

NGN and DIGITAL DIVIDE USOF VIEW

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04-12-2007

USOF OVERVIEW

- **Funded through Universal Access Levy charged @ 5% of Adjusted Gross Revenue (AGR) of telecom service providers.**
- **Levy amount credited to Consolidated Fund of India and made available to USOF after due appropriation by Parliament.**
- **Competitive bidding process followed for disbursement of subsidy from the Fund.**



USOF OVERVIEW

- **Objective**
 - To provide telegraph services in rural and remote areas.
- **Present Activities**
 - VPTs in 5.11 lakh villages
 - 1.86 Lakh MARR Replacement
 - RCPs in 46,253 villages
 - Provisioning of RDELs in 1685 SDCAs
 - 7871 Towers for Mobile Services
- **Proposed Activities**
 - Second phase of Towers for Mobile Services
 - Pilot Projects for New Technologies
 - Rural Broadband
 - OFC Network Augmentation
- **Special Focus on NE, Hilly areas, Tribal areas and Border areas**



WHAT IS NGN

- A **Next-Generation Network (NGN)** is the term given to describe a Telecommunication **Packet-based** network that handles multiple types of traffic (such as voice, data, and multimedia). It is the convergence of service provider networks that includes the public switched telephone network (PSTN), the data-network (the Internet), and, in some instances, the cellular wireless network as well.



WHAT IS DIGITAL DIVIDE

The term 'digital divide' describes the fact that the world can be divided into people who do and people who don't have access to - and the capability to use - modern information technology, such as the telephone, television, or the Internet. The digital divide exists between those in cities and those in rural areas.



REASONS FOR DIGITAL DIVIDE

- **Lack of infrastructure.**
- **Irregular power supply.**
- **Difficult topography**
- **Higher CAPEX (Capital Expenditure) and**
- **OPEX (Operational Expenditure)**
- **Low income levels.**
- **Lower ARPU (Average Revenue Per user) anticipated.**

USOF activities aim at addressing these concerns



DIGITAL DIVIDE —A CAUSE OR SYMPTOM

- **Digital divide is not a cause but it is a symptom of other divides such as –**
 - **Geographic divide**
 - **Information divide**
 - **Knowledge divide**
 - **Economic divide**
 - **Gender divide**
 - **Age divide**



HOW TO REDUCE THE DIGITAL DIVIDE

- Strengthen

- ❖ 4A's

- ✓ Awareness, Availability, Accessibility and Affordability

- ❖ 4C's

- ✓ Computing, Connectivity, Content and Capacity

- Convert

Access → Information → Knowledge → Opportunity



NECESSITY TO OVERCOME DIGITAL DIVIDE

- Awareness
- Economic development
- Societal transformation
- Bring the rural areas into the mainstream of the Indian economy
- Delivery of public services
- Education, Health, Agriculture and e-governance
- Create new sources of income and employment



CONVERT DIGITAL DIVIDE INTO DIGITAL OPPORTUNITY

- Provide Voice and Broadband connectivity in rural areas.
- Provide e-services to rural areas such as e-governance, e-health, e-education, e-Commerce
- Provide information based services related to agriculture, animal husbandry etc.



NGN – ONE OF THE POSSIBLE SOLUTIONS

- It will provide higher band width for backbone traffic for ICT applications.
- It will make optimum utilization of resources.
- It will bring the Capex, Opex, up-linking cost and one time cost to a reasonable level.



WHAT MORE IS EXPECTED

- NGN should be open, flexible, easy to use, inter-operable, safe & secure
- Regulatory framework should be in place well in advance
- Licensing conditions should be properly spelt out



CONCERNS

IT SHOULD -:

- Satisfy the dynamic requirements of end users
- Combine the best of the 3 networks i.e. telecom, internet and broadcast
- Provide integration of services from customer's point of view
- Optimize the cost of network
- Work as a catalyst for new services



CONCERNS

- Overall transformation will take time, therefore it has to co-exist with present technology.
- It should focus on innovation and sustainable development.
- It should provide marked improvement in service provisioning capability and application speed.



CONCERNS

- There is a need to change our philosophy
 - To multimedia broadband architecture
 - To information based services
 - To new business models based on economies of scope



USOF INITIATIVE

- Infrastructure scheme has been launched and one can make use of the new towers to create NGN network to start from rural side.
- On trial new technologies can be demonstrated under pilot project scheme.
- Rural Broadband scheme is likely to be launched shortly to create broadband access network that can be integrated to the NGN.
- USOF can support the required incremental infrastructure

