



UP IT&EL - OPTIMUS CASE STUDY

INNOVATIVE SOLUTIONS FOR UTILIZING BHARATNET FOR RURAL AREA DEVELOPMENT

BHARATNET/NATIONAL OPTICAL FIBRE NETWORK

BharatNet, started as National Optical Fibre Network in October 2011 and one of the main pillars behind the Digital India initiative, is an ambitious project of nationwide importance by the Government of India to trigger a digital revolution in the rural areas. Renamed as BharatNet in 2015 with a deadline to finish by March 2019, its aim is to improve telecom services in rural and remote areas of the country by connecting all the 2,50,000 Gram panchayats, provide a minimum of 100 Mbps connectivity to all gram panchayats (GPs) and give bandwidth to telecom players at nearly 75 per cent cheaper price for broadband and wifi services in rural areas.

By creating a highly scalable network infrastructure accessible on a non-discriminatory basis, to provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households and on demand capacity to all institutions, to realise the vision of Digital India, in partnership with States and the private sector - it aims to facilitate the delivery of e-governance, e-health, e-education, e-banking, Internet and other services to the rural India. Under the administrative control of the Telcom industry, this project is being implemented by Bharat Broadband Network Limited (BBNL) by utilizing the existing fibres of Central PSUs in Undertakings (BSNL, RailTel and Power Grid) and by laying down incremental fibres to connect to Gram Panchayats wherever necessary.

The entire project, with an estimated cost of around ₹ 72,000 crore, is being funded by Universal Service Obligation Fund (USOF). Universal access levy is charged from telecom service providers as a percentage of their license fee. The union government has allotted Rs 10,000 crore in the Union Budget of 2017-18. It is a Centre-State collaborative project, with the States contributing free Rights of Way for establishing the Optical Fibre Network. It was envisaged to be completed in 3 phases which are as follows:

- Phase I aimed at providing broadband connectivity to 1,00,000 gram panchayats. The government has announced the completion of the first phase of the project.
- Phase II is aimed at providing broadband connectivity to all 2.5 lakh gram panchayats by March 2019. The work on the second phase has already started and is expected to be completed by December 2018, before the March 2019 deadline. The central government announced subsidy of Rs 3600 crore is to be provided to telecom companies like Jio, Airtel, Idea etc. as a viability gap funding
- Phase III Future proofing of the Network to meet the requirements of Internet of Things (IoT) and 5G services era, to be completed by 2023

Current status of BharatNet project:

STATUS OF BHARATNET AS ON 29.10.2018

| S.N. | Description of Work | Status |
|------|--|-----------------------------|
| 1. | OFC Pipe laid | 2,81,285 Kms (1,21,407 GPs) |
| 2. | Optical Fibre laid | 2,91,689 Kms (1,19,947 GPs) |
| 3. | Tenders Finalized | 3291 Blocks / 1,22,828 GPs |
| 4. | Work Started* | 3285 Blocks / 1,22,379 GPs |
| 5. | Current Weekly performance of Optical Fibre laying | 579 Kms |
| 6. | Current Weekly performance of OFC Pipe laying | 268 Kms |
| 7. | Optical Fibre Cable Delivered on site | 3,41,568 Kms |
| 8. | Service Ready GPs | <u>1,15,863 GPs</u> |

* does not include the data of Andhra Pradesh

BENEFITS OF BHARATNET

- The project would reduce the cost of broadband services in India and connect all of India to high speed internet by providing last-mile connectivity to citizens via Wi-Fi Hotspots.
- Schemes like Make in India, Start-up India, Stand-up India would be expedited as a result of this project.
- As per an ICRIER study, every 10% increase in Internet usage is responsible for driving the country's GDP by 3.3%. Going by that estimate, the successful completion of BharatNet could add \$68.7 Bn (INR 4,50,000 Cr) to the national GDP.
- The BharatNet project would generate around 10 crore man-days of employment during the roll-out of the project, thus providing boost to the economy.
- The optical fibre footprint in India would get doubled from the existing levels after the completion of the second phase of the BharatNet project. As of now the total Wi-Fi hotspots present in India are around 37,000. This is expected to increase to 6 to 7 lakhs with 2-5 hotspots in each panchayat after the completion of the second phase of BharatNet project.

PROBLEM STATEMENT:

GoUP wishes to utilize the infrastructure of the optical fiber network (Bharatnet) for socio-economic empowerment of citizens in rural areas by providing digital services at an affordable cost. Design a comprehensive plan to recognize various avenues of opportunities to utilize the infrastructure and to provide a concrete plan of action to achieve the same within a stipulated time frame.

The analysis must provide solutions covering the following points:

- List of GoI services (G2C) which could be offered in rural areas including the budget
- List of GoUP G2C services
- Innovative models for B2C services which are economically viable for companies as well as meaningful for the rural areas
- Private companies deploying services as part of their CSR activities including Telemedicine, EduTech, rural entrepreneurship
- Any other ideas for a holistic digital revolution in rural areas

Submission Guidelines

Round 1: (Online Case Submission)

- Submission deadline for the case is at 2300 hrs, Nov 6, 2018
- A 1-page executive summary or 1 slide presentation has to be submitted. Use of tables, etc. is allowed
- Additional information from online and offline sources can be used to solve your case and is encouraged in order to make your plan more implementable
- Font style to be used is Arial and font size should be 10
- The submission should be a PDF file at dare2compete.com
- Naming convention to be followed: <Team Name>_<College Name>_Optimus_R1

Round 2: (On-campus Case Presentation)

- The final presentation will be a Power-point deck (.pdf/.ppt/.pptx)
- The presentation should not be more than 10 slides
- Further details will be informed in due course

Evaluation Criteria

- Exhaustive understanding of the case scenario and context
- Depth of analysis of industry & key challenges - Novelty, feasibility and practicality of ideas proposed
- Structure of presentation & clarity of ideas conveyed