scientists). The function was attended by Directors, Scientists from DRDO Headquarters and Delhi based laboratories.

*The New Indian Express  
11 May, 2016*

## **3rd-time unlucky Nirbhay to try luck once more**

*By Hemant Kumar Rout*

Bhubaneswar: Even as the probe report on the fiasco during last trial of homegrown subsonic cruise missile Nirbhay is yet to be submitted formally, the DRDO has planned to go for a fresh test of the weapon system from a defence test facility off Odisha coast.

More than a decade into its development, India is yet to achieve a milestone in Nirbhay project. Of three tests of the long-range all-weather cruise missile so far, two have failed miserably exposing the technological deficiencies to develop a cruise missile on its own.

While the missile was to be terminated mid-way during its maiden test on March 12, 2013, during its third test on October 16 last year, the missile veered off the intended trajectory due to some technical snags in the sub systems. The second test of the missile on October 17, 2014 could not be declared a roaring success as the weapon was seen struggling in flight and symptoms of engine coughing were also noticed.

Defence sources said though India is yet to have its own technology to develop any supersonic or hypersonic cruise missile, Nirbhay is the first system developed by the DRDO with subsonic speed.

Since the Missile Technology Control Regime (MTCR) prohibits the signatories from providing technology to any other country developing a cruise missile with a range greater than or equal to 300 km, Indo-Russian joint venture BrahMos supersonic cruise missile has a strike range of 290 km. Sources said the inquiry committee, led by National Aerospace Laboratories (NAL) Director Shyam Chetty and set up to probe the last October 16 failure, has not submitted its report even six months after the incident.

DRDO scientists associated with the mission, however, claimed that faults in the system have been rectified and the system will be ready for test after final check-ups. "If the system gets ready, the missile will be launched in June. If it fails to get clearance now, the trial will be conducted in October," the sources said.

The missile, which can be compared with America's Tomahawk missile, will be fired from the launching complex-III of the Integrated Test Range (ITR). The cruise missile having a strike range of around 750 km to 1,000 km is expected to supplement the BrahMos. The two-stage missile has a length of six meters, diameter of 0.52 m, wing span 2.7 m and a launch weight of about 1,500 kg. While the Bengaluru-based Aeronautical Development Establishment (ADE) has designed the missile, it has been developed by Advanced Systems Laboratory (ASL) of DRDO.

## **Roadmap on DRDO technology innovation unveiled**

New Delhi: The Defence Research and Development Organisation (DRDO), Ministry of Defence, observed National Technology Day, here today, which was organised by the Defence Science Forum.

Presiding over the function, Dr. G. Athithan, Chief Controller R&D (SAM), DRDO, presented a roadmap on the DRDO technology innovation.

The occasion was also marked by a National Technology Day Oration, where Prof. V.K. Singh, Director, Indian Institute of Science Education and Research (IISER), Bhopal, delivered a lecture on 'Role of Science Education and Technology for 'Make in India': Challenges'.

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*Defense World*  
11 May, 2016

## **India to Test Nirbhay Cruise Missile Again**

India's Defense Research and Development Organization (DRDO) is eyeing to test indigenous subsonic cruise missile Nirbhay for the fourth time.

"If the system gets ready, the missile will be launched in June. If it fails to get clearance now, the trial will be conducted in October," *Indian Express* quoted unnamed sources as saying Wednesday.

The probe report of the last trial is yet to be submitted formally. Of the three trials so far in ten years, the missile has failed two tests and has achieved a partial success in one.

During the first test on March 12, 2013, the missile had to be terminated halfway after it deviated from course about 20 minutes after its launch.

Despite its failure, DRDO had claimed the test successful. "The missile test met the basic mission objectives successfully, after travelling approximately mid-way, deviations were observed from its intended course. Further, flight was terminated to ensure coastal safety," it had said.

During the second test on October 17, 2014 it was successful although it was not upto the mark as it could not maintain a low height.

The missile failed to hit the target after it nose-dived in the Bay of Bengal midway 11 minutes after it was fired during the third test conducted on October 16, 2015.

India is yet to have its own technology to develop any supersonic or hypersonic cruise missile, Nirbhay is the first system developed by the DRDO with subsonic speed. Since the Missile Technology Control Regime (MTCR) prohibits the signatories from providing technology to any other country developing a cruise missile with a range greater than or equal to 300 km, Indo-Russian joint venture BrahMos supersonic cruise missile has a strike range of 290 km, sources said.