

**GOVERNMENT OF INDIA  
COMMUNICATIONS AND INFORMATION TECHNOLOGY  
LOK SABHA**

STARRED QUESTION NO:324

ANSWERED ON:12.08.2015

Advanced Telecom Technologies

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**Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:**

- (a) whether the telecom Public Sector Undertakings (PSUs) in the country are self-sufficient in advanced broadband and optical network infrastructure technologies and if so, the details thereof;
- (b) if not, the details of contracts entered into with private/multinational broadband infrastructure solution providers for supply of equipment and design, PSU-wise;
- (c) the terms and conditions of such contracts; and
- (d) the manner in which such support would be beneficial for the country in the communication sector?

**Answer**

THE MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY

(SHRI RAVI SHANKAR PRASAD)

(a) to (d) A statement is laid on the Table of the House-

STATEMENT TO BE LAID ON THE TABLE OF LOK SABHA IN RESPECT OF PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. \*324 FOR 12TH AUGUST, 2015 ON "ADVANCE TELECOM TECHNOLOGIES".

(a) The telecom sector was in Government till telecom services were opened for private participation in the 1990s. With the rapid technological advancement in the telecom sector in the last decade, the telecom PSUs have attempted to keep pace with this rapid technological change.

Indian Telephone Industries (ITI) Limited has informed that they are manufacturing products in advanced broadband and optical network infrastructure technologies like GPON (Gigabit Passive Optical Network) and DWDM (Dense wavelength division multiplexing) through transfer of technologies from indigenous and global vendors. In addition, it also takes up network infrastructure projects along with technology partners while using its resources for project management.

Telecommunications Consultants India Limited (TCIL) has informed that it undertakes project management and consultancy for broadband infrastructure. For setting up of the network infrastructure covering supply, installation, commissioning and maintenance support, TCIL enters into agreements with technology partners while using its manpower for overall project management.

Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) are providers of telecom services and necessary equipment for advanced broadband and optical fiber network infrastructure, as per requirement, are procured through open tender process from time to time.

Besides the telecom PSUs, Government has endeavored to promote domestic manufacturing through a number of measures including incentive based measures such as the Modified Special Incentive Package Scheme (M-SIPS), Electronic Manufacturing Clusters (EMCs) and Electronic Development Fund (EDF) as well as prescriptive measures such as Preferential Market Access (PMA) in Government procurements.

(b) ITI Limited has reported that for GPON technology, it has Transfer of Technology Agreement with C-DoT (Center for Development of Telematics). ITI has collaboration agreements for DWDM technology with M/s ZTE, China and for optical fiber with M/s Aksh and M/s Sterlite.

(c) The terms and conditions of the contract between ITI and technology partners for broadband equipment comprise of transfer of technology for manufacturing, installation, maintenance, repairs etc. in phased manner. For the Optical Fiber part, the collaboration agreements covers supply of the fiber by technology partner while fiber laying, networking, maintenance etc. are managed by ITI. Details are given in Annexure.

(d) The support from technology partners for communication products will be beneficial to increase business volumes and create domestic manufacturing capabilities.

Annexure

Terms and Conditions of the Agreements between ITI Limited and its technology partners

1. GPON:

A. Technology partner: C-DOT

â€¢ The agreement aims at manufacturing GPON products of C-DOT technology in ITI. Agreement is valid until Sept. 2016.

â€¢ The commercial terms are such that ITI will pay a technology transfer fee to C-DOT (about Rs. 60 Lakhs) and pay royalty @ 4% of

net sale value during supplies.

â€¢ ITI will manufacture the products by buying all components/ modules from C-DOT approved sources directly. ITI will be fully responsible for manufacturing, supply, field support and maintenance.

B. Technology Partner: Alphion India Pvt. Ltd.

â€¢ This partnership was made in September 2013 to address the NOFN tender of BBNL. (ITI had to enter into this agreement as ITI did not have financial strength to manufacture C-DOT technology products with investments for procuring components required for assembly).

â€¢ The commercials with Alphion were specific to this tender. It was proposed that ITI may either buy the products directly from Alphion and may opt for manufacturing their products if it was viable for manufacturing.

â€¢ In case ITI chose to buy the products directly from Alphion, ITI would have a margin of 10.75% of the net sale value.

â€¢ When the supplies were made directly from Alphion, the liquidated damages or other penalties were on to them.

â€¢ In case ITI goes for more value addition, like manufacturing or maintenance support, the commercials would be discussed separately. However, ITI could not win this tender.

2. DWDM:

Technology Partner: ZTE, China

â€¢ ITI executed a few orders for BSNL with this association. Even though the agreement had the option to go for manufacturing DWDM products in ITI, the volumes did not make manufacturing viable for ITI.

â€¢ The commercials with ZTE were such that ITI had a margin of 5 to 8% for different orders.

â€¢ When the supplies were made directly from ZTE, the liquidated damages or other penalties were on to them

3. Fiber supplies

Technology Partners: Aksh and Sterlite

â€¢ ITI selected these technology partners to address the Optical fiber laying orders for two zones under NFS project

â€¢ The partners are responsible for supply of the optical fiber and ITI will be responsible for laying the fiber with the help of EPC contractor.

â€¢ Payment for the supply is being arranged by the EPC contractor.

â€¢ ITI will have a margin of about 4% in these orders.

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