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## TELECOM AUTHORITIES BLOCK 120 SENDER IDS FOR BULK MESSAGING OVER CHINA LINK

### Cheat code

Centre has blocked multiple headers for malicious messaging



■ A header, also known as sender ID, is a unique combination of characters or numbers representing the brand or company name of the message sender

■ Headers are used by banks, marketing companies, utility providers and even government offices to send bulk messages (SMS) to consumers and customers

■ The header of West Bengal State Electricity Distribution Company Ltd. – WBSEDC - was compromised and taken over by a Chinese host

■ The header was misused to dupe consumers who received messages pertaining to outstanding electricity bills

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An investigation by the Indian Cyber Crime Coordination Centre (I4C) under the Ministry found that the headers were hosted from China.

Citing an example, a Ministry official said the header of West Bengal State Electricity Distribution Company Ltd. — WBSEDC — was compromised and taken over by a Chinese host. The header was misused to dupe consumers who received messages pertaining to outstanding electricity bills.

“The SMS contained malicious links, which when clicked would lead to financial loss for the consumer as the hacker would get access to the person’s phone. Consumers would fall for it as the header genuinely belongs to the electricity distribution company,” the official said.

Another official added that the scam was going on for at least three years and it was only recently that the officials at I4C flagged the issue. “The IP addresses of all the headers that were blocked were traced to China,” said the official.

Following the investigation done by I4C, the Telecom Regulatory Authority of India (TRAI) wrote to telecom companies to respond within 30 days about active or dormant headers.

On February 16, to stop the misuse of headers and message templates, TRAI issued directions to Access Service Providers to reverify and block all un-registered headers and message templates in 30 days and 60 days respectively.

Parliament was informed last month that more than 15 lakh mobile numbers detected to have been issued on fraudulent credentials, have been disconnected by the Department of Telecommunications (DoT).

The Centre has been trying to strengthen I4C that was started in 2020. The Threat Analytical Unit (TAU) of the I4C analyses the pattern of financial crimes and frauds and sends reports to central agencies such as the National Investigation Agency (NIA), Enforcement Directorate or State police forces.

*Bilateral cooperation: Prime Minister Narendra Modi with the King of Bhutan, Jigme Khesar Namgyel Wangchuck, in Delhi. ANI*

*King Jigme Khesar Namgyel and Narendra Modi discuss ‘entire gamut’ of ties and progress in boundary talks between China and Bhutan, particularly about Doklam, says Foreign Secretary*

Telecom authorities have blocked as many as 120 headers operated by a group linked to a Chinese entity in the past two months based on information provided by the Union Home Ministry.

## INDIA’S TIGER POPULATION TOPS 3,000, SHOWS CENSUS

*The population has grown the most in the Shivalik hills and Gangetic flood plains, but there is a decline in the Western Ghats numbers, though ‘major populations’ are said to be stable*

India has at least 3,167 tigers, according to estimates from the latest tiger census made public on Sunday. While this is ostensibly an increase since the census of 2018, the numbers are not strictly comparable, as a key calculation to compute the maximum and minimum range of the tiger population is yet to be done.

There were 2,967 tigers recorded in 2018, and 2,226 in 2014. Sunday’s figures were provisional and could be revised, an official involved with the census told The Hindu.

The tiger population numbers were made public by Prime Minister Narendra Modi in Mysuru on Sunday, at an event to mark the International Big Cat Alliance conference and the 50th anniversary of Project Tiger.

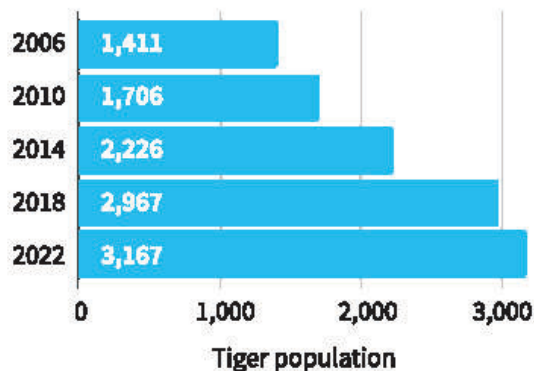
### Western Ghats decline

The tiger population has grown the most in the Shivalik hills and the Gangetic flood plains, followed by central India, the northeastern hills, the Brahmaputra flood plains, and the Sundarbans. There was a decline in the Western Ghats numbers, though “major populations” were said to be stable.

The tiger numbers are estimated by adding animals caught in camera traps, and those that may not have been captured in this way. The latter are estimated by statistical techniques. “We have found 3,080 unique tigers in

### Big cat count

According to the data released by the PM, the number of tigers in India increased by 200 in the past four years. A look at the tiger population



**Steady rise: A tiger at Van Vihar National Park in Bhopal on Sunday. PTI**

camera traps this time. In the last census, it was 2,603. However, for the latest census, we have not finished computing the estimates of tigers outside such traps as well as the State-wise break-up of tigers, so the numbers may differ. We expect it to be done within three months,” said Qamar Qureshi of the Wildlife Institute of India, one of the scientists involved in the census exercise.

In their four-year estimates, the scientists provide a range of the estimated tiger population, and the mean value is highlighted as the latest tiger population.

For instance, in 2018, the tiger population was a minimum of 2,603 and a maximum 3,346 with a mean value of 2,967.

The current estimate also does not give numbers on the proportion of tigers outside protected areas, which are a growing number and a key marker of the environmental threats as well as man-animal conflicts. However, the authors of the census report warn that nearly all of the five major tiger-zones face

challenges to the growth of the tiger population due to the increasing demands from infrastructure development.

Since 1973, when Project Tiger was established, the number of dedicated tiger reserves has grown from nine reserves covering 18,278 square km to 53 reserves spanning 75,796 square km, which is roughly 2.3% of India's land area. However, experts have said that most of the country's tigers are focused within a handful of reserves which are fast approaching their peak carrying capacity, and unless new regions are developed as reserves, it may be a challenge to ensure further growth in numbers.

Following the translocation of cheetahs from Africa, India is now looking at international initiatives to translocate tigers into other locations. It is in talks with Cambodia, where the tiger has gone extinct due to poaching, to create a suitable habitat there and ship a few tigers from India to revive the big cat's population in that country.

## FUNDING RAMP-UP ON AGENDA AS G-20 PANEL ON BANK REFORMS PREPARES TO MEET THIS WEEK



Plans afoot: The IMF and World Bank's Board of Governors' spring meeting is scheduled in Washington this week. AFP

The G-20 expert group on reforming multilateral development banks (MDB), jointly steered by Harvard University President Emeritus Lawrence Summers and Fifteenth Finance Commission Chairperson N.K. Singh, is slated to hold its first in-person meeting in Washington this week.

The group's mandate includes an evaluation of the scale of funding

ramp-up needed for institutions such as the World Bank (WB) and the International Monetary Fund (IMF) to be able to finance member countries' needs, with possible mechanisms to raise more funds from the private sector and coordinate more effectively among the different institutions.

With the IMF and World Bank's Board of Governors' spring meeting scheduled in Washington this week, the G-20 group is also likely to interact with their leadership along with that of other multilateral development institutions in the coming week.

Incidentally, the World Bank's development committee has proposed an evolution plan to "dramatically scale up" its financing and impact at a time when the world is facing "an unprecedented confluence of crises". The World Bank's Board of Governors will consider the plan that stresses the need for urgent action by all stakeholders on April 12.

Mr. Singh, co-convenor of the G-20 panel, whose report is due by June, said the challenge of raising financing is not unique to the World Bank but to all multilateral banks as member countries are reluctant to step up capital. "Each bank has its own structure and there are some focused on regional development so any convergence in the norms must recognise their different priorities," he told The Hindu.

Constituted in March under the aegis of India's G-20 Presidency, the expert group's mandate is to suggest a road map for rebooting the ecosystem of MDBs so they are better equipped to finance sustainable development goals and emerging global challenges like climate change and health.

## THE POPULATION BOMB THAT NEVER WAS

'Population bomb' narratives mobilised many policies and behaviours that shaped the lives of generations of Indian women. A new report revisits this controversial idea. It also states that population alone was never the problem for sustainability, nor will it be for the climate crisis.

On March 27, 2023, Beniamino Callegari, associate professor at Kristiania University College, Oslo, and a member of the Earth4All modelling team, and Per Espen Stoknes, Earth4All project lead and director of the Centre for Sustainability at the BI Norwegian Business School, published their predictions about the world's human population in the form of a report by the Earth4All Initiative.

This comes five decades after reports in which some economists blamed, among other things, the planet's expanding human population for its many problems. The two researchers have revisited them and revised the original population predictions. The effort is notable for the ways in which women's reproductive rights and population control have emerged in contemporary political discourse, as well as the useful contradictions they strike with more recent reports pertaining to development policy.

### What does the new report find?

In the new Earth4All Initiative report, the researchers set aside population-modelling approaches adopted by the UN, the Wittgenstein Centre ("sponsored by the European Union"), The Lancet, and integrated assessment models. Instead, they modelled birth rates "explicitly and causally ... as a function of GDP per person," which shows "a negative correlation between income and fertility rate". In this context, the per-capita GDP is a "proxy" for female education and socio-economic mobility, among other factors.

Based on such modelling, the researchers advanced two scenarios. In



Red flag: The researchers have been cautious to warn that a declining population alone won't address the issues surrounding the climate crisis. PTI

the first, called “Too Little, Too Late”, Dr. Callegari and Dr. Stoknes predicted that if economic development continues as it has in the last five decades, the world’s population would peak at 8.6 billion in 2050, roughly 25 years from now, and decline to 7 billion by 2100.

In the second scenario, called “The Giant Leap”, the researchers concluded that the population will peak at 8.5 billion by 2040 – a decade sooner than 2050 – but then rapidly decline to around 6 billion by 2100. This, they said, will be due to our investments in poverty alleviation, gender equity, education and health, ameliorating inequality, and food and energy security. To quote from the report:

“The policies supporting the Giant Leap scenario [... represent] a pathway towards fully returning human pressures on the planetary systems to the safe zone in civilisation’s long-term view, hopefully before irreversible planetary declines are triggered. However, a recovery is most plausible only for some of the planetary boundaries, such as nutrient overloading, ozone depletion, ocean acidification, and air pollution. Even in the Giant Leap scenario, although mitigation happens across the board, many of earth’s ... life-supporting systems cannot be fully returned to a safe operating space by ... even 2100.”

The report clarified that these population predictions are more optimistic than the kind of historic fear mongering and regressive development policies engendered by the ‘population bomb’ metaphor.

It also stated that population alone was never the problem for sustainability, nor will it be for the climate crisis.

#### What do the findings mean?

Essentially, the findings proposed that the better and more equitable policies we make today, the lower the earth’s human population will be later this century. However, the researchers have been cautious to warn that a declining population alone won’t address the issues surrounding the climate crisis.

The Earth4All report is entitled ‘People and Planet, 21st Century Sustainable Population Scenarios and Possible Living Standards Within Planetary Boundaries’. Aside from its predictions, it is notable because it revisits the premise of the 1968 book (The Population Bomb by Anne and Paul Ehrlich) and a 1972 report, and later book (The Limits to Growth), in which the authors made population a focus of global development policy.

But Dr. Callegari and Dr. Stoknes have been clear that humankind’s impact on the environment is not driven by population numbers but instead by the luxurious consumption of the richest people.

The duo also wrote that the equitable distribution of resources (as currently available) globally can alleviate extreme poverty, even exceeding the United Nations’ minimum levels.

#### How does it compare to other reports?

As it happens, the report also contradicted the UN ‘World Populations Prospects 2022’ report, which predicted that the global population would steadily rise to 10.4 billion in 2080 and then stabilise around that number in 2100.

The UN report also said that India would surpass China as the most populous country in 2023 (which it will). This, alongside our own National Family Health Survey, which most recently estimated India’s total fertility rate to be 2.1 (lower

in urban centres). These scenarios present India with a unique challenge: on the one hand, it will have a very large ‘young population’ (18-35-year-olds) that is also un- or under-employed, but on the other, it is dealing with rapidly declining fertility and a skewed women-to-men demographic ratio.

Population predictions and the kind of politics, scholarship, and policies they engender are wearing thin. Population size, especially in post-colonial nations, has become a locus for international aid agencies as well as for local elite narratives of “small families, happy families” leading to “modern nations”. These narratives essentially blame the poor for the conditions of their everyday lives and further disenfranchise them from the polity.

The local and global focus on population and fertility control through various (sometimes draconian) measures has been a reality for women in India for generations, including the nasbandi ka waqt (time for sterilisation), various State-level rules preventing people from holding public office if they have ‘too many’ children, and the recent, but now withdrawn, population control Bills. The ‘population bomb’ narratives mobilised many policies and behaviours that shaped the reproductive lives of generations of Indian women – but that bomb never was.

Instead, the spectre of the bomb haunts Indian women’s collective memories of reproductive justice (or lack thereof).

#### What do the contradictions mean?

The contradictions between the UN report and the Earth4All 2023 report are helpful because they allow us to imagine and address the conditions proposed by different studies. They also inform scholarship, activism, and policies that safeguard women’s health and well-being in all possible scenarios. The differing global projections, in the light of India’s local reality, should finally enable us to draft policies that are future-facing, help tap into our ‘demographic dividend’, and plan for a cultural change wherein women are able to make decisions about their reproductive lives in safe, healthy, and nourishing environments.

In fact, three reports in the last two years – the UN report, India’s latest National Family Health Survey, and the Earth4All report – can be productive and generative grounds for Indian policymakers as we consider some vital questions about our collective futures.

For example: India is currently in its ‘demographic dividend’ phase. After the current cohort of people aged 18-35 years turns 60, how does our country plan for an older population without a ‘support’ base of younger people? For another: Can India’s foreign policy accommodate borderless movements – both for our citizens into other countries (for work or leisure) given our ‘high’ population and for people from other countries to enter India in reciprocal relationships?

Yet another: What do the new predictions mean for women and their access to reproductive justices, including (but not limited) to their decision-making around having or not having children?

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## CENTRE PLANS REVAMP OF LIVESTOCK INSURANCE SCHEME TO RAISE COVERAGE



*Poor coverage: The Parliamentary Standing Committee’s report reveals that not even a single animal was insured during 2022-23, whereas during 2021-22, 1,74,061 animals were insured. File photo*

*At present, less than 1% of the country’s cattle population is insured; finding the yearly premium to be unaffordable for most farmers, the government is looking at reducing the rate and providing a subsidy for cattle rearers of SC/ST communities*

Pulled up recently by a Parliamentary Standing Committee for zero insurance coverage of livestock in 2022-2023, the Centre is considering a comprehensive livestock insurance scheme modelled on the Prime Minister’s Fasal Bima Yojana. The Union Animal Husbandry Ministry’s move is to roll out the scheme ahead of the 2024 Lok Sabha election. There are initial proposals to waive off premium for cattle rearers from Scheduled Caste (SC) and Scheduled Tribe (ST) communities. At present, less than 1% of the country’s cattle is insured and the average yearly premium is 4.5% of the insured amount.

The Animal Husbandry Ministry recently held a meeting with various insurance companies and other stakeholders on the matter. “Our effort is to reduce the premium so that more farmers enrol in the scheme,” an official said, adding that a comprehensive livestock insurance will replace the present

Livestock Insurance Scheme.

The scheme is functional in 100 districts of the country. The Centrally sponsored scheme is being managed by the respective State Livestock Development Boards.

Recently, the Animal Husbandry Ministry had told the Standing Committee on Agriculture and Animal Husbandry that farmers are often caught in the fight between State government officials and insurance companies. A report submitted to Parliament by the panel on Demands for Grants of the Ministry quoted an official, and said the Ministry prefers direct transfer of benefits to farmers' accounts.

The panel said in the report that not even a single animal was insured during 2022-23, whereas during 2021-22, 1,74,061 were insured.

"The Committee were informed of the hardships faced by the livestock owners in getting their livestock insured and also about the measures being taken to ease the process of livestock insurance. Expressing concern over no insurance during 2022-23, the Committee recommended the Ministry to take effective steps so that the process of insurance of livestock is made easy for the beneficiaries. The Committee would also like the Department to explore the possibility of developing an App-based Livestock Insurance facility for livestock

owners. The Committee would like to be apprised of the total progress made by the Department in this regard," the report added.

The official said high premium rate and general economic conditions of farmers are reasons for lower enrolment in such schemes. "The government considers subsidy on the premium paid by socially marginalised farmers from SC-ST communities," the official added.

In the meeting with insurance companies, the Centre stressed the importance of expanding the ambit of the scheme and decreasing the premium paid by the farmers.

During the lumpy skin disease pandemic, about two lakh cattle died. Farmers had demanded compensation from the government for the loss. Hence, the Centre's attempt is to keep the premium low and ensure maximum coverage of livestock.

"The coverage at present is very poor as most of the farmers are not in a position to pay premium. Some exquisite cattle breeds are insured by the breeders, but the government wants to insure more animals," the official added. Several farmers' organisations had also demanded comprehensive livestock and crop insurance in the background of pandemics such as lumpy skin disease.

## INDIA TO BRIDGE LANGUAGE GAP WITH NEIGHBOURS

*Considering our cultural imprints in these countries, India cannot afford to ignore these countries*

Looking to expand its cultural footprint in nations with which it has historical ties, including those in its immediate neighbourhood, India is planning to create a pool of experts in languages spoken in countries such as Myanmar, Sri Lanka, Uzbekistan and Indonesia to facilitate better people-to-people exchanges.

The Indian Council for Cultural Relations (ICCR) has envisaged a special project called 'The Language Friendship Bridge', which plans to train five to 10 people in the official languages of each of these countries.

As of now, the ICCR has zeroed in on 10 languages: Kazakh, Uzbek, Bhutanesse, Ghoti (spoken in Tibet), Burmese, Khmer (spoken in Cambodia), Thai, Sinhalese and Bahasa (spoken in both Indonesia and Malaysia).

### 'Shared heritage'

"Considering our cultural imprints in these countries, India cannot afford to ignore these countries," ICCR President Vinay Sahasrabudde told The Hindu.

In India, the focus till now has been on learning European languages such as Spanish, French and German, along with the languages of major Asian economies such as China and Japan. Though a number of universities and institutes offer courses in these languages, only a handful teach any of the 10 languages on the ICCR list. Sinhala, for example, is taught at Banaras Hindu University and the School of Foreign Languages (SFL) under the Ministry of Defence. The SFL also has courses in Bahasa, Burmese and Tibetan.

"India requires translators, interpreters and teachers in the languages of these countries with which it shares a cultural history," Dr. Sahasrabudde said. The idea is to enable India to translate its epics and classics, as well as contemporary literature, into these languages so that people can read them.

### Varsity consultations

The ICCR is in discussion with universities and institutes as well as

experts offering foreign language courses in the country on the modalities of implementing the project. Among those being consulted are the foreign language departments at Jawaharlal Nehru University, Delhi University, Hyderabad's English and Foreign Languages University, Banaras Hindu University, and Mahatma Gandhi Antarrashtriya Hindi Vishwa Vidyalaya at Wardha.

The discussions, sources said, have thrown up two possibilities. One is to start tie-ups wherein teachers from these countries come and teach courses in India. The second approach is the ICCR offering scholarships to Indian students to go and study these languages in the countries where they are spoken.

Language experts feel that the second option is the better one as a proper cultural environment is needed to learn a language in its entirety. "To learn any language, a person has to be in that country. There are many aspects which one needs to learn, like expressions and proper pronunciation, which happen only in the correct environment," said Soma Ray, a former senior faculty member at the SFL who now teaches at St. Stephen's College in Delhi University.

She also emphasised the need for proper utilisation of trained language experts.

### Growing demand

Experts also feel that the ICCR's list of languages needs to be expanded, with India seeing a boom in cultural and economic ties with other neighbouring countries as well.

Meeta Narain, a professor at the Centre for Russian Studies in Jawaharlal Nehru University, offered the example of medical tourism. "A large number of people are visiting India for treatment from countries like Turkey, Bangladesh, Afghanistan and Maldives and there is an urgent need for a pool of translators and interpreters for facilitating their visits as well," she said.

## DRACONIAN RULES

*New amendment rules on intermediary guidelines amount to censorship*

With the advent of social media — the product of the evolution of the Internet into a sphere of communication that allows for relatively unfettered user-generated content — the problem of misinformation has taken a grotesque form. Express measures to curb misinformation, called "false news" and the somewhat inaccurate "fake news", are a must. However, this raises the question whether the Union government or its divisions can be the regulating entity. In the IT (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023, the Union government has added a provision of a fact-check unit to identify fake or false or misleading online content related to the government. Against such content identified by this unit, intermediaries, such as social media companies or net service providers, will have to take action or risk losing their "safe harbour" protections in Section 79 of the IT Act, which allows intermediaries to avoid liabilities for what third parties post on their websites. This is unacceptable and problematic. Also, Section 69A of the IT Act, 2000 elucidates the procedure to issue takedown orders, which these notified amendments could bypass. They also run afoul of *Shreya Singhal vs Union of India* (2015), a

verdict with clear guidelines for blocking content.

Without a right to appeal or the allowance for judicial oversight, the government cannot sit on judgment on whether any information is "fake" or "false" as the power to do so can be misused to prevent questioning or scrutiny by media organisations. Takedown notices have been issued by the government for critical opinion or commentary on social media platforms, with several having to comply with them and only a few such as Twitter contesting them in courts. By threatening to remove a platform's immunity for content that is flagged by a government unit, it is clear that the Union government intends to create a "chilling effect" on the right to speech and expression on online platforms. To keep the establishment — which includes the executive government of the day — on its toes and to speak truth to power is a non-negotiable and salient role of journalism in a democracy. In India, freedom of the press is guaranteed through Article 19 of the Constitution, with media rights and public right to free speech derived from this Article. It stands to reason that any relationship between the government and the media should be one kept at arm's length, with the media

having sufficient freedom. The government being the arbiter on what constitutes “false” or “fake” news and having the power to act upon platforms for publishing these will amount to draconian censorship.

## AWAITING LIFT-OFF INTO THE SECOND SPACE AGE

*Rakesh Soodis a former diplomat*

The Space Age began in 1957 with the launch of satellite Sputnik 1, and in 1961, cosmonaut Yuri Gagarin became the world's first person in space. Neil Armstrong made history by walking on the moon in 1969. The First Space Age became reality.

Today, the Second Space Age is here. Though there is no precise date for its beginning, the contrast in today's space domain is stark. Between the 1950s to 1991, a period dominated by the Cold War, 60 to 120 space launches took place annually and 93% of these were by the United States and the erstwhile Union of Soviet Socialist Republic (USSR) governments. Three decades later, there are not only many more actors in the space scene, but a majority are also private companies. Last year, there were 180 rocket/space launches, 61 by Elon Musk's Space X; 90% of global space launches since 2020 are by and for the private sector.

### India's space journey begins

India made a modest entry into the First Space Age in the 1960s. The first sounding rocket, a U.S. supplied Nike-Apache, was launched at Thumba (Kerala) in 1963 and in 1969, the Indian Space Research Organisation (ISRO) was set up. It has come a long way since, with over 15,000 employees and an annual budget between ₹12,000 crore-₹14,000 crore in recent years. Through these decades, it has sought to prioritise societal objectives and benefits.

Its first major project was Satellite Instructional Television Experiment (SITE) that involved leasing a U.S. satellite in 1975-76 for educational outreach across 2,400 villages covering five million people. Satellite technology was a new mass communication tool. This led to the INSAT series in the 1980s, followed by GSAT, that provided the backbone for the country's tele-communication and broadcasting infrastructure.

This was followed by remote sensing capability development. The use of space-based imagery for weather forecasting, resource mapping of forests, analysing agricultural yields, groundwater and watersheds, gradually expanded to cover fisheries and urban management. Following the Indian Remote Sensing programme, this plan grew with the Oceansat and Cartosat series. The field of satellite-aided navigation emerged later. It began with GAGAN, a joint project between ISRO and the Airports Authority of India, to augment Global Positioning System (GPS) coverage of the region, to improve air traffic management over Indian airspace. This has now been expanded to a regional navigation satellite system called Navigation with Indian Constellation (NavIC).

In parallel came the development of satellite launch capabilities. Beginning with the SLV-1 in the 1980s, it took a decade before ISRO developed the PSLV series that has become its workhorse with over 50 successful launches.

### Space potential

The origins of the Second Space Age can be traced to the Internet. In India, the process began accelerating as the 1990s saw the emergence of private TV channels, together with cable TV followed by direct-to-home transmissions. The demand for satellite transponders and ground-based services exploded. Today, more than half the transponders beaming into Indian homes are on foreign satellites.

The last 15 years witnessed another transformation, and this time India was in lockstep with the developed world. The age of mobile telephony, followed by smartphones has shown the world what a data-hungry and data-rich society India is. Broadband, OTT and now 5G promise a double-digit annual growth in demand for satellite-based services.

In 2020, the global space economy was estimated at \$450 billion, growing to \$600 billion by 2025. The Indian space economy, estimated at \$9.6 billion in 2020, is expected to be \$13 billion by 2025. However, the potential is much greater with an enabling policy and regulatory environment. The Indian space industry could easily exceed \$60 billion by 2030, directly

creating more than two lakh jobs.

The reason is that in terms of the end-user revenue, only a fifth is generated by the government. Media and entertainment account for 26% of India's space economy, with consumer and retail services accounting for another 21%. In terms of space activities, downstream activities such as satellite services and associated ground segment are dominant, accounting for over 70% of India's space economy; upstream activities of satellite manufacturing and launch services contribute the smaller share. A similar trend can be seen in developed countries. The reason is that India has been an early adopter of digital app-based services.

The growing role of the private sector is also evident in the numbers and ownership of satellites. According to the United Nations Office for Outer Space Affairs (UNOOSA), there are 8,261 satellites in orbit, of which nearly 5,000 are active. Till 2010, about 60 to 100 satellites were launched annually. The pace has picked up in recent years. In 2020, 1,283 satellites were launched. Today, Starlink operates a constellation of over 3,500 satellites and has a million paying customers. Both Starlink and OneWeb (in which Airtel has a stake) project constellations of 40,000 satellites each. And Jeff Bezos of Amazon has launched Project Kuiper to bring low-latency broadband connectivity around the globe. How this domain will be regulated is a separate challenge, but this provides a glimpse of the scope of expansion.

### Creating an enabling environment

The Indian private sector is responding to the demands of the Second Space Age. From less than a dozen space start-ups five years ago, there are over 100 today. The pace of investment is growing. From \$3 million in 2018, it doubled in 2019 and crossed \$65 million in 2021. The sector is poised for take-off — as a transformative growth multiplier like the IT industry did for the national economy in the 1990s.

Today, ISRO manages four to five launches annually. It manages 53 operational satellites — 21 for communication, 21 for earth observation, eight for navigation and the remaining as scientific experimental satellites (China operates 541). In addition, ISRO has missions such as Chandrayaan, Mangalyaan and Gaganyaan (manned space mission). ISRO has always been an open organisation that has worked closely with the Indian private sector. However, for some private sector companies, space technology-related work is a small part of their revenue stream. They were content as vendors, producing to defined specs and designs.

The start-ups are different. Their revenue stream depends on space-related activities and they need a different relationship with ISRO and government. ISRO today is the operator, user, service provider, licensor, rule maker and also an incubator. It has steered India through the First Space Age and needs to do what it can do best now within its resources and its high-quality manpower — research. To be fair, the government has been mulling over this. In 2017, the government introduced the first draft Space Activities Bill in Parliament but it lapsed in 2019. There has been talk of commercialising the PSLV and SSLV launch services and NewSpace India Limited (NSIL) was set up to replace Antrix. The Indian National Space Promotion and Authorization Centre (IN-SPACe) was set up in 2020 as a single-window-clearance for the private sector. However, it is unclear whether it will emerge as the licensing authority or a regulator. An Indian Space Association (ISpA) was created as an industry association.

In recent years, a series of policy papers have been circulated for discussion — a satcom/telecom policy, an earth observation policy and a foreign direct investment policy. These have served a purpose. What is needed now is legislation (a space activities act). This provides the legal grounding that policy papers lack; help set up a regulatory authority and create an enabling environment for raising venture capital funding into the Indian space start-up industry. The window of opportunity for India to join the Second Space Age exists; it should not be lost.

# WE AIM TO INSPIRE YOU

# DIRECTING AI FOR BETTER AND SMARTER LEGISLATION

*Mitul Jhaveri is a public policy consultant at the Ministry of Health and Family Welfare, Government of India*

Artificial Intelligence (AI) is attracting the attention of entrepreneurs, political leaders, and policymakers the world over. Most mature democracies are now using AI tools for better pieces of legislation and parliamentary procedures. For instance, AI tools can assist parliamentarians in preparing responses for legislators, enhancing research quality, obtaining information about any Bill, preparing briefs, providing information on particular House rules, legislative drafting, amendments, interventions, etc. They can also empower legislators to make informed decisions by having access to insights into citizen grievances, media opinions, and voices of citizen-centric associations. Many obstacles

For AI to work in India, we first need to codify our laws. The challenges with current laws are they are opaque, complex and there is a huge translation gap between law-making, law-implementing and law-interpreting organisations. The Indian government has done well to set up the India Code portal, but it cannot be entirely relied upon as a 'single source of truth'. The interface should contain a complete chain, right from the parent Act to the subordinate pieces of legislation passed by the central government and the amendment notifications, enabling any entity to get a 360° view. Such a requirement becomes more critical in special situations such as COVID-19. For example, in measures related to COVID-19, the central government issued over 900 notifications while State governments issued over 6,000 notifications on the subject (Data as on September 20, 2020).

We need to make laws machine-consumable with a central law engine, which can be a single source of truth for all acts, subordinate pieces of legislation, gazettes, compliances, and regulations. For example, AI can tell us if an entrepreneur wants to open a manufacturing unit in Maharashtra and what acts and compliances are applicable. If a citizen wants to check the eligibility for welfare schemes, AI can recommend which schemes are eligible, based on details provided by citizens.

## Assisting legislators

Compared to western democratic nations, in India, parliamentarians manage constituencies with a huge population. AI can analyse citizens' grievances and social media responses, and flag issues and priorities that need immediate attention. It can also assist parliamentarians in seeking citizen inputs for public consultation of laws and preparing a manifesto.

Many Parliaments across the world are now actively experimenting with AI-powered assistants. The House of Representatives in the United States has introduced an AI tool to automate the process of analysing differences between Bills, amendments and current laws. This is of immense help to legislative staff to

readily see the impact of amendatory provisions in Bills that they move through the legislative process.

The Netherlands House of Representatives, for instance, has implemented the "Speech2Write" system which converts voice to text and also "translates" voice into written reports. As per the Inter-Parliamentary Union (an international organisation of national parliaments), "Speech2Write comprises automatic speech recognition and automated editing capabilities that can remove filler words, make grammatical corrections and propose editing decisions." Japan's AI tool assists in the preparation of responses for its legislature and also helps in the automatic selection of relevant highlights in parliamentary debates. Brazil has developed an AI system called Ulysses which supports transparency and citizen participation. The good news is that India is also innovating and working towards making parliamentary activities digital such as the 'One Nation, One Application' and the National e-Vidhan (NeVA) portal.

AI can also simulate the potential effects of laws. For example, various datasets such as the Census, data on household consumption, taxpayers, beneficiaries from various schemes, and public infrastructure can be modelled. In that case, AI can uncover potential outcomes of a policy. At the same time, it can also help in flagging laws that are outdated in the present circumstances and which require amendment. For example, we all saw how 'The Epidemic Diseases Act, 1897' failed to address the COVID-19 pandemic situation when the virus seemed to have overwhelmed the country. Not just this, many other provisions in the Indian Penal Code (IPC) are controversial and redundant. According to Article 309 (attempted suicide) of the Indian Penal Code (IPC) continues to be a criminal offence. We have many pieces of criminal legislation that were enacted more than 100 years ago that are of hardly any use today. Some include the Press and Registration of Books Act, 1867, the Public Gambling Act, 1867, the Prisons Act, 1894, etc.

The COVID-19 pandemic has given a strong thrust to the Digital India initiative and a digitisation of services. This momentum needs to be kept up and utilised in the field of law, policy-making, and parliamentary activities, harnessing the power of AI. While doing all this, it needs to be ensured that the use of AI must be encouraged in an open, transparent, and citizen-friendly manner. AI is a powerful tool, but at the end of the day, we should be mindful of the fact that it is a means to an end and not an end in itself.

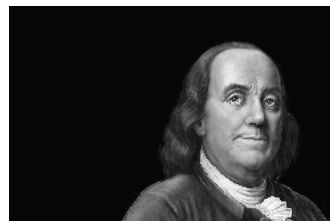
## RACE TO THE BOTTOM

*Restricting journalists does not serve the interests of China or India*

China's decision to "freeze" the visas of two Indian journalists, including The Hindu's Beijing correspondent, has shown how journalists have unfortunately been dragged into rising geopolitical tensions between the neighbours. China's government, on April 6, 2023 said its decision was a response to India taking steps aimed at Chinese journalists. In 2017, China said, India had shortened the visas for India-based reporters to three months, down from the one year that is the norm in both countries. Then on March 31 this year, reports said, a Xinhua reporter was told to leave India. With Beijing's retaliatory move, there are only two Indian reporters in China, who have been warned of countermeasures if Chinese visas were not restored to one year validity. It is now entirely possible that there will be no reporters from the world's two largest countries covering the other — a most unfortunate development amid worsening relations. Restoring the access of journalists on the basis of reciprocity is not complex. Indeed, until 2016, reporters from both countries were on one-year visas and largely left to do their work. The troubles began that year, when three Xinhua reporters were expelled after visiting a Tibetan settlement without permission from the Home Affairs Ministry, which subsequently began placing all Chinese reporters on three-month visas.

India appears to increasingly be following the Chinese playbook by

tightening scrutiny on foreign reporters in general. India has, as G-20 host, highlighted the strength of its democracy, but recent actions, including the government's over-the-top response to a BBC documentary, appear to show insecurity. While New Delhi is right to scrutinise non-journalistic activities of some Chinese reporters, restricting all of them will be counterproductive. On the spectrum of Chinese media coverage — largely negative on India — ground reports have been among the more multifaceted, showing sides of India that most Chinese usually do not get to see. Beijing, meanwhile, also stands to lose from its decision to restrict Indian media access. Last year's fake news of a coup in China, published in Indian websites, highlighted the absence of on-the-ground context. Moreover, if Beijing is now justifying its freezing of visas by pointing to reciprocity, it should be aware that reciprocity would also mean giving Indian organisations the kind of freedom that Chinese media enjoy in India. Even in the absence of Chinese employees, Xinhua and CGTN can continue to report with their Indian journalists. In contrast, Beijing bars foreign media organisations from hiring Chinese journalists except as assistants. In this race to the bottom, both sides stand to lose.



*I didn't fail the test,  
I just found Hundred ways to do it wrong.*

- BENJAMIN FRANKLIN

# WHAT IS CYBER INSURANCE? DO SMALL UNITS NEED COVER?

November 2022 data suggests about 43% of all cyberattacks targeted small businesses and start-ups. That is why it's all the more important for them to be equipped with cyber insurance

## CYBER INSURANCE

Businesses steadily rely on digital technology to operate, store data, and communicate with a more extensive customer base, propelling their growth. Although this convergence of offline and online worlds is a boon, it also raises cyberattack risks, particularly for small and medium-sized businesses, micro, small, and medium enterprises and start-ups.

These businesses are more vulnerable as they are still in the process of establishing robust cybersecurity means and expertise to combat cyber risks. Thus, with the current interconnectivity, it has become crucial for small businesses to financially safeguard themselves from cyberattacks by taking cyber insurance.

Here are some situations where such insurance may provide cover: If your business experiences a data breach, resulting in the theft or loss of sensitive data, cyber insurance can cover the loss.

### Cover lost income

When a cyberattack causes a business to shut down or experience a disruption, cyber insurance can provide coverage for lost income and expenses. If it results in damages to third parties, such as customers or partners, the insurance can cover legal defence costs and damages awarded.

### So, what is cyber insurance?

Having a digital presence can sometimes be a catch-22 situation for small businesses. While it makes way for better efficiency, it also exposes companies to Internet-based perils.

These include data and security breaches, cyberattacks, intellectual property losses, cyber-safety hazards, financial fraud, etc.

Therefore, to mitigate such risks, start-ups and small businesses should purchase cyber insurance policy that has become more of a necessity than a choice. Moreover, the policy is now gaining popularity in India as it covers the expenses of investigating and repairing damages such as restoring lost data, incurring forensic costs, providing indemnification for lawsuits, compensating clients for any loss resulting from cyber incidents.

### Is it essential?

MSMEs and start-ups are crucial growth drivers of the Indian economy and also contribute significantly to the country's GDP. However, November 2022 data suggests about 43% of all cyberattacks targeted small businesses and start-ups. That is why it's all the more important for them to be equipped with cyber insurance policy.

The policy secures the company from the repercussions of being the

potential victim of a cyber crisis that may cause financial and data loss and harm its reputation.

### Kinds of coverage

First-party cover shields the business from costs incurred when it is afflicted by fraudulent activities such as a data breach.

Third-party cover offers protection from legal liabilities arising from any third party, including insured's customers, suppliers, business partners, and other stakeholders in the event of them suing the organisation for data breach and mishandling their data.

### What is covered?

Some common costs covered in the policy are legal and legal representation costs, cyber extortion payouts, business interruption costs, administrative investigations, data recovery and reconstitution costs, forensic costs etc.

### Estimation of premium

To acquire cyber insurance, businesses follow a standard procedure. Insurers comprehensively evaluate the risk and offer coverage options. Accordingly, the firms must share documents outlining the specifics of the security procedures and protocols. The insurer then follows statutory norms to determine the applicant's eligibility and the premium required. But, there is no fixed premium, as it varies based on the sector and the quality of risk.

### What is not covered?

Cyber insurance broadly protects the insured against various risks; however, it comes with some exclusions such as violation of contracts, breach of trade secrets and trademarks, and disputes over registered patents or intellectual property.

In addition, deceitful or deliberate behaviour or any fraudulent act infringing the rule or regulation is not covered. Property damage, harm, or injuries caused due to negligence, lack of precaution to safeguard confidential banking information, etc., are also not covered. Ongoing and uninsurable legal cases and physical injury, death, or damage to any tangible object remain uninsured.

To recapitulate, cyber insurance is crucial for enterprises of all sizes, as companies conduct substantial business online.

But before buying, evaluate the features, and check the coverage limits, inclusions, and exclusions that correspond to your needs. Also, be cognisant and read the terms and conditions before purchasing the policy.

(The writer is Head - Corporate & SME Insurance, Policybazaar.com)



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