

REGIONAL NETWORK CENTRE, SOUTHERN COMD

Background

1. For ICT dominance, which is bedrock of modern warfare, state-of-the-art Next Generation Network, Proj NFS has been rolled out interconnecting 414 x Defence stations across IA. In order to better monitor the network operational condition and security, have an efficient network maintenance philosophy and deliver high quality of service to the end users, Regional Network Centres (RNCs) have been est at all HQs Comd locs with National Network Centre (NNC) at Delhi and Disaster Recovery (DR) NNC at Bengaluru.

2. The RNCs will assist in management of many multi-vendor, multi technology components and devices in NFS and help implement centralized management which includes centralized fault management and location, centralized configuration and provisioning and network performance analysis. Key objectives of est of RNCs are as under: -

- (a) Improve operational effectiveness and efficiency in managing all assets deployed as part of Armed Forces Next Generation Network (NGN).
- (b) Real time monitoring and management of all systems deployed.
- (c) Provide platform for planning and implementation of optimal infrastructure and resources for EWT/ ops.
- (d) Monitor inventory and all assets through the life cycle of the project.
- (e) Providing centralized intelligence with decentralized views and mgt capb including visualization and analysis tools.
- (f) Improve end user experience and satisfaction towards provisioning and assurance of services.

RNC Bldg Pune

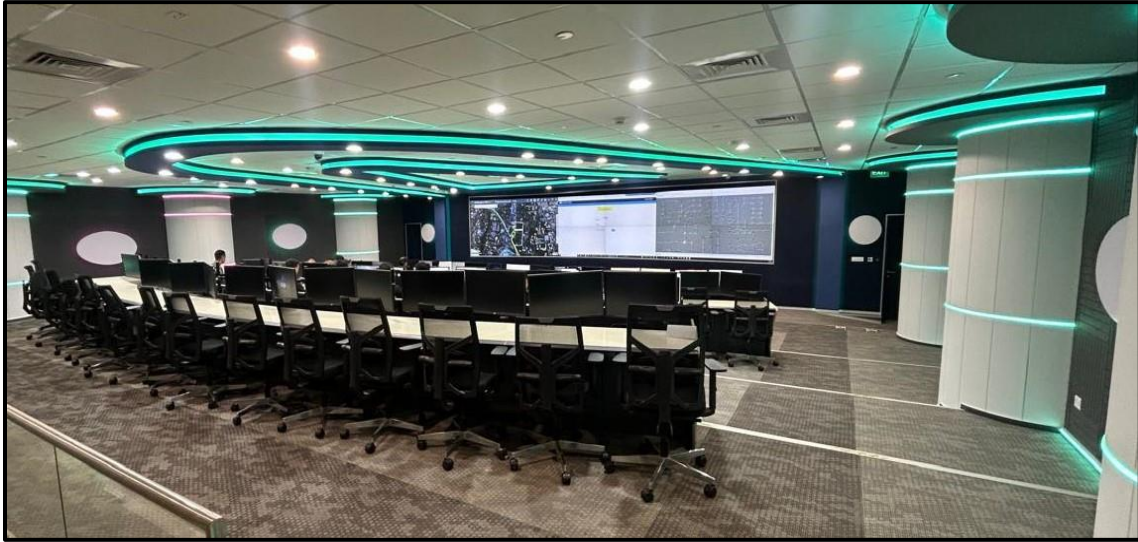
3. The tender work for construction of the RNC bldg, Pune was sublet to M/s Capacite Infraprojects Ltd by BSNL in Nov 2018 with initial PDC of 22 May 2020 for a tendered cost of Rs 23.18 Crores. The facility is one of six similar RNCs est at all HQs Comd except ARTRAC.



RNC BLDG

4. The state-of-the-art three-story Regional Network Center (RNC) building has been constructed at Nehru Marg in Pune Cantt, to serve as the Network Operation Centre (NOC), Network Security Operations Centre (NSOC), and a Tier 3 Data Center (DC), equipped with an Integrated Building Management System (IBMS). This facility is designed to meet the highest standards of safety, security and operational efficiency, ensuring reliable support for critical IA apps in Southern Comd. Key facilities in the bldg incl:-

- (a) **Network Operations Centre (NOC).** The NOC carries out Network mgt, config, event logging, fault mgt and performance mgt for, approx 17000 Km of OFC, 160 x routers, 606 x switches, 292 x Optical Line Amplifiers (OLA), 657 x Dense Wavelength Division Multiplexing (DWDM) eqpt, centralized IP Exch called as IP Multimedia Subsystem (IMS) and other NFS components of Southern Comd. The Unified Network Mgt Sys (UNMS) software in NOC provides an abstracted view of the network with a common mgt platform. NOC has 25 x opr posns with a twelve-projector data wall of 6 ft x 31 ft.



NETWORK OPS CENTRE (NOC)

(b) **Network Security Ops Centre (NSOC).** NSOC provides a centralized snapshot of security posture across the network in Southern Comd, by monitoring 105 Firewalls and Security Incident & Event Mgt (SIEM) log collectors across the region. It provides real time alerting and response on various network threats. NSOC has 10 x opr posns with a six-compartment data wall of 4.5 ft x 12 ft.



NETWORK SECURITY OPS CENTRE (NSOC)

(c) **Data Centre (DC) and DC Ops Room.** The DC hosts all strat and op appls in a robust infrastructure of 80 Blade Servers and 100 TB of storage. It provides a virtualized cloud infrastructure for providing resources to end users on demand. DC Ops Room will be utilized to manage the DC. DC Ops Room has 10 x opr posns with a four compartment data wall of 4.5 ft x 12 ft.



DATA CENTRE (DC)



DC OPS ROOM

(d) **Surveillance and Security.** The bldg has 76 CCTV cameras for comprehensive monitoring alongwith Biometric authentication systems, boom barriers and X-Ray scanners to control access and ensure security.



SURVEILLANCE & SECURITY CAMERAS

5. **Impact on Op Role of Southern Comd.** This facility is one of six similar RNCs across India, collectively bolstering the IAs capability to manage and monitor operations efficiently. It will serve as a cornerstone for 'Atmanirbhar Bharat' and modernizing applications and services, ensuring reliability, and meeting the future demands of a 'Digital Army'. Fwg benefits will be accrued:-

(a) **Enhanced Operational Efficiency.** Centralized monitoring and mgt through the NOC and NSOC streamline network ops, reducing downtime and ensuring quick incident response.

(b) **Data Resilience.** With Tier 3 compliance, the facility guarantees high availability, minimizing service interruption for all strat and op data.

(c) **Future-Ready Infrastructure.** The facility is designed to support the growing digitalization and automation initiatives of IA.

(d) **Tri Svcs Support.** Since NFS is a tri-svcs network, mgt and config of Jt Comn Architecture (JCA), Dense Wavelength Division Multiplexing (DWDM) and GIS based Optical Fibre Network Mgt Sys (GOFNMS) Tk II for IAF and IN in Southern Comd is being undertaken by RNC bldg.