

VOICE Press Release dated 19th May 2022

Successful live demonstration of an “end to end” Private 5G Enterprise network at Sanchar Bhavan from 16 to 18 May 2022 has just been concluded by the newly formed Society, ‘Voice of Indian Communication Technology Enterprises’ (VOICE) that is exclusively consisting of Indian telecom design companies and working on Aatma Nirbharta and Make in India vision of Hon’ble Prime Minister.

VOICE, acting as a system integrator had put on a live display of an entire “end to end” 4G/ 5G platform that included Radio Access Network (RAN), Evolved Packet Core (EPC), IP Multimedia SubSystem (IMS), Network Management System (NMS), Billing, multiprotocol gateways, Quantum Encryption, IOT devices all connected over L2 Switches. Multiple RANs as well as multiple gateways were on display. Highlight of the demonstration was that entire platform on display had products from various Indian companies where hardware and software control reside with domestic players. Apart from the live demo of Private 5G network, on display were standalone products applications and chipsets from various domestic companies on 4G/ 5G.

VOICE team in their presentation to Hon’ble Minister of Communications had stated that through a consortium-based consolidation of domestic companies, not only deployment of private 4G/ 5G Enterprise networks can be possible as early as by the current year itself but cost to users may be substantially lower as compared to conventional deployments by licensed service providers. Further large-scale commercial deployments even in remote areas may take place within next 18 months as compared to 4 to 5 years from convention routes. It however will call for immediate provisioning of spectrum for setting up private networks along with finalization of National technical specifications so that enabling ecosystem can be created.

IMS of one domestic company used in the live demo has partnered with CeWiT and demonstrated VoNR calls today at Chennai also.

Today domestic design companies, not only have all the ingredients of a globally competitive telecom services sector but also have a robust framework for equipment manufacture & R&D.

Indian manufacturers have made significant strides and have showcased “use cases” for applications in Mines, Railways, Defense as well as can provide solutions for utility companies, airports & metro projects. They have offered to deliver a perfect and better substitute to meet demands that are presently catered by imported Tetra radios used in these utility companies.

Hon'ble MoC, MoS, Secretary (Telecom), Telecom Commission members, Niti Ayog Members, senior officials from DoT, TEC, NTIPRIT, CDOT, Railways, armed forces, defense, power, home, urban development, DRDO, Railtel, RITES, DRDO and many more Ministries, PSUs, Service providers BSNL, Reliance Jio. Online sessions were there with our missions and telecom stakeholders of Poland and Germany. There were some 5G players from even USA, NEC, Japan and international consultants and many more from Indian private sector. There was a special an hour-long online session demo involving 125 senior GM & higher-level officials from Railways. They were extremely positive and look forward from domestic players for their modernization. Presence of more than 500 visitors at very senior level from Government. Many expressed the view that this type of interaction had not taken place at any stage in Sanchar Bhavan and will give a boost to the Aatma Nirbharta vision of the Government.

We recognize our strengths & our government is committed to further support & strengthens the ecosystem for electronic hardware manufacture, development of Technology along with promotion of domestic IPR. With this, India is poised for another digital revolution given the massive thrust on “Make in India”, and a comprehensive roadmap laid down by Ministry of Communications.

VOICE will continue to play an important role in helping the Government in formulation of appropriate policies by making recommendations on strengthening domestic capability.

Key asks from VOICE are also enclosed.

Rakesh Kumar Bhatnagar

Director General, VOICE

+91 9350836103/ 7011550321

rkbhatnagar.dg.voice@gmail.com

Key asks from VoICE

1. Reserve small chunks of IMT Band spectrum for setting up Private networks based on domestic technologies as was the case in Ind footnotes 50 & 55 in NFAP 2011. Bands are required in High frequency as well as in low frequency. Both ends of spectrum are required for different use cases and that is what was addressed in NFAP 2011. Bands preferably should be the ones that are commonly available on smart phones costing around affordable costs of say under Rs. 5,000.
2. 5G private networks to be included in PPP MII policy for preference in public procurement.
3. Ensure that all 5G private networks / Network in a Box and such other products are procured that are TEC approved and specifications of products under procurement should not discriminate against technologies available with domestic manufacturers while they should meet functional requirements.
4. Ensure that TEC makes specifications for 5G private networks are a reduced sub-set of the 3GPP specifications and not full-blown specifications, considering the fact that these private networks will not be connected to PSTN / PLMN as per TRAI recommendations. These networks would also not need any interface with legacy RFCs /devices. Certification for all telecom products should be "Single -window and removal of certification requirements from procurement process that are not relevant to India such as FCC, CE etc
5. Facilitate and fund 4 Pilot projects for Power Grid, Mining, Railways, Defence sectors and implementation should commence before 15th August 2022.
6. USO fund to encourage funding of private network related to agriculture automation, mining and other use cases that generates jobs in rural areas.
7. Indian telecom MSME's should be allowed to participate in Proof-of-Concept (POC) trials for all class of products by BSNL/ Railways so that they can qualify to bid in tenders. Currently restrictions are placed on Indian telecom MSME's for POC even though they fully meet the technical specifications defined for the trials.
8. Use USO funds to Incentivise the licensed mobile operators to reserve at least 10% of their network roll out for domestic player.
9. Majority of the Tenders are turnkey tenders. Policy framework should ensure applicability of PPP MII order on each item that is earmarked for purchase from domestic companies as per PPP MII order, where domestic competence and competition exists, in purchases made as turnkey projects. There is a need to clarify regarding applicability of PMI policy even on turnkey tenders for all line items.
10. Intellectual property (IP) developed in Government labs should be made available at affordable cost to industry from 5G testbed / C-DOT etc. Entire details of drawings / technology and source code should be made available to domestic design companies on royalty basis that is a small percentage of revenue sales.

Company Specific requirements

SIGNALCHIP / SIGNALTRON

1. Special focused policy on funding R&D in Indian semiconductor companies for ICT chips. Chips for ICT are amongst the most complex and global players spend 100 million \$+ on each chip. The current scope of design linked incentives is good however, the amount provided as incentives cover is very small portions of the R&D expenses that are needed to build chipsets for addressing functional requirements.

2) Identification of key semiconductor chips that we want to own in the country and programs to provide grants/ conditional grants through challenges to develop them through domestic chip companies.

Saankhya Lab

1. Spectrum policy should enable direct to mobile broadcast in UHF spectrum.

2. Saankhya is world's first company to make Software Defined Radio (SDR) technology for consumer devices. They are pioneers in converged broadband and broadcast network solution. There could be a mandate for putting the broadcast receiver chip in mobile phones for emergency alerting.

Kenstal

1. Delicensing of 6Ghz and 60Ghz bands to promote cheaper access and backhaul networks in rural areas.

2. Reduction in cost of MVNO licenses to help domestic industry deploy networks in partnership with Telcos. It will also help in penetration of networks in remote areas that are not financially viable for telcos