## **Editorial**

Two events in December 2014 brought back public attention to the scourge of terrorism once again—the Sydney Café hostage crisis and the Pakistani Taliban's murderous attack on a school in Peshawar. The two attacks occurred within a day of each other, although there is little to no evidence of a link between them. In the first attack, an individual named Man Haron Monis, a self-styled cleric of Iranian origin who had a history of violent criminal offences, took 17 people hostage in Café Lindt in Sydney's Martin Place on 15 December 2014. The hostage drama ended some 16 hours later as police stormed the café; Monis was killed and two of the hostages died in crossfire. A day later, on 16 December 2014, nine members of the Tehrik-e-Taliban Pakistan (TTP) entered the Army Public School in Peshawar to carry out a terrorist attack. The terrorists mercilessly gunned down 145 members of the staff and young students including 130 children. Although the terrorists were killed in an operation launched by Pakistani security forces, the dastardly attack on the school appeared to have shaken the collective consciousness of the Pakistani society. It is, however, not certain if it will bring about a permanent change in the Pakistani establishment's use of jihadis as an instrument of policy. The TTP attack also brought back memories of the Beslan school massacre in Russia in 2004, which also targeted school children. The same day saw 15 school-going children die in a twin car bomb suicide attack in central Yemen. The stark lesson was that terrorism is nowhere near being eradicated. It is a global problem requiring a global effort to eliminate it, and will be a time-consuming affair.

The United States and its coalition partners continue to launch air strikes against Islamic State (IS) targets in Syria and Iraq. On its part, the IS has recently approved a budget of US \$2 billion for 2015, part of its 'development programme' for the areas under its control, which includes basic services such as education and welfare for those within its territory. It is also said to have started a bank in Mosul and continues in its efforts to establish a proto-state in parts of Iraq and Syria.

India's immediate and extended neighbourhoods thus continue to be volatile. It makes it all the more essential that, as the previous issue's editorial opined, India should contribute in the fight against extremism and terrorism both in its own interests and as a provider of common goods regionally. India should contribute to, and will benefit from, checking the flow of funds to the terrorist organizations, intelligence sharing, capacity building in the fragile states, and taking a strong political stand against the rising tide of extremism.

In October 2014, India's East Coast was struck by Cyclone Hudhud. Particularly impacted was Visakhapatnam, an industrial and port town and home to the Indian Navy's Eastern Command. The airfield and other installations in the naval base suffered extensive damage owing to the cyclone. That Hudhud struck India's East Coast barely a year after Cyclone Phailin raised questions on whether the increasing frequency of cyclones in the Bay of Bengal and on the Eastern Coast was an outcome of climate change. The larger question is, given that this is a region that sees regular cyclones, what would be their impact on future maritime and military operations in the Bay of Bengal and the larger Indian Ocean Region? Abhijit Singh seeks to answer these questions in 'Climate Change and Maritime Security in the Indian Ocean Region (IOR)'. He posits that climate change is likely to influence maritime security in the IOR in the future. The growing unpredictability in climate and weather patterns is already having a disproportionate impact on the region. Not only is the IOR predicted to bear the brunt of climatic change in future, it is also likely to face strong constraints in meeting the threats. The effect of climate change on human security in the IOR is only likely to be matched by the impact of extreme weather conditions on naval operations and the security of maritime assets. Singh argues that the changing climate could take the form of a structural challenge that regional maritime forces will need to prepare systematically to tackle effectively.

The past two years have made us aware of how close we are to the 'Big Brother' scenario envisaged by George Orwell in his book 1984. The revelation of the US National Security Agency's PRISM programme by Edward Snowden blew the lid off the vastness and depth of surveillance ordinary people are subject to on a daily basis although the old cyber security programme 'Echelon' being run by the Anglo-Saxon countries was no less effective. In 'The Geopolitics of Cyber Espionage', Munish Sharma states that there is an intricate relationship between the methods

of cyber espionage and the evolution of information and communications technology, of which information security is a key aspect. His article is an attempt to establish the forward and backward linkages of cyber espionage. It examines the geopolitics, methods, role of information security technology and, most importantly, how the future of cyber espionage is being shaped by emerging technologies such as supercomputing, quantum computing and 'big data', from an Indian perspective.

Those following the state of defence acquisitions would have noticed that with the appointment of the new Defence Minister, a number of pending acquisition projects have been cleared. India ranks as one of the largest militaries in the world today and it is a matter of necessity that its Armed Forces are able to access the best and the latest in terms of defence technology, be it from within the country or abroad, in order to stay at the top of their game. Simplification of the acquisition procedure is important but much more needs to be done to ensure timely acquisition of defence equipment in a cost-effective manner. In the realm of defence acquisitions, some of the best practices followed by other countries have significance in the Indian scenario as well. This is particularly relevant given the new government's 'Make in India' initiative, which when applied to the defence manufacturing sector does have the potential to invigorate indigenous manufacturing in defence equipment.

The first of these best practices is stability which is at the core of defence acquisition. Once a plan is finalized, there should be no deviation from it mid-way in order to avoid time and cost overruns. It is essential, therefore, that the end users and managers think through the requirement at the initial stage only, after which the user should not be permitted to change his mind. Second, adopt a long-term perspective in defence acquisition by identifying the necessity, prioritizing acquisitions, guaranteeing adequate funding for at least the next five years by a decision of the Cabinet Committee on Security and then provision of adequate budgetary support for the entire period of the projects year after year. Delays in the project owing to unavailability of funds as per the payment schedule tends to destroy value. It is also imperative to keep an adequate margin in the budget for a project so as to cater for the absolutely necessary changes that may occur because of technological advancements. Third, the organization responsible for defence acquisition must have three essential characteristics: engineering expertize; commercial expertize to draft, conclude negotiations and monitor contracts; and programme management expertise to monitor the physical progress of the project. Fourth, an acquisition organization should have a culture aimed at mitigating risk before the commencement of manufacturing and of constant communication with the manufacturer so as to ensure that the project is completed in time with minimal time/cost overruns. The key here is to understand the technological requirements of the equipment so that risks can be identified and approached accordingly. Fifth, the right set of behaviour should be built into the terms of contract so that the manufacturer produces what the consumer requires rather than presenting a fait accompli with sub-optimal results. Sixth, in order to ensure that the technical specifications do not become obsolete, and cost overruns do not occur, it is necessary to shorten the decision-making time at each state of the acquisition process. The time between the submission of the RFP (request for proposal) and the placing of the tender should be brought down to the minimum. Finally, the resolution of problems with the manufacturer should be done with a degree of fairness and expertise should be available for monitoring the contract.

Maintenance and repair works could also be outsourced to the private sector. It is necessary that the private sector in India be co-opted into the process and allowed greater freedom in investing in manufacturing defence equipment indigenously. This would also lead to enhanced R&D in defence technologies and the building up of a body of valuable defence-related intellectual property within the country.

Flowing from the above, in this issue we feature the second of two articles on the 'Impact of the Recommendations of the Standing Committee on Defence (15th Lok Sabha) on the Defence Budget', by Amit Cowshish. The first article appeared in the October–December 2014 issue of JDS. Cowshish continues with his examination of the detailed demands for grant (DDGs) of the Ministry of Defence (MoD) by the Standing Committee on Defence of the 14th Lok Sabha (2004–05 to 2008–09). His examination reveals that the recommendations made by the committee had little impact on the country's defence budget. While the examination was generally perfunctory, the recommendations were either too general or too impractical to be implemented by MoD. This is the second of two articles that examine how the Standing Committee on Defence of the 15th Lok Sabha (2009–10 to 2013–14) followed the same pattern. Its examination was based on pre-conceived notions about the size of the defence budget and, similar to its predecessor, the

recommendations were too general to make any impact on the trajectory of the defence budget.

Lately, there has been a concerted effort to bridge the infrastructure capacity gap between India and China along India's northern borders. While development of border areas in the North-East has been prioritized, the efforts have not delivered the envisaged results. One of the three main causes is legislation. In Arunachal Pradesh, the Indian state with the largest contiguous border with China, areas are governed by laws which aim to safeguard the way of the life of the indigenous people. Amongst the peculiarities, the land is not owned by the people but is utilized by them based on traditional grazing rights. Since there has been no sale of the land, there are no available pricing parameters. Hence, this is resulting in impractical and unviable compensation demands even for small pieces of land required for bunkers close to the Line of Actual Control (LAC). As governmental procedures require a 'no-objection' certificate for commencement of projects, this has led to dual compensation.

The Land Acquisition, Rehabilitation and Resettlement Act of 2013 has also made processes difficult, given the procedural and functional clauses incorporated. While careful handling has ensured that the people have not taken land acquisition cases to the courts until now, any decision to do so in the future could cause problems. The Land Acquisition, Rehabilitation and Resettlement Act 2013 has now been amended with the issue of an ordinance and it is hoped that the process of land acquisition for the strategic roads programme and for meeting other defence needs will catch speed.

The second problem is structural. The roads are a critical component of the overall development process since heavy plant equipment, stores, building material, etc., can only be transported to far-flung areas only if suitable roads are available. The agency responsible for developing border road infrastructure—Border Roads Organization (BRO)—is constrained by a number of factors that limit its ability to deliver in time. It is controlled by the MoD for its operations while the coordinating agency is the Border Roads Development Board (BRDB) and receives funds from the Ministry of Road Transport and Highways. This leads to dual control of the BRO and its decision making, thereby adversely affecting its functional efficiency. Moreover, while Director General (DG) Border Roads remains responsible for the execution of projects, he has limited powers to decide on prioritization and planning of projects. Furthermore,

the dual source of cadre of the BRO is affected by the pay fixation of the Sixth Pay Commission, which in turn has created a disparity between the uniformed and civilian component of the organization. This has led to issues of command and control, and reporting, resulting in a debilitating impact on the efficiency of the organization. It is hoped that the plan to bring BRO under the full control of MoD will materialize soon since it will ensure both accountability and authority to implement projects.

The anomaly of accountability and authority that affects DGBR and Secretary BRDB must be reconciled. The same person has to be both accountable and vested with the requisite authority to prioritize and implement projects. Finally, the pay fixation disparity in BRO must be corrected to ensure cohesive functioning of the organization. Simultaneously, the compensation package for BRO personnel must improve.

The third problem relates to *capacity and implementation*. The BRO is particularly constrained by: shortage of supervisory staff; shortage in critical equipment like drilling machines, etc., despite the same being sanctioned; inadequate outsourcing of work, both by the government and the BRO, which further limits the capacity to undertake fresh projects; and low wages of BRO workers that, despite employment in difficult conditions, does not provide an adequate incentive. There is an urgent need to invest in the organization and nurture it and make up its manpower and equipment shortages at the earliest. Approved equipment and that in the pipeline must be procured to ensure requisite efficiency levels. Similarly, deficiencies at the supervisory level must be filled on priority. Implementation bottlenecks, which require permissions at the state government level, must be expedited and the state should be made accountable for ensuring implementation of the same. Periodic meetings held to review the progress on projects must include high level representatives from state governments concerned, besides other stakeholders and the action required to be taken by the various agencies to be completed by the time the next meeting takes place. A project management team with due authority must be established for each major project.

Along with speeding up the border infrastructure development, there is also a need for the Indian Armed Forces to look at moving further towards jointness. In this issue, V.S. Rana writes on 'Enhancing Jointness in Indian Armed Forces: The Case for Unified Commands'. He says that

the nature of warfare has undergone a major change over the last few decades, brought about by rapid advancement in technologies combined with changes in doctrines and organisational concepts. This has resulted in enhanced focus on integrated and joint operations. Unified structures have been put in place by all major militaries in the world to optimize their defence capabilities. India appears to be reluctant to adapt wholeheartedly to the changing nature of war-fighting despite facing a variety of threats to its internal and external security. Rana's article makes a case for establishing unified commands in India to enhance integration and jointness at the strategic and operational levels. In doing so, he examines various available models for implementation in the Indian context. Finally, Rana suggests a viable model for unified commands for India keeping in mind the geopolitical realm and the external and internal threats to its security.

The issue also carries four book reviews: Stuti Banerjee reviews Hindu Nationalism and the Evolution of Contemporary Indian Security; Vivek Chadha reviews When Counterinsurgency Wins: Sri Lanka's Defeat of the Tamil Tigers; S. Samuel C. Rajiv reviews Strategy: Key Thinkers; and Gunjan Singh reviews Science and Technology in China: Implications and Lessons for India.

JDS is planning to bring out two special issues this year on the 1965 Indo-Pak War and Pakistan's Security Policies. Those interested in contributing to the proposed specials can write in to the Editor, JDS on nkohli.idsa@nic.in.