



BharatNet Project

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Why in News

Recently, the **Department for Promotion of Industry and Internal Trade** (DPIIT) ordered the scrapping of a Rs 1,950 crore tender for the **BharatNet project** in Tamil Nadu.

Department for Promotion of Industry and Internal Trade

- It comes under the aegis of the **Ministry of Commerce and Industry**.
- It was **established in 1995** and has been **reconstituted in the year 2000** with the merger of the Department of Industrial Development.
- In **February 2019**, it was **renamed** to the existing one from the previous name, Department of Industrial Policy & Promotion (DIPP).
- **Functions:**
 - With progressive liberalisation of the Indian economy, initiated in July 1991, there has been a consistent shift in the role and functions of this Department.
 - From regulation and administration of the industrial sector, the role of the Department has been transformed into facilitating investment and technology flows and monitoring industrial development in the liberalised environment.

Key Points

- BharatNet is a **flagship mission** implemented by **Bharat Broadband Network Ltd.** (BBNL).
 - It is a **Special Purpose Vehicle** (SPV) set up by the Government of India under the **Companies Act, 1956** with an authorized capital of Rs 1000 crore. Initially, it was under the **Ministry of Communications and Information Technology**, which was bifurcated into the **Ministry of Communications** and the **Ministry of Electronics and Information Technology** in **July 2016**.
 - Currently, it is being **implemented by the Department of Telecommunication** under the Ministry of Communications.

- **National Optical Fibre Network (NOFN)** was launched in **October 2011** and was **renamed as Bharat Net Project in 2015.**
- **National Optical Fibre Network:**
 - It was envisaged as an information superhighway through the creation of a robust middle-mile infrastructure for reaching **broadband connectivity to Gram Panchayats.**
 - The Ministry of Communications has launched the **National Broadband Mission** that will facilitate universal and equitable access to broadband services across the country, especially in rural and remote areas.
 - **Aim:**
 - To facilitate the delivery of **e-governance**, e-health, e-education, e-banking, Internet and other services to rural India.
 - To **connect all the 2,50,000 Gram panchayats in the country and provide 100 Mbps connectivity** to all gram panchayats.
 - To achieve this, the existing unused fibres (**dark fibre**) of public sector undertakings (PSUs) (BSNL, Railtel and Power Grid) were utilised and incremental fibre was laid to connect to Gram Panchayats wherever necessary.
 - **Non-discriminatory access** to the NOFN was provided to all the service providers like Telecom Service Providers (TSPs), Cable TV operators and content providers to launch various services in rural areas.
- The entire project is being **funded by the Universal Service Obligation Fund (USOF)**, which was set up for improving telecom services in rural and remote areas of the country.
- **Implementation:**
 - The project is a **Centre-State collaborative project**, with the states contributing **free Rights of Way for establishing the Optical Fibre Network.**
 - The **three-phase implementation** of the BharatNet project is as follows:
 - **First Phase:** Provide one lakh gram panchayats with broadband connectivity by laying underground **optic fibre cable (OFC)** lines by December 2017.
 - **Second Phase:** Provide connectivity to all the gram panchayats in the country using an optimal mix of underground fibre, fibre over power lines, radio and satellite media. It is to be completed by March 2019.
 - **Third Phase:** From 2019 to 2023, a state-of-the-art, future-proof network, including fibre between districts and blocks, with ring topology to provide redundancy would be created.
 - The **participation of states became important in the second phase** which involved laying of OFC over electricity poles. This was a new element of the BharatNet strategy as the mode of **connectivity by aerial OFC has several advantages**, including lower cost, speedier implementation, easy maintenance and utilization of existing power line infrastructure.

Dark fibre

- It is an **unused optical fibre** that has been laid but is not currently being used in fibre-optic communications. Since fibre-optic cable transmits information in the form of light pulses, a 'dark' cable refers to one through which light pulses are not being transmitted.
- Companies lay **extra optical fibres in order to avoid cost repetition** when more bandwidth is needed.
- It is also known as **unlit fibre**.

Source: IE