

A wake-up call

India must build resilience against cyber attacks

This week, yet again, the global economy was hit by cyber attacks that affected sectors as diverse as banking, the transportation industry, chocolate factories and oil refineries. Some attacks seemed designed to just cause disruption; others were backed by demands for ransom to be paid in bitcoin, a cryptocurrency. The digital infection is likely to have started in Ukraine, but it has spread like a plague across at least 60 countries. Some affected companies paid up while others managed to migrate to backups. But the attacks caused huge financial losses and physical damage. This is not the first instance

of such malware attacks, yet the worst aspect is that such invasions are likely to happen again, thanks to a proliferation of linked computer systems and the increasing dependence on computerised systems in almost all walks of life. There will also always be unscrupulous hackers exploiting computer systems to make a quick buck, or just to cause chaos for the "Lulz", as hackers call them.

It is apparent that some of the methods used were developed, with government approval, as tools for cyber warfare. Nation-states have used cyberwarfare extensively in the past decade. Stuxnet, a sophisticated and malicious computer worm, was reported

to have crippled Iran's nuclear establishment by physically destroying centrifuges. The Stuxnet attack was believed to be a joint operation funded and run by the Israeli and American security establishments. When Russia and Georgia had a brief conflict in 2008 over the disputed region of South Ossetia, Georgia's information technology infrastructure was targeted by hackers who knocked the country off the Internet. Since the start of its conflict with Russia, Ukraine has been hit by several waves of cyber attacks, targeting its physical infrastructure such as power grids.

Any 21st-century war is likely to have a large cyber component since all modern military equipment and communication systems are enabled with information technology (IT). Cyber attacks are useful weapons, offering a big bang for the buck. They require relatively little investment to cause large-scale disruption.

What is more, such attacks enjoy plausible deniability. But unlike other weapon systems, nation-states cannot control and sequester the tools of cyber warfare. Any smart hacker can design, modify and release malware into the wild and it is impossible to prevent the spread of such malware. Not surprisingly, the ability to cause actual physical damage and chaos has obviously multiplied as civilisation becomes more IT-driven.

In this regard, India is at high risk. Quite apart from the defence establishment, Indian Space Research Organisation and big businesses, there is also the drive towards Smart Cities, Digital India, Aadhaar, and the newly unveiled goods and services tax (GST) regime, among other government programmes, where information technology and networking are integral to the structure. India is also enmeshed in multiple "dirty wars" and, therefore, an attractive target for

cyber terrorism. India is also a soft target - many so-called smart systems are designed to be accessed by over a billion people.

Creating a cyber-security network to protect such assets is a multi-pronged task. It involves "hardening" key infrastructure elements such as the Aadhaar and GST databases so as to render them immune to attempts by hackers. It also involves educating private citizens and businesses to implement safe cyber practices. More importantly, it requires creation of backups to be seamlessly integrated, in case of a disaster.

While this is imperative, yet it is unclear if the government has embarked on any such cyber-security initiatives. There have certainly been no attempts to educate private citizens in safe practices, for instance. India's cyber establishment, thus, remains highly vulnerable to disruption. The latest attacks should be a wake-up call.

Negotiating the seas

With the United States having recognised India's role in the Indo-Pacific region, the time is opportune for the two countries to step up maritime security cooperation

PREM VIR DAS

It must be truly rare in bilateral discussions between heads of state or government, and especially those in which the global superpower is a party, for a relatively inconsequential item like maritime security to even figure in the agenda, much less attract any serious attention. Yet, in the just concluded Modi-Trump interface, this theme was stressed thrice, not by our prime minister but by the US president. First, he spoke of the forthcoming Malabar exercises at sea which would, in his words, be the most elaborate and complex carried out until now. He then went on to stress the need to elevate the level of maritime security cooperation between the two countries. Finally, the joint statement acknowledged the need for both countries to play meaningful and legitimate roles in the Indo-Pacific and the common imperative for both in ensuring freedom of movement at sea consistent with international norms.

There are other elements to this highest-level engagement too, but the purpose here is to focus on issues at sea highlighted at the meeting and how they impact our own interests and aspirations.

Starting in the reverse order, some analysts have commented that by not referring to our role in the South China Sea (SCS), which had figured in the Modi-Obama statement of 2016, our position has been diminished. This is erroneous. The term "Indo-Pacific" was first coined by then Secretary of State Hillary Clinton in 2008. The Americans soon shied away from it and put out the more convoluted terminology of "Indo-Asia-Pacific". The term chosen by Ms Clinton is more embracing, covering as it does waters stretching from the Suez Canal to the waters of the western Pacific (which include the SCS).

We should be more than satisfied that the Trump Administration has chosen to restore the original description and, even more important, that it recognises India's legitimate role in this vast region. India is, in essence, an Indian Ocean Region (IOR) player, but given its size and interests, which includes growing maritime trade, its concerns extend beyond it. So, even though it is not a SCS littoral, it cannot remain excluded from developments that are taking place there. Its inclusion as party to the Indo-Pacific provides exactly that recognition. So, this is fully consistent with our long-term interests, and if some of our own foreign office mandarins have contributed to it, full marks to them.

As for enhancement of maritime security cooperation, while this has increased substantially in the last 15



A productive visit: Prime Minister Narendra Modi with US President Donald Trump at the White House

years, we are still constrained by bureaucratic hurdles, the main ones being our inability to conclude two important bilateral agreements which would facilitate sharing of classified information. These have been discussed threadbare in earlier years but there is a need, on both sides, to take a fresh look, given the strategic convergence that has been spoken of by both leaders.

Cooperation at sea involves not just ships going out together and carrying out exercises over a couple of days, but understanding the whys and the wherefores. This can come about only if there is some degree of synergy of doctrines, and for this to happen information sharing is important. So, while one can be selective and discriminate between what can be shared and what has to be beyond the radar, some compromise seems necessary. In the IOR especially, India has to become a net security provider and that will often require joint operations with the US. This realisation will facilitate actions needed to foster enhanced maritime security cooperation.

The third element is the reference to Malabar series of exercises at sea.

The content of these annual exercises, conducted alternately in the IOR and the western Pacific, has been enhanced over the last 15 years but there is a qualitative difference this year. For one, India will field its most capable platform, the aircraft carrier INS Vikramaditya with its MIG 29K aircraft and several frontline ships and submarines. The US participation will also be substantial. Add to this the presence of the Japanese Navy and the strategic convergence which guides this exercise becomes readily apparent. The Malabar series is clearly an Indo-Pacific event and lends credibility to India's aspirations and potential.

To these three elements which figure prominently in the Trump-Modi dialogue, must be added the American clearance for the supply of nearly two dozen Guardian drones for the Indian Navy.

While these will, no doubt, enhance the surveillance capabilities of our forces at sea, the fallout will come in what may lie ahead. If these should materialise, as one hopes they will, it is almost certain that they will be followed, sooner rather than later, by weapon-fitted versions. The logic of

the strategic relationship, provided it is taken through, will dictate such a step for both parties.

The Indian Navy also has an enquiry ongoing for nearly five dozen fighter aircraft to operate from aircraft carriers at sea and while the choice may, to some extent, be influenced by what the Indian Air Force selects for itself, the options should be wide open. Procurement of major military hardware must always be seen through the prism of geopolitical interests more than just financial cost. The dialogue just concluded gives India an opportunity to make the required course correction.

In sum, we must treat the US focus on maritime security cooperation, which treats both parties on par, as more than just passing remarks. This is the most positive part of the articulation that has been made, quite different to the rhetoric about friendship and democracy. As the Bard wrote, "There is a tide in the affairs of men, which taken at the flood, leads on to fortune..." That circumstance may be upon us.

The writer is a former Commander in Chief of the Eastern Naval Command. He has also served as member of the National Security Advisory Board

Aadhaar and multiple identity disorder

RAJENDRAN NARAYANAN

Agantuk (*The Stranger*) was Satyajit Ray's last film. The film revolves around the return of an old man, Manomohan Mitra, to India after 35 years. Manmohan had spent all his life with Adivasis from across the world and has a take on civilisation and progress that is at odds with the popular urban narrative of it. He claims to be the uncle of Anila and wants to spend a few days at her house in Kolkata. Anila's husband Sudheendra is highly suspicious of this stranger's identity. Manomohan sees through Sudheendra's suspicion and gives his passport to Sudheendra to verify his "identity". Sudheendra heaves a sigh of relief as he matches the name, the photograph, and the distinguishing mark. Manomohan, on the contrary, debunks Sudheendra's conviction by saying "the passport proves nothing" about "identity".

India is going through a curious phase where these questions are being codified and mapped through a 12-digit numeric equivalent called Aadhaar. Let us look at what these mean from the lens of an Adivasi man called Xavier Ahir Minj in his forties.

Xavier is a resident of Mahuatoli village in Champa panchayat of Mahudand block in Latehar district of Jharkhand. That's his residential identity. He cannot stand straight and uses a sturdy stick as support. He is visibly disabled and has a certificate issued in 2009 with his passport photograph stuck on it that "proves" that he is more than 50 per cent disabled. He is thus eligible to get disability pension from the state. Despite numerous visits to the block office, an 18-km walk, he has still not started receiving his disability pension.

Identity as an NREGA worker: Xavier is listed as "Jebiyar" Ahir in the NREGA Management Information System (MIS). His job card, bank passbook, and his Aadhaar number have been taken away by a local contractor. According to the MIS, he and his wife have collectively earned ₹24,096 from the beginning of the last financial year. However, they don't even know their job card number and neither has worked a single day. They were angry upon learning that so much money has been siphoned off in their names. On paper though, they are model NREGA workers because they've purportedly done close to 100 days of work in a year.

Identity in the Public Distribution System: Xavier has also been struggling to get rations under the PDS because he doesn't have his "original" ration card and the dealer refuses to acknowledge the photocopy. Xavier's wife, Indo Devi, was shouted at by the ration dealer for not producing the original, and they have stopped getting rations ever since — although the Jharkhand PDS website indicates otherwise.

An Aadhaar enrolment camp was conducted in his village a few years ago. Since then Xavier owns an Aadhaar card. Unaware of privacy concerns, he had given his Aadhaar number to a contractor, among oth-

ers, perhaps paving the way for wages taken out in his name. While he was asked to sign the consent form during enrolment, there has been no education or training on the uses, abuses, and privacy of this biometric authenticated number.

Not so long ago, Nandan Nilekani, the architect of the Aadhaar project, came up with a taxonomy of the people opposed to Aadhaar, two of the categories being "rights-of-the-poor" advocates and "luddites" (those who are opposed to technological change). Xavier doesn't belong to either of the camps. He got an Aadhaar because he was told that once he gets his Aadhaar, all his problems would be solved. However, all that has happened is Xavier resides in multiple databases with Aadhaar acting as the compass among his many so-called identities.

Mr Nilekani's taxonomy may appear clever but it indicates he is ill-informed about ground realities, and points to his technoutopianism. What is primarily required is political and administrative will for effective delivery of services and not merely a randomly generated unique 12-digit number to tag people. Enrolment in Aadhaar itself is a shining example of the government's reach when there is political willingness. The sheer numbers in the Aadhaar database is testimony to that. In Xavier's context, it is more important to have responsive and accountable field staff as opposed to more camps to get people into a database. Is it better to have a fancy algorithm that solves a wrong problem or some sub-optimal technology that attempts to solve more relevant problems? What is at stake is not efficiency but democracy at large.

The proponents of the UIDAI project may dismiss Xavier's situation as anecdotal.

They may desire an assessment of the scale of such travesties. But how many anecdotes are required to make the government pause and reflect? The velocity of Aadhaar imposition has left no time for rigorous studies or debate in evaluating the costs and benefits of this coercive project. Aadhaar was supposed to be a panacea against corruption and leakage and a magic wand for financial inclusion. But, Xavier stands tall, paradoxically so, as a counter-example to the claims made by Aadhaar — he is yet to get his disability pension, his PDS entitlements are in peril, and cash is being withdrawn by somebody else in his name. Xavier exists as rows and columns in databases and is yet invisible to the state. Much like Manomohan's passport, Xavier's Aadhaar seems to prove nothing. How has Aadhaar helped Xavier?

Manomohan Mitra in *Agantuk* astutely remarks, "I understand your dilemma. I know you but you don't know me." In the same vein, Xavier remains an agantuk — a stranger to the state. He knows the state, but he has fallen through the cracks and continues to live in the blind spot of our democracy.

The writer is on the faculty of Azim Premji University

OTHER VIEWS

Centre should sell entire stake in Air India, even if in stages

Both domestic and foreign buyers must be allowed to bid freely for shares

With the Union Cabinet's "in-principle" approval for the sale of Air India and five of its subsidiaries, a long-standing demand on the reform checklist has been ticked. The rationale for the government to shovel in huge sums of money to keep the loss-making airline afloat was weakening by the year. Air India has been surviving on a ₹30,000-crore bailout package put together by the United Progressive Alliance government in 2012 to help its turnaround, and the debt relief provided by public sector banks. The airline has a debt load of over ₹50,000 crore on its books, and it is estimated that even a well-executed asset sale may not fully cover its present liabilities.

It is not yet clear whether the airline will be fully privatised or how its eventual sale will be executed. A ministerial panel under Mr Jaitley is expected to begin working on the details soon. But having taken the politically courageous decision to privatise Air India, the government would do well to go for the sale of its entire stake, even if it is done in a gradual manner. Eventually, the aim of the sale should be to get the best price for the airline. One good way to achieve this would be to allow both domestic and foreign buyers to bid freely for stakes. For



this, the government will have to re-tune its FDI policy to allow foreign investors to buy a stake in Air India.

The Hindu, June 30

The PM has at last spoken

But, will he be heeded?

Whether emboldened or compelled by the sense of harmony and coexistence suffused in the air of Sabarmati Ashram, Prime Minister Narendra Modi on Thursday was able to enunciate the long-awaited words: The killing of people in the name of cow protection is not acceptable. That done, he needs to now put his weight behind what he has said: Ensure mobs do not lynch anyone, in anyone's name or for any cause. Irrespective of his politics, every person with a scrap of humanity in him has been dismayed by the rash of lynchings, public beatings and arson in the name of protecting the cow across the country, especially the BJP-ruled states, since 2014.

The Tribune, June 30

Assault on the media

Breach of privilege charge misused

Trial by the legislature is an idea that goes against the principle of separation of powers which forms the backbone of a democratic structure. Yet, the Constitution of India grants this rare privilege to the country's legislators. The idea is to ensure that no one has the audacity to assail the dignity of the House or impede its working. Unfortunately, as the long history of the working of state and Central legislatures in India shows, breach of privilege has become a weapon commonly used against media houses, media persons or individuals who get into the bad books of legislators. In the absence of a codified law that clearly defines what constitutes a breach of privilege, such cases of misuse of the special powers granted to the

legislature have set precedents. The latest instance is served by the Karnataka legislature's privileges committee, which has ordered a year's jail sentence and fine for two journalists.

The powers-that-be appear to be taking their right to be offended rather seriously. Throughout the country, this has built up a powerful onslaught against press freedom. Media persons who dispense vested interest groups and influential politicians find themselves easy targets of official investigation or summary trials. If legislators come across offensive reportage, they should, by all means, counter it, but not by misusing their privilege.

The Telegraph, June 30