



# Smart network, smart infrastructure

Network and technology together can lead towards better governance

GN Bureau

**B**uilding robust network infrastructure is the key to the success of programmes like Digital India and smart cities. To deliberate on creating network infrastructure, Governance Now organised Smart Networks Conclave 2015 in October in New Delhi. Governance Now director Kailashnath Adhikari set the tone of the conference with his opening address. Referring to a World Bank report, he said that a 10 percent increase in broadband penetration increases the per capita GDP by 1.38 percent in developing countries. Though private investment in the sector depends on more certainty, telecom

operators are ready to support the government. Policy makers can play a role in reducing these hurdles and providing greater certainty and support for deployments. Policy updates and effective implementation will also determine how much the nation benefit from deployment of next-generation networks.

Rami Rahim, CEO, Juniper Networks, said, "There is no better time than today to challenge the IT industry because of the massive transformation that is taking place in the networks around the world." He said that the industry witnessed two major transformations that had reshaped the value of internet in our lives. "One was TCP/IP that would carry traffic and would create connectivity between two points. Second was packet forwarding engine

that enabled internet to become what it is today," he said adding that the third transformation is under way. "The third transformation is cloud-based architecture and service delivery. The phenomenon is unfolding across the globe," he said. "The effects of this technology are going to be profound in our society. Network and technology together can lead to better governance if connected and accessed well. It is also breaking down the digital divide that exists in the world," he added.

Talking about the Digital India initiative, Paolo Colella, head of region - India, Ericsson, said, "Broadband connectivity will create job opportunities at places where jobs are not possible today. Countries where investment in digital industry is prominent have better economy. However, for better



execution of digital dream, it is crucial to develop new policies to improve procedures.” He said that the change will also help service providers to bring new technologies like 4G, data connectivity, and help them draw opportunities by bringing Internet of Things (IoT) applications.

Pressing the need to have more capable networks, he said Ericsson is looking at 5G that can sense and adapt to different kinds of needs. “The need is for the networks that can work on sense,” he said adding that by adapting to low-power consumption method, technology can be used to monitor small signals like detecting and poaching in remote areas. “To work on this we have to work on low-power consumption and extremely intelligent network,” he said.

RK Bahuguna, CMD, RailTel, discussed the challenges of the Digital India mission. He said the idea of smart city is still unclear. The biggest concern for the policy makers and telecom operators is to connect the unconnected but the question is what next.

“We don’t have the content. The government has been taking initiatives to promote content in two most important areas: health and education. But what we lack at is implementation and funds,” he said. “We have taken initiatives to provide computer and internet connectivity to educational institutions, but just providing these is not enough. They need content that is bit regulated and useful at initial stages,” he added.

Underlining the need to have solid infrastructure to accommodate changing technology, Uma Shankar, joint secretary, department of telecom, government of India, said. “The other key component in building upon the Digital India mission is infrastructure. It is not about what we require today but what we will require 30 to 50 years later.” He said that the cost of technology is 10 percent of the total infrastructure cost that needs to be laid down. Signalling that it is not prudent to compromise the 90 percent, he added, “What is laid now is going to be there for next 20 years.”

Rahul Rishi, partner, Ernst and Young, moderated the panel discussion on the role of smart networks for



### **Ajay Chagti**

Special secretary - IT, Delhi govt

*“In the next five years we are expecting an increase of data flow by 50 times which will not only be coming from computers and mobiles but also from IoT devices. The government needs to create infrastructure to handle such large volumes.”*

powering a smart India. “The word ‘digital’ is going beyond connectivity and really looking at involvement which is engagement of people,” he said.

Low cost of ownership of infrastructure is really important for the country like India where affordability is an important issue. Answering a question on how low cost ownership of networks can be achieved, Amajit Gupta, managing director, India & SAARC at Juniper Networks, said that the challenge is not to build the network but it is the network which is scalable, reliable and has a less rate of obsolescence. There is a need to figure out how the cost to operate becomes minimum or negligible. Technology does not account for majority cost. Therefore, cost of ownership is not a real challenge but cost of management, operation and running it in the long term is a challenge.

Badri Gomatam, chief technology officer, Sterlite Technologies Limited, said, “It is not about technology but clarity of policy guidelines and the long road ahead. We need an absolute clarity on the role of all stakeholders. Broadband should be considered an essential utility like electricity.”

Commenting on the expectations from the private sector, Ajay Chagti, Special Secretary-IT, GNCTD said, for providing online delivery of services where citizens don’t have to come to offices needs hardware, more connectivity and more web services. He also said that cost of managing the IT infrastructure is very high which should be brought down. Project like smart cities

doesn’t need only access and affordability but also volume and velocity. Elaborating on volume he said in next five years we are expecting 50 times increase in data flow which will be generated from new form factors too therefore, government need to gear up to create the infrastructure to handle such a large volume. At the same time it is important to think how this real time, unstructured data will be used.

Nishant Batra, VP & head of engagement practice, Ericsson India, said, “When we visualise Digital India, its innovation and execution both need to come forth. India needs the best of electronics at the cheaper cost and that is where original equipment manufacturers (OEMs) like us need to step in.” He emphasised the importance of project execution and delivery for the success of government programmes.

Talking about the role of technology in government programmes, Golok Kumar Simli, principal consultant & head (technology), ministry of external affairs, said, “Digital India is all about an ecosystem. What we are lacking is the time-bound execution.” Highlighting the success story of passport post technological interventions, he said India is leading in the world in terms of passport delivery. “We are on third position worldwide and issue approximately 12 million passports per annum whereas China and the US issue 18 million passports and 14 million passports each year respectively,” he added. ■

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