



HCL Deploys Defence Communication Network

Defstrat Editorial Team

The nature of the current battle space warrants that our forces viz the army, navy and the airforce fight in an integrated manner. To achieve the synergy required to effectively fight together there is an imperative requirement of real time and seamless communications between the three forces. Military thinkers have been continually stressing upon the requirement for seamless integration and synergy of the three services to counter threats to India's territorial integrity and to the vast national resources in the southern peninsula and economic zones in the Indian Ocean Region. It is towards this end that a need was felt for integrated and secure communication networks for smooth tri-Service interaction, to instill a spirit of 'jointmanship' and synergy within the defence services.

As a consequence thereof, the Indian Defence Forces conceptualised the Defence Communication Network (DCN) in early 2000s. Thereafter the process went through the usual challenges both from within and outside. These aspects were

dwelled upon in detail in an article on the subject in the July-August issue of this magazine in 2011 and are briefly enumerated below:-

- The challenge from within came from the traditional inter services rivalry. The services were suspicious of this new demon eating into their own existing and planned communication infrastructure, manpower and resources
- Challenges from outside have been the laggardly and tedious defence procurement procedures. Unseemly competition amongst the competitors too tends to derail the process.

However, the challenges were overcome and in the end it was great achievement when the Defence Communication Network (DCN) - the first tri-Service communication and IT network of the Armed Forces was deployed on 02 July. HCL Infosystems has enabled the design, development and deployment of Defence Communication Network (DCN).

HCL Infosystems has had a long association with the Indian

Defence sector. The Company has closely worked with the Indian Air Force to deploy The Air Force Network (AFNet) and AFCEL (Air Force Cellular Network). AFNet is the first network of its kind for Indian Defence Institutions, which interlinks major installations throughout the country on a high bandwidth network. It incorporates latest traffic transportation technology in the form of Internet Protocol.

Mr Premkumar Seshadri, Executive Vice-chairman and Managing Director of HCL Infosystems was a proud person and gave credit to his team for indigenous design, development and deployment of the first ever tri-service communication and IT network for the Indian Defence Forces. “HCL Infosystems is privileged to have the opportunity to successfully partner in yet another mission critical program of national importance – the Defence Communication Network” said Prem.

DCN is the largest single satellite network in the Indian Defence Forces, spread across the country. It is a strategic, highly secure and scalable system. The communication network makes voice data and video data accessible to the three services over a secured network. It is capable of working on both terrestrial as well as satellite modes of communication and has also been fixed on-board different military vehicles.

It will transcend inter service boundaries and provide reliable communications to the strategic elements of the three services pan-India (including island territories and for any out of area contingencies). It will also provide a very effective redundancy to individual services networks which in today's world of cyber warfare is essential and critical.

The other advantages that will accrue on account of the DCN are:

- **Help in Fast Flow of Information.** The DCN will considerably improve the flow of inter service and intra service information for all the three forces, this in turn will improve situational awareness for both higher commanders and troops in the combat zone, enabling better informed and considered decisions by higher commanders and reduced fog of war for the troops on the ground; which will help them act aptly and would greatly facilitate mission accomplishment.
- **Enhance Jointmanship.** Cohesive and integrated responses, duly synchronized, are a dominant requirement of the battlefield scenarios currently prevailing as also those that will obtain in the future. The system will help greatly enhance jointmanship between the three forces. This would enable well synchronised and integrated responses from the three forces. The need for such responses is mandated by the many different types of weapon systems available in the inventory

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of the forces. Availability of suitable and timely information will help in the selection of appropriate weapon systems.

- **Interoperability.** The DCN will have a salutary effect on the interoperability between the three services. The facet of interoperability has been seen to be lacking woefully in the past. Currently this aspect suffers on account of lack of timely sharing of information between the three services, besides other issues like there being very little by way of joint doctrine and the ‘conditioning’ to do it on one's own with a view not to share the credit with anyone else. These shortcomings will of course need more than a DCN to obviate.

- **Help in Asymmetric Warfare.** We are facing an additional threat from extremist elements (both internal and external) using asymmetric operations of attack. This has increased the need for a more vigorous and operational approach to communications and sharing of information at a national level for long term strategic effect. Strategic communications grow out of the recognition that things that are said or done in one place (or by one agency) have effects elsewhere, they therefore bias towards military and security issues with a nationwide impact. A case in point is the Nov 26, 2008, terror attack in Mumbai, when it was felt that the command, control and coordination for effective coastal security could have been better achieved through cooperative exercises and more information sharing amongst the Defence Forces.

Though the inauguration of the DCN for the armed forces is a welcome step, there are some reports that the DCN planned as tri-service strategic communication network did not include development of common software for the three services to use. Hence the DCN is presently sans common software thus diluting its efficacy. This is an issue that needs to be addressed with alacrity.

The DCN gives a big impetus to India's military's capacity building for network centric warfare. Once fully operational, it will offer a multitude of advantages; allowing commanders at all levels to be more flexible. It will act as a force multiplier, enhancing the probability of success due to the fact that assessments, based on which actions would be taken, are based on more cogent inputs.

There is no gain saying that the induction of the DCN is a great landmark in the history of the Indian Defence Forces. [SA](#)