

# समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा

**A Daily Current Awareness Service**



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## **Indian Navy to Deploy DHRUV Mk III Chopper to Maldives**

The Indian Navy will deploy an Advanced Light Helicopter (ALH) MK III in Male to strengthen maritime co-operation between India and Maldives.

Captain DK Sharma, spokesperson of the Indian Navy tweeted, “In a move to further strengthen the robust maritime co-operation between India & Maldives, Indian Navy to deploy an ALH Mk III in Male.”

“ALH to assist Maldives National Defense Forces (MNDF) in coastal security, SAR, casualty evacuation, Maritime Recce, Commn and Logistic duties,” he tweeted.

MK III is an improved version of Dhruv light helicopter equipped with Shakti engines, new electronic warfare (EW) suite and warning systems, automatic chaff and flare dispensers, and improved vibration control system. The first batch were inducted into Indian service in 2012.

*The Tribune*  
28 Apr, 2016

## **Make selections transparent, Parrikar tells armed forces**

Fed up with an increased number of complaints in armed forces tribunals by officers who miss higher ranks in the armed forces, Defence Minister Manohar Parrikar, has asked the three services — the Army, Navy and the IAF — to make their own systems of selection more transparent.

Parrikar today clarified on the sidelines of an IAF function that he had not issued any orders to have civilian oversight in the selection boards of the three services.

The minister, while addressing the top brass of the three services during their respective Commanders conferences in this month, had addressed the issues of promotions at the senior levels.

There have been allegations in tribunals by officers that they have been overlooked.

PTI adds: Arguing that the present system of promotion to higher grade, or the ranks of Brigadier and above, has its own logic, defence sources, however, said there was room for improvement.

The sources said it was necessary to not only be clean but also appear to be clean. The armed forces at present follow a pyramidal structure for promotion. While at the bottom, there are a number of officers, the numbers are narrowed as they go up.

### **Complaints against promotion board**

- The Defence Minister has asked the three services — the Army, Navy and the IAF — to make their own systems of selection more transparent
- The move came after the defence ministry received a number of complaints regarding the promotion board system and lack of transparency

*The Tribune*  
28 Apr, 2016

## **56 IAF men get job offers**

Defence Minister Manohar Parrikar and Minister of State for Skill Development Rajiv Pratap Rudy today handed over skill development and employment certificates to 56 retiring IAF personnel. Under a pilot project, the skill development ministry trained retiring defence personnel who had exposure to world-class technology in fighter jets, secure communication, missiles, etc.

IAF Chief Air Chief Marshal Arup Raha said: “Every year, around 5,000 IAF officers retire. But they don’t get jobs commensurate with their expertise.” Parrikar said the government hoped to utilise skills of all 50,000 defence men who retire every year. The 56 IAF men were trained in electronics, automotive and healthcare — on pilot basis. — TNS

*The Economic Times*  
28 Apr, 2016

## Aditya Birla Group Gears Up for Defence Foray

*By Devina Sengupta*

*To form JVs with US, Israeli and Russian cos to make components for aerospace & combat vehicles*

The Aditya Birla Group has decided to enter the defence sector, following at least seven Indian corporate houses that have ventured into the segment and adding heft to the government's 'Make in India' initiative.

The conglomerate with interests from metals to mobile telephony intends to form JVs with US, Israeli and Russian companies to make components for aerospace and combat vehicles, two people with direct knowledge of the plan said.

The Kumar Mangalam Birla-controlled group has started exploratory talks with companies such as Lockheed Martin, the world's largest defence contractor, US helicopter maker Sikorsky and Israel's Rafael Advanced Defense Systems. The \$47 billion group has appointed one of the Big Four global consultants to help them with strategies and identify partners.

The new division will be led by former strategy head Dev Bhattacharya and will soon start hiring to roll out its plan. An Aditya Birla spokeswoman declined to comment on the foray.

Private Indian companies are expanding into defence after the government took several policy measures to encourage the local manufacture of equipment for the country's armed forces to achieve self-reliance. The steps include allowing foreign direct investment (FDI) up to 49% in the defence sector and liberalising the licensing regime for Indian manufacturers.

**On Target**  
Aditya Birla group to enter defence sector by forming JVs with American, Israeli & Russian cos

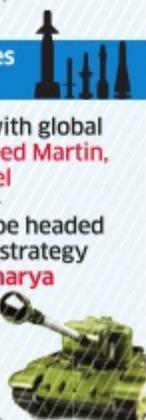
Plans to form series of business units

Has started talks with global cos such as Lockheed Martin, Sikorsky and Rafael

New division will be headed by group's former strategy head Dev Bhattacharya

Group to compete with Tatas, Mahindras, Bharat Forge, L&T

Experts say Make in India & "ease" of doing biz in defence are compelling reasons for local cos to enter sector



“The Make in India focus, coupled with the easing of defence manufacturing and exports, is making a compelling case for large Indian business houses to foray into this sector,” said Ankur Gupta, vicepresident, defence, at EY. “The private sector's belief now needs to be crystallised by the ministry of defence through long-term sustainable orders and the companies themselves forging global supply chain partnerships.”

The Aditya Birla Group's challenge would be to find the right partners to work with on casting and forging, besides making equipment for aerospace as well as combat vehicles.

Flagship Hindalco Industries, India's second-biggest producer of aluminium, has been a supplier to India's defence equipment makers. Its overseas subsidiary, Novelis, the world's largest can maker, supplies aluminium to plane makers. Aluminium is extensively used in main battle tanks, missiles, weaponry systems and boats, among others.

Other Indian business houses have a head-start over Birla in the defence business. The Tata Group, Mahindra & Mahindra, Bharat Forge, L&T, Godrej and the Anil Ambani-controlled Reliance

Group have started making equipment for India's defence forces. Adani Group's Adani Defence Systems & Tech is the latest entrant.

The Tata Group has targeted an order book of Rs 10,000 crore from defence for the financial year ending March 2017. Revenue from the sector in 2015-16 increased 7.5% to . 2,650 crore.' In the past few months, the Mahindra Group has signed pacts with global companies to make parts of military vehicles, select artillery systems and land-based weaponry. Some analysts say there is still enough room in the defence market for private companies.

*Zee News*  
28 Apr, 2016

## **Indian Naval Ships Veer, Nipat to be decommissioned today**

Mumbai: Indian Naval Ships Veer and Nipat, serving under the illustrious 22nd Killer Squadron, will be decommissioned in Mumbai on Thursday.

Both the ships, which are 1241 RE class missile vessels, have completed 29 and 28 years of commissioned service respectively.

These ships are the first of Veer Class of ships to be decommissioned from the Indian Navy.

During their splendid service, the ships have participated in numerous operations and successfully completed many deployments.

To ensure security of valuable assets off Gujarat coast, Veer and Nipat have been forward deployed off Gujarat and International Maritime Borderline on numerous occasions.

A Defence statement has assured that the Navy has executed re-basing of some ships to ensure that adequate force levels are maintained in the West Coast of the country.

*The Economic Times*  
27 Apr, 2016

## **Dozen laser walls activated along Indo-Pak border**

New Delhi: A dozen "laser walls" have been made operational along the India-Pakistan International Border in Punjab to plug the porous riverine and treacherous terrain and keep an effective vigil against intruders and terrorists exploiting the frontier areas to cross over.

While eight infra-red and laser beam intrusion detection systems are "up and working" along as many vulnerable and sensitive areas of the international border (IB) in Punjab, four more will be operationalised the next few days, a senior BSF official said.

The "laser walls" or fence are being monitored by Border Security Force (BSF) which guards the Indo-Pak IB in Jammu and Kashmir, Punjab, Rajasthan and Gujarat.

The decision to install these laser walls was taken by BSF two years ago keeping in mind the vulnerability of the border in these areas as barbed wire fencing could not be installed in many infiltration prone areas due to treacherous terrain or marshy riverine topography.

After the Pathankot terror attack, where it was suspected that terrorists crossed over from Pakistan by breaching the IB from Bamiyal area in Punjab, Union Home Ministry and BSF have sped up the deployment and activation of these walls along the long and winding border.

A total of 45 such laser walls will be installed in these areas along the international border in Punjab and Jammu, a blueprint prepared in this regard and accessed by PTI said.

According to the blueprint, BSF along with a team of technical experts will be conducting a pilot project for deploying "technological solutions" for effective border guarding at two "sensitive"

riverine stretches in Jammu sector which entails deployment of smart sensors to pick up suspected movements along IB.

"The laser walls have started working and their functioning is being monitored. Preliminary results in detecting illegal movements are encouraging," the official said.

He said sensors were being monitored through a satellite-based signal command system and armed with night and fog operability tools.

Apart from these, four other pilot projects of similar kind in stretches of 30-40 kms of IB in Jammu and Gujarat and one in West Bengal along Indo-Bangla border have been approved by Home Ministry to secure Indian borders effectively.

"Work on them will begin by next month," he said.

After the Pathankot incident, BSF had deployed an additional battalion (about 1,000 men) in Punjab sector even as it has increased the number of its ambush operations and patrol in the area.

BSF is also considering deploying at least four more battalions in Punjab and Jammu border areas as a second-tier of defence after withdrawing these units from the Line of Control.

*The Hans India*  
27 April, 2016

## **Indian Navy Provides Assistance in Fire Fighting at Duvvada Sez, Visakhapatnam**

Twelve fire tenders of Indian Navy were deployed in fire fighting at Biomax Company in Special Economic Zone, Duvvada, Visakhapatnam. A huge fire broke out from 12 Bio-diesel tanks of Biomax Company late evening on Tuesday.

On getting the news from the State Administration, the Eastern Naval Command launched two aircraft for aerial reconnaissance and assessment of the extent of fire. Navy's Quick Reaction Teams (QRT) and an ambulance with medical teams were rushed to the site of the fire accident along with the fire tenders.

Naval hospital, INHS Kalyani has been kept standby for providing assistance in case of medical emergency. Fire tenders are being replenished and turned around. Additional fire tenders are kept standby for deployment.

*जनसत्ता*

28 अप्रैल, 2016

## **केंद्रीय सशस्त्र पुलिस बलों में महिलाओं को 33 फीसद आरक्षण**

नई दिल्ली, 27 अप्रैल (भाषा)। सरकार ने बुधवार को कहा कि केंद्रीय सशस्त्र पुलिस बलों में महिलाओं के प्रतिनिधित्व में वृद्धि करने के लिए 33 फीसद तक पद उनके लिए आरक्षित करने का फैसला किया गया है।

गृह राज्यमंत्री किरण रिजजू ने विभिन्न पूरक सवालों के जवाब में राज्यसभा को यह जानकारी दी। उन्होंने कहा कि केंद्रीय सशस्त्र पुलिस बलों में महिलाओं के प्रतिनिधित्व में वृद्धि करने के लिए शुरू में सीआरपीएफ और सीआइएसएफ में कांस्टेबल स्तर पर 33 फीसद पद महिलाओं के लिए आरक्षित करने का फैसला किया गया है। उन्होंने बताया कि बीएसएफ, एसएसबी और आइटीबीपी जैसे सीमा रक्षक बलों में 14.15 फीसद पद आरक्षित रखने का फैसला किया गया है। उन्होंने कहा कि सरकार के मौजूदा निर्देशों के अनुसार अनुसूचित जाति, अनुसूचित जनजाति और अन्य पिछड़ा वर्ग के लिए आरक्षण इनमें लागू है। उन्होंने कहा कि इन बलों में अनुसूचित जाति और अनुसूचित जनजाति के कर्मियों की संख्या उनके लिए आरक्षित फीसद से ज्यादा है।

## **Russia's Putting Hypersonic Missiles on Its Battle Cruisers**

The Russian Navy will start sending so-called hypersonic missiles to sea as early as 2022. Capable of flying five to six times the speed of sound, the missiles will be carried by both aging battlecruisers and brand-new submarines, giving each the ability to quickly kill enemy ships.

Currently in advanced stages of development, the Zircon anti-ship missile is capable of flying at hypersonic speeds, between 3,800 to 4,600 miles an hour. That's fast enough to travel from San Francisco to Washington, D.C. in just over thirty minutes.

According to Moscow's state press, Zircon is undergoing land-based testing and is planned to enter production in 2018. Zircon almost certainly builds upon Russian know-how in hypersonics, learned during the the joint development of the Russian-Indian BrahMos hypersonic anti-ship missile. Brahmos has a maximum speed of Mach 2.8 and a range of about 180 miles.

The extreme speed of the Zircon will make it very tough for navies to defend against. At 4,600 miles an hour, the Russian hypersonic missile will be traveling faster than a mile a second. Even if a defending ship were to detect an incoming Zircon at 100 miles, that leaves the ship just over one minute to shoot the missile down.

Zircon's striking range and warhead size are both currently unknown. Space inside every missile is at a premium, with the high explosive warhead, guidance system, engine and fuel all competing for room. The missile is meant to fit inside the new 3S-14 shipboard missile silo system, which can also fit Onyx and Kalibur anti-ship missiles.

This suggests a similar size to both, but Zircon's hypersonic engine will likely be larger than either of the slower missiles. Zircon could have a relatively short range and small warhead size; BrahMos, for example, has a large propulsion system but a short range and a relatively small 440 pound warhead. Of course it is worth noting that an object traveling at Mach 6 imparts devastating kinetic energy on its target, compensating for a smaller explosive warhead.

Zircon will be deployed on the battlecruiser Pyotr Velikiy when it emerges from shipyard overhaul in 2022. The battlecruiser, the largest surface combatant currently in operation in any navy, will be equipped with ten of the missiles. Zircon will also be deployed on Russia's next-generation "Husky" class attack submarines, currently under development.

*The Asian Age*  
28 Apr, 2016

## **US warns N. Korea again over nuke tests**

The United States warned on Tuesday it would consider "other" options, which could include new sanctions or security steps, if North Korea continued nuclear and ballistic missile testing.

South Korea's Yonhap news agency earlier said North Korea appeared to be preparing a test-launch of an intermediate-range ballistic missile, after what the United States described as the "fiery, catastrophic" failure of a launch attempt this month.

It is widely expected to conduct a fifth nuclear test soon, perhaps ahead of a congress of the ruling Workers Party congress in early May.

President Barack Obama said the United States was working on defending itself and its allies against potential threats from North Korea, which he called an "erratic" country with an "irresponsible" leader.

In a CBS interview that aired on Tuesday, Mr Obama said the United States was spending a lot more time positioning its missile development systems to set up a shield “that can at least block the relatively low- level threats,” posed by North Korea.

US state department spokesperson Mark Toner urged North Korea to refrain from actions that destabilise the region and said Washington would consider “other” options if Pyongyang continued nuclear and missile testing.

**पंजाव केसरी**

**28 अप्रैल, 2016**

**क्षेत्र को अस्थिर करने से बाज आए उ.**

**कोरिया**

वाशिंगटन, (रायटर): अमरीका ने उत्तर कोरिया से क्षेत्र को अस्थिर करने की गतिविधियों से दूर रहने की चेतावनी देते हुए कहा है कि यदि उसने परमाणु एवं बैलिस्टिक मिसाइलों का परीक्षण जारी रखा तो अन्य विकल्प अपनाये जा सकते हैं।

अमरीका के विदेश मंत्रालय के प्रवक्ता मार्क टोनर ने संवाददाताओं से बात करते हुए यह बात कही। श्री टोनर ने उत्तर कोरिया द्वारा आगे भी परमाणु एवं बैलिस्टिक मिसाइल परीक्षण किये जाने की रिपोर्टों के बाबत पूछे जाने पर कहा कि यदि उत्तर कोरिया ने इस तरह का व्यवहार जारी रखा तो हम अन्य विकल्प अपना सकते हैं।

श्री टोनर ने हालांकि विकल्पों

**चेतावनी**

**परमाणु एवं बैलिस्टिक मिसाइलों का परीक्षण जारी रखा तो अपनाए जा सकते हैं अन्य विकल्प : अमरीका**

के बारे में विस्तार से बताने से मना कर दिया।

उल्लेखनीय है कि उत्तर कोरिया ने इस साल जनवरी से लगातार परमाणु एवं बैलिस्टिक मिसाइल परीक्षण किया है। इन परीक्षणों की संयुक्त राष्ट्र ने भी आलोचना की है तथा उत्तर कोरिया पर कई प्रतिबंध भी लगाया है।

area or pushing the robot’s emergency button will alert the police immediately. Breakthroughs in low-cost autonomous navigation and positioning as well as intelligent video surveillance have contributed to the development of the robot, said Xiao Xiangjiang, director of the Institute of Electromechanical Engineering and Automation of the National University of Defence Technology.

Other highlights of the robot include its ability to react during emergencies, according to Xiao. Wei Quansheng, an officer from Beijing Municipal Public Security Bureau, said the robot guard can be used in many public places such as airports, stations and subways to help with police officers’ anti-riot missions. The robot is jointly developed by the National University of Defence Technology and a robotics company in central China’s Hunan Province. The university began researching robotics theory and technology in the 1980s. The school is hoping to continue to build up China’s intelligent security service robots to promote development of the robot industry and upgrades to the country’s security industry, Xia said.

*The Asian Age*  
28 Apr, 2016

**China unveils first security robot**

China’s first robot security guard made its debut, an electrical anti-riot device that can be activated through remote control in case of a threat. The 1.49-metre-tall, 78-kg “AnBot” unveiled at the ongoing China Chongqing Hi-Tech Fair has a maximum speed of 18 km per hour. It can patrol at a speed of 1 km per hour and has battery capacity of 8 hours. The security robot is capable of autonomous patrol, intelligent monitoring, emergency calls, auto recharging and has optional modules for environmental monitoring, biochemical detection and clearing explosives, state-run Xin-hua news agency reported.

An electrical anti-riot device can be activated through remote control if a threat is detected. Shouting for help in the patrol

# आज से अपना भी सटीक JPS सिस्टम



■ प्रस, नई दिल्ली : आज भारत को अपना सटीक जीपीएस सिस्टम मिल जाएगा। अभी तक हम इसके लिए अमेरिका और रूस पर निर्भर थे। गुरुवार को रिजनल नैविगेशन सैटलाइट सिस्टम के सातवें और आखिरी सैटलाइट IRNSS-1G को आंध्रप्रदेश के श्रीहरिकोटा से लॉन्च किया जाएगा। दोपहर 12:50 बजे पीएसएलवी-सी33 (पोलर सैटलाइट लॉन्च व्हीकल) से इसे छोड़ा जाएगा। भारत के इस सिस्टम में सात सैटलाइट हैं। इससे नैविगेशन सिस्टम ज्यादा सटीक होगा। अभी अमेरिका, रूस, यूरोपीय यूनियन और चीन के पास ही जीपीएस है।

## ये होंगे फायदे

- भारत की सीमा से 1,500 किमी. दूर तक बारीक नजर रख सकेंगे।
- जमीन और समुद्र में रास्ता तलाशने में मदद मिलेगी।
- आपदा के दौरान राहत कार्य करने में होगी आसानी।
- मोबाइल सेवाएं और सूचना उपकरण ज्यादा अच्छे होंगे।
- IRNSS के तहत दो तरह की सेवाएं दी जाएंगी। स्टैंडर्ड सर्विस : यह सभी यूजर्स को दी जाएगी। प्रतिबंधित सर्विस : अधिकृत यूजर्स के लिए।

## **Tiniest thermometer created using DNA**

***Toronto: Scientists have created the world's tiniest thermometer that is 20,000 times smaller than a human hair, using DNA structures that can fold and unfold at specifically defined temperatures.***

The advance may significantly aid our understanding of natural and human designed nanotechnologies by enabling to measure temperature at the nanoscale, researchers said.

Over 60 years ago, researchers discovered that the DNA molecules that encode our genetic information can unfold when heated.

"In recent years, biochemists also discovered that biomolecules such as proteins or RNA (a molecule similar to DNA) are employed as nanothermometers in living organisms and report temperature variation by folding or unfolding," said Alexis Vallee-Belisle, professor at University of Montreal in Canada.

"Inspired by those natural nanothermometers, which are typically 20,000 times smaller than a human hair, we have created various DNA structures that can fold and unfold at specifically defined temperatures," said Vallee-Belisle.

One of the main advantages of using DNA to engineer molecular thermometers is that DNA chemistry is relatively simple and programmable.

"DNA is made from four different monomer molecules called nucleotides - nucleotide A binds weakly to nucleotide T, whereas nucleotide C binds strongly to nucleotide G," said David Gareau, from the University of Montreal.

"Using these simple design rules we are able to create DNA structures that fold and unfold at a specifically desired temperature," Gareau said.

"By adding optical reporters to these DNA structures, we can therefore create 5 nm-wide thermometers that produce an easily detectable signal as a function of temperature," said Arnaud Desrosiers, from the University of Montreal.

These nanoscale thermometers open many exciting avenues in the emerging field of nanotechnology, and may even help us to better understand molecular biology.

"There are still many unanswered questions in biology," said Vallee-Belisle.

"For example, we know that the temperature inside the human body is maintained at 37 degrees Celsius, but we have no idea whether there is a large temperature variation at the nanoscale inside each individual cell," she said.

Researchers are trying to determine whether nanomachines and nanomotors developed by nature over millions of years of evolution also overheat when functioning at high rate.

"In the near future, we also envision that these DNA-based nanothermometers may be implemented in electronic-based devices in order to monitor local temperature variation at the nanoscale," said Vallee-Belisle.

The study was published in the journal Nano Letters.

## **German nuclear plant infected with IT viruses**

A nuclear power plant in Germany has been found to be infected with computer viruses, but they appear not to have posed a threat to the facility's operations because it is isolated from the Internet, the station's operator said on Tuesday.

The Gundremmingen plant, located about 120 km (75 miles) northwest of Munich, is run by the German utility RWE.

The viruses, which include "W32.Ramnit" and "Conficker", were discovered at Gundremmingen's B unit in a computer system retrofitted in 2008 with data visualisation software associated with equipment for moving nuclear fuel rods, RWE said.

Malware was also found on 18 removable data drives, mainly USB sticks, in office computers maintained separately from the plant's operating systems. RWE said it had increased cyber-security measures as a result.

W32.Ramnit is designed to steal files from infected computers and targets Microsoft Windows software, according to the security firm Symantec. First discovered in 2010, it is distributed through data sticks, among other methods, and is intended to give an attacker remote control over a system when it is connected to the Internet.

Conficker has infected millions of Windows computers worldwide since it first came to light in 2008. It is able to spread through networks and by copying itself onto removable data drives, Symantec said.

RWE has informed Germany's Federal Office for Information Security (BSI), which is working with IT specialists at the group to look into the incident.

The Germany's Federal Office for Information Security (BSI) was not immediately available for comment.

Mr Mikko Hypponen, chief research officer for Finland-based F-Secure, said that infections of critical infrastructure were surprisingly common, but that they were generally not dangerous unless the plant had been targeted specifically.

The most common viruses spread without much awareness of where they are, he said.

Mr Hypponen said he had recently spoken to a European aircraft maker that said it cleans the cockpits of its planes every week of malware designed for Android phones.

The malware spread to the planes only because factory employees were charging their phones with the USB port in the cockpit.

Because the plane runs a different operating system, nothing would befall it. But it would pass the virus on to other devices that plugged into the charger.

In 2013, a computer virus attacked a turbine control system at a US power company after a technician inserted an infected USB computer drive into the network, keeping a plant off line for three weeks.

After Japan's Fukushima nuclear disaster five years ago, concern in Germany over the safety of nuclear power triggered a decision by the government to speed up the shutdown of nuclear plants. Tuesday was the 30th anniversary of the Chernobyl nuclear disaster.

## **Soon, city to get a breath of fresh WAYU**

In an attempt to resolve the issue of pollution through technology, National Environment Engineering Research Institute (NEERI), along with IIT Bombay, has developed a unique device for the congested, polluted areas of the city. Wind Augmentation and Air Purifying Unit (WAYU), a sophisticated air purification device that purifies air within a 20-metre range, could work as a boon for the traffic police and residents of congested polluted areas of the city.

WAYU, a unique system for diffused air pollution control system, was born out of the simple need to resolve the issue of pollution in metropolis and its ill effects on the residents, as well as those who spend extended hours in its presence. Apparently NEERI, in its detailed report in 2010, where air quality monitoring was carried out in Mumbai, confirmed how certain parts of the city have very poor air quality and major contributor of many of the key pollutants, such as carbon monoxide 30-35 per cent, particulate matter (20-30 per cent) and nitrogen dioxide and nitric oxide 35-70 per cent was from vehicular traffic and re-suspended dust.

Vinay Padalkar, an IIT-B alumnus, who worked on the project along with NEERI, said that they found out that vehicular intersections are the most polluted vicinities on roads and thus they focused to resolve the issue at intersections. “A vehicle typically accelerates and decelerates when it comes across an intersection. This causes higher amount of pollutants to be released in the atmosphere.

Buildings, typically surrounding the intersection, create an urban tunnel effect. As the vehicle-induced turbulence is negligible at the intersections, the pollutants get trapped leading to higher exposure of pollutants to people,” explained Mr Padalkar.

To find a solution to asthma, chronic obstructive pulmonary disease, cardiovascular disease, cancer and increased mortality issues among susceptible groups like traffic cops, pregnant women and children as well as senior citizen, the system was developed, which could improve the air quality at urban intersections in a way that it can work with solar power.

Dr Rakesh Kumar, director of NEERI, explained that the device works on two simple principles — wind generation for dilution of air pollutants and active pollutants removal. “The device uses low speed wind generators and filters along with a thermal oxidiser for removal of toxic content. The air is passed through the filters and where the particulates are removed. The air is heated inside the specially designed section of the device with appropriate surface and retention time, within the thermal oxidisers where the carbon monoxide, hydrocarbons, VOCs get converted to carbon dioxide,” said Dr Kumar.

Apparently, at the outlet of the device the air has some residual velocity, the air creates enough turbulence in the atmosphere, which helps to bring down the pollutant concentrations by the method of dispersion. Mr Padalkar also confirmed that the device has been tested at a traffic junction and was found to reduce the pollutant concentrations by 40-60 per cent.

While the two prototypes of the device have already been created, the officials are in talks with MPCB to get the device fitted at traffic junctions to check the feasibility. Dr Kumar confirmed that while the final tests would be conducted shortly before the monsoons, the project would be taken forward post-monsoon. “We have received favourable response from the authorities and we are hoping that the device will resolve the pollution issues at large,” said Dr Kumar.

## **US keeps China, India on intellectual property shame list**

Washington: The Obama administration on Wednesday kept China, Russia and India on its annual list of countries with the worst records of preventing the theft of intellectual property and cited Switzerland for failing to curb online copyright infringements.

The annual list, released by the United States Trade Representative's Office, carries no threat of sanctions, but aims to shame governments into cracking down on piracy and counterfeiting and updating their copyright laws.

"Intellectual property is a critical source of economic growth and high-quality jobs for the United States, and it is more important than ever to prevent foreign governments and competitors from ripping off United States innovators who are trying to support high-paying jobs by exporting their goods and services to consumers around the world," US Trade Representative Michael Froman said in a statement. The United States Trade Representative's Office said that the value added of US-held intellectual property was approximately \$5 trillion in 2010, contributing 34 percent to US gross domestic product that year and supporting 40 million jobs in IP-intensive industries.

### **Reforms in China**

It said China has undertaken some intellectual property law reforms, but the highest level of scrutiny was still warranted due to trade secret theft, rampant piracy and counterfeiting of online and physical goods, as well as newer requirements that condition market access on use of intellectual property developed in or transferred to China.

India stays on the highest priority watch list due to lack of measurable improvements to its intellectual property legal framework, despite stepped up enforcement efforts, USTR said. But Pakistan was upgraded to the regular watch list after it created specialized intellectual property courts, established a timeline for improving its legal framework and improved border security.

Switzerland was added to the regular watch list because it has become an increasingly popular host country for copyright-infringing websites, belying its generally strong record on IP issues, USTR said. Overall, the agency has 11 countries on the "Priority Watch List": Algeria, Argentina, Chile, China, India, Indonesia, Kuwait, Russia, Thailand, Ukraine, and Venezuela. It said these countries will be the subject of particularly intense bilateral engagement during the coming year.

There are 23 other countries on the "Watch List" that highlights other IP problems: Barbados, Bolivia, Brazil, Bulgaria, Canada, Colombia, Costa Rica, Dominican Republic, Ecuador, Egypt, Greece, Guatemala, Jamaica, Lebanon, Mexico, Pakistan, Peru, Romania, Switzerland, Turkey, Turkmenistan, Uzbekistan and Vietnam.

### **India needs to do more: US**

- India has not addressed long-standing and systemic deficiencies in its IPR regime and has endorsed problematic policies that may leave open the door for backsliding in the future.
- India is working on an IPR policy. However, a lackluster policy that does not provide the ability to act upon stated commitment to improve the climate for IPR would be a missed opportunity.
- US urges India to: enact anti-camcording legislation; model its statutory licence provisions relating to copyrighted works on the standards of the Berne Convention for the Protection of Literary and Artistic Works; ensure that collecting societies are licensed promptly and able to operate effectively; fully establish and operationalise India's Copyright Boards. ---*Reuter*