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Fri, 22Sept, 2017

17 years on, Navy gets its first new conventional submarine

India will soon commission its first new conventional submarine in over 17 years, with the first Scorpene submarine INS Kalvari being delivered to the Navy by Mazagon Docks on Thursday. The second submarine of this class, INS Khanderi, is slated for delivery by December.

The delivery of INS Kalvari (tiger shark), the first of the six French diesel-electric Scorpene submarines being built under the Rs 23,652 crore `Project-75' at Mazagon Docks in Mumbai, is significant because the Navy currently has just 13 aging diesel-electric submarines, with just half of them operational at any given time. The force needs at least 18 conventional submarines.

India also has two nuclear powered subs, INS Arihant and INS Chakra, but the latter doesn't have nuclear-tipped ballistic missiles as it has been acquired on lease from Russia. The Navy needs at least six nuclear-powered attack subs and four nuclear-powered subs with nuclear-tipped missiles.

The Scorpene project has, of course, faced huge time and cost overruns. INS Kalvari, for instance, was to be ready by 2012, with the other five coming by 2017. Now, with the third submarine, INS Karanj, to be "launched" later this year, all the six will be inducted by 2020 or so.

Moreover, even the tender for the long-delayed Project-75 India for the six new stealth submarines, with both land-attack missile capabilities and air-independent propulsion for greater underwater endurance, is yet to be even floated.

Earlier this year, India finally kick-started this "mother of all underwater deals" after a 10-year delay, with arms majors from France, Germany, Russia, Sweden, Spain and Japan being asked to submit initial proposals for the estimated Rs 70,000 crore (\$10.9 billion) project to build the six submarines in collaboration with an Indian shipyard here.

Fri, 22Sept, 2017

Sitharaman may break combat vehicles logjam

By Rajat Pandit

Defence minister Nirmala Sitharaman will have to step into break the continuing deadlock over the long delayed "Make in India" project to produce over 2,300 future infantry combat vehicles (FICVs) for the Army for an estimated Rs 60,000 crore.

The mega FICV project, first accorded "acceptance of necessity" by the defence ministry (MoD) way back in October 2009, remains stuck in bureaucratic bottlenecks and wrangling, corporate rivalry and controversies, say sources.

To further queer the pitch, the US has also offered India the development and production of armoured personnel carriers in a trilateral venture with Israel under the Defence Technology and Trade Initiative (DTTI), which is likely to figure in the discussions between Sitharaman and her American counterpart James Mattis later this month, as was earlier reported by TOI.

Under the original FICV project, two of the five Indian private firms in the fray, apart from the Ordnance Factory Board, were to be selected to design and build prototypes. With the government funding 80% of the

developmental cost, which could amount to about Rs 3,000 crore, the best prototype was to get the green signal for mass production.

The private contenders are L&T, Mahindra, Pipavav Defence & Offshore Engineering and two consortiums of Tata Motors-Bharat Forge and Tata Power SED-Titagarh Wagons. As per the original plan, the 12-lakh strong Army was supposed to induct 835 new FICVs by 2017, with another 1,479 coming in by 2022.

But the project is still far away from even kicking off. Sources say there continues to be a major disagreement within the MoD over the number of private contenders that should be asked to make detailed project reports.



Fri, 22Sept, 2017

French Rafale ready to make jets in India

In line with their contract obligations, French major Dassault Aviation has said it was coordinating between French suppliers and Indian companies to manufacture Rafale fighter jets in India.

Rafale International comprising Dassault Aviation, Safran and Thales has met over 100 French Small and Medium Enterprises (SMEs) in Paris. Indian and French Defence Ministry officials, too, were at these meetings. The French Aerospace Industries Association is the nodal agency producing systems and sub-systems for Rafale.

French SMEs were being encouraged to set up production activities in India alongside Dassault Aviation, Safran and Thales as part of the Rafale programme to help the company meet its obligations, said a Rafale spokesperson in India. The move comes two days after a US business chamber expressed its concerns over sharing hi-end technology with Indian companies.

“Encouraging French SMEs to come to India is a key condition to participate in the ‘Make in India’ initiative of PM Narendra Modi and will benefit both French and Indian industries,” the spokesperson said.

Rafale is looking towards creating opportunities for establishing a full-fledged aero-defence manufacturing eco-system in India, said Eric Trappier, Dassault Aviation chairman and CEO and GIFAS chairman.

The GIFAS is a trade body of 382 members ranging from major prime contractors and system suppliers to small specialist companies.



Fri, 22Sept, 2017

Balancing Exercise - India to Hold Tri-Services Drill with Russia

By Shaurya Gurung & Dipanjan Roy Chaudhury

India will hold its first bilateral tri-service exercise with Russia in October this year. This is the first such exercise that India will conduct with any of its foreign partners, reflecting maturity in the strategic partnership.

The exercise called Indra is India's way of balancing strategic relations with Russia and the US and send a message to China. It will be focussed on counter-terrorism tactics with the involvement of mechanised forces

such as tanks and infantry combat vehicles, artillery guns, Indian Air Force transport planes and naval anti-submarine ships and Special Forces personnel.

The very decision to have Russia as a partner for first ever trilateral exercise reflects confidence in defence partnership evolved over five decades, said an expert who did not wish to be quoted. This is also a reflection of familiarity with each other and need to elevate strategic partnership at a new level. Even as it has developed close partnership with China post-sanctions India continues to be a key partner for Moscow.

The third planning conference meant to decide the modalities of the exercise took place between Indian and Russian delegations at Ussuryisk, Russia in mid-September this year. It was mutually agreed to conduct the exercise from October 19 to 29 at Vladivostok in eastern Russia, which is not very far from Russia's borders with China and North Korea. The exercise will take place at three locations in this area Sergeevsky 249 Combined Arms Training Area, Cape Klerk and Peter the Great Bay in the Sea of Japan. Russia wants India to enhance presence in Far East Russia when Beijing has made inroads.

A 350 strong army contingent from different combat arms infantry, artillery and armour will participate in the exercise. Tanks and BMP infantry fighting vehicles will be provided to the Indian Army for the exercise in Russia. Two IL-76 military transport aircraft of Russian origin and two Indian Navy ships INS Satpura, a multi-role frigate and INS Kadmatt, an anti-submarine corvette will also participate in the exercise. The Indian Navy contingent will also include Chetak Search and Rescue helicopters and MARCOS. Furthermore, Joint Task Force Staff will be setup and consist of officers from the Indian and Russian parties for command and control of the troops during tactical manoeuvres.

दैनिक जागरण

Fri, 22Sept, 2017

म्यांमार को हथियारों की आपूर्ति करने पर विचार कर रहा भारत

नई दिल्ली, प्रेटर: रोहिंग्या मुस्लिमों के खिलाफ की जा रही सैन्य कार्रवाई को लेकर म्यांमार सरकार की पूरे विश्व में आलोचना हो रही है, लेकिन भारत ने इससे इतर हटकर म्यांमार को हथियारों की आपूर्ति करने का फैसला लिया है। वहाँ के नौसेना प्रमुख टिन आंग सैन के दौरे पर कई मुद्दों पर बातचीत हुई, जिसमें पड़ोसी देश के नाविकों को प्रशिक्षण देने का फैसला भी हुआ। इन्हें भारत के बेहतरीन रक्षा संस्थानों में सैन्य कार्रवाई का प्रशिक्षण मिलेगा।

म्यांमार के नौसेना प्रमुख टिन आंग सैन ने बुधवार को भारत दौरे पर रक्षा मंत्री निर्मला सीतारमण के अलावा तीनों सेनाओं के प्रमुखों से मुलाकात भी की थी। इस दौरान वह मुंबई भी गए, जहाँ जहाजों का निर्माण किया जाता है। उनका चार दिवसीय दौरा गुरुवार को खत्म होने जा रहा है। इस दौरान उनकी भारत के साथ गश्ती नौकाओं

की आपूर्ति को लेकर भी चर्चा हुई। इससे पहले 2013 में भी भारत ने म्यांमार को हथियार देने की पेशकश की थी, लेकिन उसके बाद फोकस समुद्री रिश्ते मजबूत करने पर हो गया। अब उम्मीद है कि दोनों देश बंगाल की खाड़ी में मिलकर निगरानी करेंगे। इस क्षेत्र में चीनी प्रभाव को कम करने के लिए ये रणनीति बनी है।

उल्लेखनीय है कि भारत की ईस्ट लुक पॉलिसी में म्यांमार की बेहद अहम भूमिका है। भारत का चीन के साथ विवाद चल रहा है और ऐसे में सरकार पड़ोसी देश के साथ मजबूत संबंध कायम करना चाहती है। भारत ने म्यांमार की सरकार की कार्रवाई का हर जगह समर्थन किया है। हालांकि, अंतरराष्ट्रीय दबाव बढ़ने के बाद भारत ने इस बात पर दुख जताया कि हजारों की तादाद में रोहिंग्या बांग्लादेश में जाकर

शरण ले रहे हैं। उधर, चीन भी भारत की तरह से म्यांमार सरकार का समर्थन करने की नीति पर चल रहा है। चीनी विदेश मंत्री ने संयुक्त राष्ट्र महासचिव पंतोनियो गुतेरस से कहा भी कि अपने देश की संप्रभुता की रक्षा करना कोई गलत काम नहीं है और म्यांमार की सरकार ऐसा ही कर रही है। हालांकि अंतरराष्ट्रीय दबाव म्यांमार सरकार पर बरकरार है। ब्रिटेन ने अपने प्रशिक्षण कार्यक्रम को स्थगित करने की चेतावनी तक दे दी है। दिल्ली स्थित आब्जर्वर रिसर्च फाउंडेशन के के. योहो का कहना है कि अंतरराष्ट्रीय दबाव के बीच नौसेना प्रमुख का सत्कार इस बात का स्पष्ट संकेत है कि भारत वहाँ की सरकार को रखिन मामले में समर्थन दे रहा है।

Fri, 22Sept, 2017

China, India, Pak boosting N-stockpile, says watchdog

The global number of nuclear warheads dropped last year, but it seems China, India, North Korea and Pakistan are expanding the size of their atomic arsenals, a Swedish arms watchdog said on Thursday.

The Stockholm International Peace Research Institute says developments in North Korea's nuclear program "contributed to international political instability with potentially serious knock-on effects".

SIPRI says that as of January 2017 the US, Russia, Britain, France, China, India, Pakistan, Israel and North Korea together had about 14,935 nuclear weapons, down from 15,395 a year earlier. SIPRI listed North Korea as not having any deployed warheads but with 10 to 20 "other warheads", which include "operational warheads held in storage and retired warheads awaiting dismantlement".

Placing more curbs on N Korea: Trump

US President Donald Trump said on Thursday that he was putting more sanctions on North Korea for carrying out ballistic missile and nuclear tests. "We will be putting more sanctions on North Korea," Trump told reporters. This came even as the North's foreign minister described as "the sound of a dog barking" Trump's threat to destroy his country. "It would be a dog's dream if he intended to scare us with the sound of a dog barking," North's minister Ri Yong Ho said. Agencies

Fri, 22Sept, 2017

'Made small nukes to check India'

We See Zero Role for India in AF: Pak PM

Pakistan has developed short-range nuclear weapons to counter the 'Cold Start' doctrine of the Indian Army, Prime Minister Shahid Khaqan Abbasi said on Thursday.

On his maiden visit to US as Pakistan PM, Abbasi also said that Pakistan's nuclear arsenal was safe and secure. On the assertion that Pakistan has the fastest growing nuclear arsenal in the world, Abbasi said, "As far as tactical nuclear weapons (are concerned), we do not have any field tactical nuclear weapons." Related report: P 28 "We have developed short-range nuclear weapons as a counter to the Cold Start doctrine that India has developed. Again, those are in the same command-and control authority that controls the other strategic weapons," Abbasi said in response to a question at the Council on Foreign Relations, a top American thinktank. 'Cold Start doctrine' was developed by the Indian Army for a possible war with Pakistan, which intends to allow India's conventional forces to perform holding attacks to prevent nuclear retaliation from Pakistan in case of a conflict. "We have a very robust and secure command-and-control system over our strategic nuclear assets. Time has proved that it's a process that is very secure," he said. The Pakistan premier sought to dispel the notion surrounding the country's inability to handle its nuclear programmes properly.

"We do have nuclear capability. And we know how to handle nuclear waste. We had a nuclear programme in the early '60s, one of the first countries in Asia to have a nuclear programme. So if we've managed it for over 50odd years, I think we can continue to manage it," Abbasi said. He said Pakistan sees "zero" political or military role for India in Afghanistan, weeks after US President Donald Trump sought more help from Delhi to bring peace and stability in the war-torn country. Stung by Trump's threat to crack down on

Pakistan, Abbasi insisted on Wednesday that the army had uprooted all sanctuaries used by Islamic extremists along its frontier with Afghanistan.

The Pakistani premier demanded the UNSC resolution on Kashmir be implemented, asserting his country will continue to support the right of self determination for J&K.

He also said disputes between India and Pakistan over Indus Treaty can be resolved within context of agreement itself.

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THE TIMES OF INDIA

Fri, 22Sept, 2017

Chinese navy gets another N-powered sub

China has added a new nuclear-powered submarine to its fast expanding fleet but experts believe that it is not the most advanced version as speculated earlier, official media reported on Thursday. The new submarine is stated to be 69th conventional and nuclear submarines, according to unofficial estimates by global defence think-tanks.

A new nuclear submarine has been turned over to the People's Liberation Army Navy (PLAN), state-run Global Times quoted an official with the China Shipbuilding Industry Corporation (CSIC) as saying.

However, experts believe this submarine is not the most advanced Type 096, which is China's next generation strategic nuclear submarine, the report said. It added the submarine was built at the Dalian shipyard, but did not reveal the submarine's name and type.

पंजाब केसरी

Fri, 22Sept, 2017

50 से ज्यादा देशों ने परमाणु प्रतिबंध संधि पर किए हस्ताक्षर

संयुक्त राष्ट्र, (एपी): पचास से हस्ताक्षर समारोह के शुरू होने संघि को समर्थन करने वाले ज्यादा देशों ने परमाणु पर कहा, आप वो राष्ट्र हैं जो देशों में लागू करने के लिए 50 हथियारों को प्रतिबंधित करने दुनिया को नैतिक नेतृत्व का औपचारिक मंजूरीयों की के लिए एक संधि पर आज रास्ता दिखा रहे हैं। विश्व को जरूरत है। इस संधि के लागू हस्ताक्षर किए। दुनिया के आज ऐसे नैतिक नेतृत्व की होने पर इन देशों में किसी भी परमाणु शक्ति संपन्न देशों ने बहुत जरूरत है। दिन समाप्त परिस्थिति में परमाणु हथियारों को भले ही खारिज होने से पहले इंडोनेशिया और को विकसित करने, परीक्षण कर दिया हो लेकिन इसके आयरलैंड समेत 50 देशों ने इस करने, निर्माण करने, उन्हें समर्थकों ने इसे ऐतिहासिक संधि पर हस्ताक्षर किए। अन्य हासिल करने, अपने पास समझौता बताया है। परमाणु देश अगर चाहें तो बाद में इस रखने या संचय करने पर हथियारों को नष्ट करने से पर हस्ताक्षर कर सकते हैं। रोक रहेगी। संबंधित अंतरराष्ट्रीय गुयाना, थाईलैंड और वेटिकन ने पहले ही इस संधि को अभियान के कार्यकारी ने पहिले ही इस संधि को निदेशक बेट्राइस फिन ने औपचारिक मंजूरी दे दी है। इस

Gene editing used to alter DNA of human embryos

London: Scientists in the UK have for the first time used genome editing to study DNA function in human embryos, an advance that could help better understand the biology of our early development.

Researchers from the Francis Crick Institute in the UK revealed the role of a key gene in human embryos in the first few days of development.

They used genome editing technique called CRISPR/Cas9 to stop a key gene from producing a protein called OCT4, which normally becomes active in the first few days of human embryo development.

After the egg is fertilised, it divides until at about seven days it forms a ball of around 200 cells called the blastocyst.

The study found that human embryos need OCT4 to correctly form a blastocyst.

"We were surprised to see just how crucial this gene is for human embryo development, but we need to continue our work to confirm its role," said Norah Fogarty from the Francis Crick Institute.

"Other research methods, including studies in mice, suggested a later and more focused role for OCT4, so our results highlight the need for human embryo research," said Fogarty, first author of the study published in the journal Nature.

"One way to find out what a gene does in the developing embryo is to see what happens when it is not working," said Kathy Niakan from the Francis Crick Institute, who led the research.

"If we knew the key genes that embryos need to develop successfully, we could improve IVF treatments and understand some causes of pregnancy failure. It may take many years to achieve such an understanding, our study is just the first step," said Niakan.

The team spent over a year optimising their techniques using mouse embryos and human embryonic stem cells before starting work on human embryos.

To inactivate OCT4, they used CRISPR/Cas9 to change the DNA of 41 human embryos. After seven days, embryo development was stopped and the embryos were analysed.

The embryos used in the study were donated by couples who had undergone in vitro fertilisation (IVF) treatment, with frozen embryos remaining in storage.

The majority were donated by couples who had completed their family, and wanted their surplus embryos to be used for research. The study was done under a research licence and strict regulatory oversight.



Open data dream far from reality

Hurdle: The government portal launched in 2012 has failed to hit the bulls eye as the data is either outdated or the officials don't update the information on time

New Delhi: Often, getting basic information from the government can feel like drawing water from a stone. You have a right to know how much money is spent on cleaning your street or running your child's school – it's public money, after all – but finding out can be nearly impossible.

And what if you want to know how much rain your city received every day for the past 50 years? The government would know, but you won't.

These struggles are symptomatic of a lack of an open data culture, which not only robs citizens the right to know but also the government and independent researchers the ability to size up problems and come up with critical solutions.

Almost everyone who closely works with Indian data sets, or has tried at some point, is likely to have a story about the struggle to either locate a dataset or find it in an accessible format — something that is easy to download and analyse. A surprisingly large amount of Indian data is found in PDFs, which make it difficult to play with.

The problem can be solved by the 'Open Government Data (OGD)' project. According to Open Knowledge Foundation, OGD refers to "data and information produced or commissioned by government or government controlled entities, which can be freely used, reused and redistributed by anyone".

Open data can help create \$3 trillion a year of value for the global economy, according to a McKinsey Global Institute report from October 2013. From citizens who wish to hold the government accountable, to government officials who want to improve the delivery of public programmes, to researchers devising evidence-based policy, to civil society organisations tracking election results – nearly everyone benefits from open data.

In India, the OGD movement gained strength following a global push for open data that began with the launch of data.gov in the United States in 2009, and data.gov.uk in the United Kingdom the following year. In 2012, India adopted the National Data Sharing and Accessibility Policy (NDSAP) and launched its OGD portal, data.gov.in, that October.

In theory, publishing data in a centralised repository should help better allocate scarce research resources, says Nisha Thompson, co-founder of DataMeet, a community of data science and open data enthusiasts. "Multiple individuals and organisations are spending the same amount of time, money and effort to collect and clean the same data sets," Thompson said.

It is precisely for this reason — making government data easily accessible in a single place — that data.gov.in was launched. "The objective is to make more data sets open, making it easy for citizen to access, reduce our RTI (Right To Information) flow, and at the same time, increase accessibility, transparency and accountability, while promoting innovation," Sitansu Sekhar, technical project manager with the Indian government's data portal, said. But is data.gov.in working as desired? Not really.

Doing It Wrong

Sample this: DP Mishra, the data portal's technical director, enthusiastically notes that the National Crime Records Bureau (NCRB) — responsible for collating official crime statistics — has published a significant amount of data on data.gov.in.

Go and search for "NCRB" on the portal, however, and you will get zero results. That's the first problem: search. Sure, "crime" will give you listings, which includes NCRB data.

But why are there no results for the organisation name?

Now, consider rainfall statistics. Try searching for "rainfall 2017" on the portal. This time, results do show up, but there is nothing for the year 2017. The same thing happens when you look up "health budget" — you won't find anything for 2017. Here is the second problem: many important data sets are outdated, even though they lie somewhere with the government.

"I often find incomplete data sets on the portal, making it almost impossible to use it for research whose outcome can then be used for evidence-based policymaking," said Natasha Agarwal, an independent research economist.

Rakesh Dubbudu, founder of Factly, a public information portal that is helping the Telangana government to open their data, said the portal's design is another issue. "The moment you go to the data portal,

you are overwhelmed. There is just too much information—you don't know where to go to," Dubbudu said, underscoring the difficulty in navigating the datasets, a third problem.

The portal also suffers from an issue that has nothing to do with design or technology: it's simply hard to get government agencies to upload their latest data to the portal.

Closed Approach

In 2015, Agarwal wrote a paper on the OGD movement in India, looking critically at data.gov.in. She wrote that the initiative suffers because the suppliers of data — ministries, for instance — do not see the value in making data open. Given their resource and capacity constraints, some ministries' chief data officers (CDOs) believe updating data.gov.in is not worth their time.

Shekhar, the project manager of the portal, acknowledged the challenge of getting agencies to upload new data. "Uploading data on the portal is an additional burden on the officer. That is not their sole task. The CDO has other work too, so they say they don't have time for this task," he said.

Mishra, data.gov.in's technical director, said he and his colleagues have very little control over which data sets get uploaded to the portal. If the datasets are outdated, he said, "that's not in our hand. As long as the government is not pressurised, it won't happen. The community should write to the CDO about their concerns." But there is another problem, which Agarwal also highlighted in her paper: data.gov.in lacks an effective feedback mechanism to understand how people are using the platform.

DP Mishra said there is a form on the website where users can send in their queries. But most people send requests for adding specific data sets, he said. "There is hardly any feedback about the platform." The data portal team believes its product is at par with international standards – in fact, one of the best. Agarwal disagrees. "Having worked with the US data portal, and trying my luck with India's, I can say we are not even close."

All these problems notwithstanding, "we have definitely moved forward," Thompson, the DataMeet founder, said. In 2010, when she moved back to India, "no one was thinking about data," she said. "From then to now, we have a vibrant community of people working with data. The ecosystem has grown significantly."