

# Executive Summary

## Background

Direct to Home (DTH) service is a satellite based broadcast service which entails distribution of multi-channel television programmes in Ku band. Ministry of Information and Broadcasting (MIB) is the nodal Ministry for broadcasting services in India. Department of Space (DOS) provides national space infrastructure through satellite transponder capacity to meet the telecommunication, broadcasting and security requirements of the country. Union Government approved (November 2000) the proposal of Ministry of Information and Broadcasting (MIB) to introduce DTH service in India. During 2004 to 2007, DOS entered into lease agreements with Doordarshan, Dish TV, Tata Sky, Sundirect DTH (Sun DTH), BIG TV (Reliance), Airtel Digital TV (Airtel) and D2H (Videocon) for hiring of satellite transponder capacity for providing DTH services.

The requirement for DTH service is of the order of minimum of five Ku band transponders going up to 18 to 24 transponders for providing 300 to 400 channels. Therefore, availability of Ku band transponders was the most important consideration while planning satellite capacity for DTH service. DTH service is also location specific. Since the dish antenna of the DTH customer has to be facing the satellite, satellite capacity should preferably be available at a particular position in the sky continuously. Therefore, larger number of Ku band transponders would be required continuously at the same position in the sky to ensure continuity of service.

The Union Cabinet approved an 'open sky' policy and allowed both Indian and foreign satellites to be used in DTH services with the condition that proposals envisaging use of Indian satellites would receive preferential treatment. DOS would acquire and allocate necessary transponder capacity from foreign satellites for short term periods, so that the service could be brought back to INSAT system as and when Indian satellite capacity was available.

## Audit objectives

Audit was conducted with a view to evaluate

- whether planning and realisation of satellite capacity for DTH service was done with a view to give economic, efficient and effective service;
- whether allocation of satellite capacity for DTH service was transparent, fair and equitable; and

- whether transponder lease agreements safeguarded the financial interest of Government and were implemented accordingly.

## Audit findings

Audit of DTH services in India was limited to the role of DOS in planning, realising, allocating, contracting and managing communication satellite capacity for the DTH service providers.

### Planning of satellite capacity

- DOS failed to provide satellite capacity (Ku band transponders) on domestic satellites as it was not able to realise the communication satellites as planned. Out of nine satellites with an aggregate of 218 Ku band transponders planned for launch during eleventh five year plan period, DOS could eventually realise three satellites with 48 Ku band transponders, which was only 22 *per cent* of the target.
- In spite of having sufficient funds, DOS did not consider procured launches for its ready satellites or acquire satellite in orbit and position it under the orbital slot coordinated by India.
- DOS was unable to maintain the satellite capacity already used for DTH service due to technical problems, using these capacities to substitute for satellites being de-commissioned, etc.
- DOS could not satisfactorily fulfil the competing needs of critical, strategic and commercial sectors, which led to a forced migration of commercial DTH users (Sun DTH, Airtel and Reliance) to foreign satellite systems.

*(Para 2.2.1)*

- The satellite launch of GSAT 8 initially intended for DTH use was delayed by more than three years. When satellite capacity was eventually available, it was not immediately earmarked and capacity remained idle from July 2011 to December 2011. The satellite was finally allocated for non DTH use.
- DOS launched GSAT 10 satellite in order to swap with capacity allocated to Tata Sky on INSAT 4A, which was functioning with reduced power. Tata Sky subsequently declined the proposal but DOS did not allocate capacity on GSAT 10 to any other service

provider apprehending litigation, as Tata Sky was given exclusive first right of refusal on Ku band capacity of INSAT 4A.

**(Para 2.2.2)**

- Inability of DOS to realise its communication satellites and failure to utilise available satellite capacity led to competitive disadvantage to DOS vis-à-vis foreign satellite system. Out of the total 76 Ku band transponders used by Indian DTH operators (July 2013), only 19 transponders (25 *per cent* of total) belonged to Indian satellites. The remaining 57 transponders (75 *per cent* of total) were on foreign satellites. Tata Sky, which was using 12 transponders in the INSAT system, had also decided (July 2013) to migrate to foreign satellite arrangement as a permanent measure. As such, only 10 *per cent* of the satellite capacity for the DTH service would be serviced by INSAT system. The future requirement of transponders for DTH services was also planned to be met largely from foreign satellites.

**(Para 2.2.3)**

- Non-achievement of targeted Ku band capacity to meet its commitments for DTH service providers was fortuitous for the foreign satellite owners, who were ready at the opportune time to place their satellites over five orbital slots in Indian skies for providing DTH services in India. Crowding of the foreign satellites over India and consequent increase in demand for the orbital slots would not only affect INSAT system, but would also result in non-availability of the strategically important slots for India.

**(Para 2.2.4)**

- DOS arranged foreign satellite capacity to Indian DTH industry as a short term measure to ensure that the service could eventually be brought back to INSAT system. As DOS could not realise its communication satellites in time, most of the DTH service providers moved to foreign satellites. These DTH service providers later did not prefer to return to INSAT system due to trust deficit.
- As DTH service is 'location specific' any change in the position of the satellite would result in migration expenses to the DTH service provider besides causing inconvenience to the customers. Therefore bringing back of service providers from foreign satellite to INSAT system would be an improbable and difficult exercise.

### Allocation of Satellite Capacity

- When satellite capacity for DTH usage was available with DOS, it was not earmarked; instead, lease agreements with foreign satellite providers were renewed for further periods.

*(Para 2.3)*

- INSAT Coordination Committee (ICC), which was to earmark satellite capacity, was not convened after June 2004 and was re-constituted by the Government of India only in May 2011, after lapse of nearly seven years. In the meantime, three satellites were launched, in which capacity was allocated to DTH service providers directly by DOS, which was not as per SATCOM policy.

*(Para 3.1)*

- Ministry of Information and Broadcasting (MIB), which is a member of ICC, was responsible for matters relating to broadcasting in India. By not convening ICC, MIB was not involved in the satellite capacity allocation decision making process.

*(Para 3.2)*

- The procedure for allocation of satellite capacity was not framed by ICC. There was no prescribed procedure within DOS for allocation of satellite capacity for DTH service providers. Thus, since the initiation of DTH service in India, DOS committed satellite capacity to various DTH service providers without an ICC approved procedure.

*(Para 3.3)*

- Tata Sky was fifth in the order of preference for allocation of satellite capacity. However, Tata Sky was granted precedence over Doordarshan and allocated capacity on INSAT 4A satellite which was launched earlier.

*(Para 3.4.1)*

- DOS committed the exclusive first right of refusal to Tata Sky for using Ku band transponders (for DTH service) at 83° east orbital slot, whereas this was not done in transponder lease agreements entered with other DTH service providers. This created a difficult situation for DOS in allocating its Ku band transponders in the slot to any other DTH service provider or usage. Consequently, DOS did not allocate Ku band transponders of GSAT 10 to any other user fearing litigation from Tata Sky.

*(Para 3.4.2)*

### Leasing of Satellite Capacity

- Transponder lease agreements did not safeguard financial interest of Government. The lease period in transponder lease agreements for INSAT Ku band satellite capacity for DTH service ranged from five to 10 years without provision for revision of prices. Though DOS subsequently decided to raise its prices by 15 *per cent* the revision was not carried out. In contrast, the transponder lease agreements with foreign satellite operators were valid for one to six years only. Prices of transponders leased from foreign satellite systems were increased by five to 33 *per cent* over a period of one to six years whereas DTH service providers availing INSAT transponder capacity paid the same charges for over six to ten years.

**(Para 4.2.1)**

- Transponder lease agreement entered with Tata Sky gave certain benefits to Tata Sky which were not offered to any of the other DTH service providers.

**(Para 4.2.2)**

- DOS entered into agreement with Sun DTH for the lease of 6.25 transponder units in INSAT 4B satellite at the rate of ₹4.75 crore per transponder. DOS actually charged Sun DTH for only six transponders which resulted in loss of ₹ 46.92 lakh to DOS.

**(Para 4.2.3)**

- DOS allowed bonus free access to satellite capacity for 1.5 months after the permitted three months time to Sun DTH which resulted in unintended benefit of ₹3.56 crore to Sun DTH.

**(Para 4.2.4)**

- Based on the request of Prasar Bharti, though DOS allocated one additional transponder to Prasar Bharti but it did not enter into a firm agreement/MoU. Prasar Bharti later informed that the additional transponder was not put to use since MOU was not signed. As a result, revenue of ₹5.90 crore towards lease charges was not collected by DOS.

**(Para 4.2.5)**

## **Audit recommendations**

Audit made the following recommendations:

- *DOS and ICC may frame a transparent policy for allocation of satellite capacity for DTH services and all future satellite capacity allocations may be made based on the same.*
- *DOS may consider creating Ku band satellite capacity for DTH services commensurate with the demand in the sector and requirement for national and strategic applications.*
- *DOS may clearly define short term and long term strategy for allocation of Ku band satellite capacity to DTH service providers on domestic and foreign satellites to ensure continuity to the existing users as well as to bring those DTH service providers using foreign satellites back to INSAT/GSAT system.*
- *DOS may incorporate price revision clause in long term transponder lease agreements and revise the transponder prices in time to avoid extending undue benefit to the service providers.*