New Wars, New Weapons

The Defence Communication Network (DCN), launched in July comes not a day too soon. The pan – India satellite network that connects the three services, interlinking major installations throughout the country on a high bandwidth network and incorporating traffic transportation technology in the form of Internet Protocol, is a big step towards preparing and equipping the military for the next generation of warfare which, first and foremost requires the Forces to be far more integrated than they are at the moment.

Of course, this is a problem when all conventional militaries, which were conceived and designed as separate forces, are facing around the world, but even then, India has a lot of catching up to do. There is a radical conceptual change that is underway from platform-centric warfare to network- centric warfare, and India has only just started to recognise it. Even today, when we talk of military modernisation, we refer to big guns and better fighter jets, long range missiles and nuclear-powered sub-marines. Those weapons platforms are fine and important too, but we cannot afford to ignore the growing importance of sensor and surveillance systems on these platforms which will be the real fire power for the machines. This is what will ensure supremacy on the 21st century battlefield which will be as much physical as virtual.

The information or intelligence that these systems pick up will have to quickly shared, decoded and interpreted. It will

be imperative, therefore, for all three services to, communicate in the same language through a common medium. Gone are the days when either the Army or the Navy or the Air Force could just do their own thing and not worry about coordinating with the others. In future conflicts, we will see, for example, the Air Force providing extensive support to ground forces while naval forces will be providing offshore logistical support and precision fire capabilities against targets on the ground. Complex battleground data sent by one unit has to be easily and quickly transmitted, decoded and understood by the other. There will also be a plethora of manned and unmanned surveillance units that will support all three services. Of course, this is a work in progress, and it is no one's case that the DCN alone will solve all interoperability problems – but it is definitely an important step in the right direction.

Also, another aspect of today's warfare is cyber attack (remember China's 'laptop warriors'?). Given that these are fast becoming the norm in today's conflicts, the importance of a highly secure military communication system cannot be underestimated. Imagine the kind of the damage that would be inflicted if, say, during peace time, the military's communication system is hacked, and information about our weapons platforms compromised or during war-time the command centre is penetrated and our missiles deactivated.