

Chapter 4 – Leasing of satellite capacity

4.1 Institutional mechanism for entering into transponder lease agreement

According to Article 2.6.5 of NGP of SATCOM Policy, the use of INSAT capacity by non-Government users was to be based on a formal lease agreement signed between DOS/INSAT and the party, which would spell out the technical, financial, contractual and management terms and conditions. However, approval and control mechanism to ensure that the various terms and conditions of the agreement were determined after examining the technical, financial and legal implications of the contract as well as to fix responsibility and accountability for management of the contract was not put in place in respect of DTH transponder lease agreements. There was no prescribed procedure for:



Figure 7: DTH service in operation

- Approval of the appropriate authority from the financial angle (Member Finance of Space Commission) so that financial interests and financial risks involved were sufficiently covered in the lease agreement;
- Approval from Ministry of Law from the legal angle;
- Duly documented meeting of Technical committee and Commercial negotiation Committee at the appropriate level for negotiation of terms and conditions with the service providers; and
- Stipulation of the officials responsible for management of the contract.

DOS stated (March 2014) that various methods for leasing transponders to commercial users in INSAT/GSAT system had since been adopted and streamlined.

In respect of the transponder lease agreements entered into by DOS with DTH providers for allocation of satellite capacity on INSAT systems, whereas DOS provided all technical support, invoicing and collection of payments was done by Antrix. For this, Antrix charged

commission ranging from 15 *per cent* to 40 *per cent* from DOS. In respect of the back to back contracts entered into by Antrix with the DTH service providers for foreign satellite capacity, Antrix charged commission of 7.5 *per cent* from the DTH service providers. Though DOS offered substantial technical support in the allocation and leasing of satellite capacity to DTH service providers, no remuneration was claimed by DOS. On the contrary, the effective realisation of revenue by DOS through leasing of INSAT/GSAT capacity was also reduced due to considerable percentage being paid as commission to Antrix.

While agreeing that it provided technical support to Antrix, DOS stated (March 2014) that back end work related to end user and Antrix was significant and the current mechanism was necessary to establish INSAT/GSAT system as a good commercial venture. The reply may be viewed in the context that in spite of rendering complete technical support for the allocation of satellite capacity in back to back agreements, DOS did not claim any compensation from Antrix.

4.2 Transponder lease agreements did not safeguard financial interest of Government

Audit noticed that the terms and conditions of the transponder lease agreements of DOS favoured private service providers and were against the financial interest of the Government, as discussed in the succeeding paragraphs.

4.2.1 Loss due to non revision of transponder charges

The period of lease committed in the DTH transponder lease agreements between DOS and the DTH service providers for satellite capacity from INSAT system ranged from five to 10 years. Audit observed that the transponder lease agreements entered by DOS did not include provision for revision of prices.

DOS constituted (June 2002) a Standing Committee to fix minimum price for each type of transponder for different INSAT satellites. The committee was to periodically review the marketing strategy and in the event of any difference on account of rates, it was authorised to negotiate with individual DTH service providers. INSAT transponder lease charges were fixed and approved (March 2008) by DOS for a period of three years i.e up to March 2011.

As ICC was yet to finalise the prices as of April 2011 when the validity period expired, the validity of existing price of various transponder lease agreements was extended till December 2011. DOS subsequently decided (April 2012) to raise its prices by 15 *per cent*. Audit, however, observed that ICC did not finalise the prices, due to which the revision was not carried out. As such DOS extended the validity of the existing prices upto September

2013 and stated (September 2013) that approval was being sought for further extension of the prices up to 31 March 2014.

In contrast, the transponder lease agreements with foreign satellite operators in the case of back to back contracts were valid for one to six years only. At the end of the terms of the agreement, fresh contracts were entered with revised prices as detailed in Table 8.

Table-8: Revision of price of transponders leased from foreign satellites

₹ in crore

Sl. No.	Foreign satellite capacity provider	DTH Service provider	Original Agreement				New Agreement				Increase in price	Percentage increase in price (%)	Duration between dates of original and increasing process (months)
			Date of original Agreement	Price per transponder per year as per contract	Commission @ 7.5%	Total price per transponder	Date of new Agreement	Price per transponder per year as per contract	Commission @ 7.5%	Total price per transponder			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Measat	Reliance	October 2007	4.30 for 36 MHz	0.32	4.62	August 2011	4.52 for 36 MHz	0.34	4.86	0.24	5	46
2.	ST	Videocon	July 2009	4.82 for 54 MHz (US\$ 1 million)	0.36	5.18	January 2011	6.20 for 54 MHz (US\$ 1.35 million)	0.47	6.67	1.49	29	18
3	ST	Videocon	January 2011	6.20 for 54 MHz (US\$ 1.35 million)	0.47	6.67	April 2012	8.24 for 54 MHz (US\$ 1.6 million)	0.62	8.86	2.19	33	15
4.	Measat	Sun DTH	December 2008	4.21 for 36 MHz	0.32	4.53	July 2011	4.52 for 36 MHz	0.34	4.86	0.33	7	31
5.	SES	Dish TV	June 2004 (amendment January 2005)	4.54 for 36 MHz (US\$ 1 million)	0.34	4.88	April 2010	4.88 for 36 MHz (US\$ 1.1 million)	0.37	5.25	0.37	8	70
				5.23 for 54 MHz (US\$ 1.15 million)	0.39	5.62		5.61 (US\$ 1.265 million)	0.42	6.03	0.41	7	70

It is evident from the table that prices of transponders leased from foreign satellite systems were increased by five to 33 *per cent* over a period of one to six years. In contrast, DTH service providers availing INSAT transponder capacity paid the same charges for six to ten years. Non-inclusion of price revision clause in the agreements signed by DOS with service

providers for INSAT systems and non-revision of prices resulted in a pricing differential estimated at ₹36.17 crore to the disadvantage of DOS, as shown in Table 9.

**Table-9: Pricing differential due to delay in revision of prices
(Agreements valid after April 2011)**

₹ in crore

Sl. No.	Customer	Satellite	Date of agreement	Period*	Duration	Rate of transponder on April 2011	Rate of transponder considering increase of 15%	Number of transponders	Pricing differential ³¹	Duration since dates of original agreement (months)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Tata sky	INSAT-4A	12 November 2005	1 April 2011 to 17 July 2013	27 months 17 days	4.6	5.29	12	19.02	91
2	Doordarshan	INSAT 4B	18 March 2004	1 April 2011 to 21 May 2012	13 months 21 days	4.4	5.06	5	3.77	114
				22 May 2012 to 30 Sep 2013	16 Months 10 days	4.4	5.06	6	5.39	
3	Sun DTH	INSAT 4B	19 February 2005	1 April 2011 to 30 November 2012	20 Months	4.7	5.40	1	1.17	93
4	Airtel	INSAT 4CR	26 December 2006	1 April 2011 to 03 Sep 2011	5 Months 03 days	4.8	5.52	7	2.14	72
			26 December 2006	04 Sep. 2011 to 05 October 2011	01 Month 02 days	4.8	5.52	6.75	0.43	
			26 December 2006	06 October 2011 to 15 December 2011	02 Months 10 days	4.8	5.52	6.67	0.93	
			26 December 2006	16 December 2011 to 01 March 2012	02 Months 15 days	4.8	5.52	6.5	0.97	

³¹ The pricing differential is worked out by considering an increase of 15 per cent in prices, as was decided by DOS in April 2012. The loss is calculated as 15 % of Column (7) x Column (6)/12 x Col.(8)

Sl. No.	Customer	Satellite	Date of agreement	Period*	Duration	Rate of transponder on April 2011	Rate of transponder considering increase of 15%	Number of transponders	Pricing differential ³¹	Duration since dates of original agreement (months)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			26 December 2006	02 March 2012 to 03 July 2012	04 Months 02 days	4.8	5.52	6	1.46	
			26 December 2006	04 July 2012 to 13 July 2012	10 days	4.8	5.52	5	0.10	
			26 December 2006	14 July 2012 to 31 August 2012	01 Month 18 days	4.8	5.52	4.5	0.43	
			26 December 2006	01 September 2012 to 30 September 2012	01 Month	4.8	5.52	3	0.18	
			26 December 2006	01 October 2012 to 31 December 2012	03 Months	4.8	5.52	1	0.18	
TOTAL									36.17	

*taken upto validity of the agreement or September 30, 2013, which ever was earlier.

An analysis of prices of transponders from the details shown in the Tables 8 and 9 also revealed that whereas, prices of the transponders on foreign owned satellites upon revision ranged from ₹4.86 crore to ₹8.86 crore per transponder per year, the prices of INSAT transponders remained constant at ₹4.40 crore to ₹4.80 crore for over a period of six to ten years. The poor marketing strategy of DOS to continue with the same prices, when foreign satellite providers regularly revised their prices resulted in loss of transponder charges and provided an extra advantage to the service providers who were allocated INSAT capacity.

DOS stated (December 2012) that the long term contract was consciously decided considering the award of 10 year licence by MIB and also due to difficulties in re-location to other orbital locations within a short period. DOS also added that a fixed tariff was entered with DTH users to improve the acceptability of INSAT/ GSAT system and to make the INSAT/ GSAT satellite system commercially dependable and viable in the country. DOS added (March 2014) that the policy for revised transponder pricing was in the process of approval by the Cabinet. DOS further stated (May/June 2014) that the contract with Tata Sky had

been re-negotiated and Tata Sky had agreed for renewal of prices with effect from 18 July 2013.

The fact, however, remained that though prices were to be revised after March 2011, the same was not done on the pretext that the contract could not be terminated as the service providers were issued licences for 10 years. Revised prices were also yet to be charged from Tata Sky as of March 2014.

4.2.2 Special terms and conditions of transponder lease agreement with Tata Sky

As discussed in para 3.4.1 and 3.4.2 of this report, DOS allocated satellite capacity to Tata Sky on INSAT 4A out of turn and by offering it exclusive rights over the orbital slot 83° east. Audit further observed that the transponder lease agreement entered (November 2005) with Tata Sky gave the following benefits to Tata Sky, which were not offered to any of the other DTH service providers such as Airtel and Sun DTH:

- Commitment for satellite capacity was open ended, with provision for additional transponder capacity whereas in other agreements the satellite capacity was committed for the period of lease only.
- Credits were provided in the case of interruption in service for more than 30 minutes to 24 hours at slab rates, whereas in the other agreements the credits were provided for interruption of more than one hour on proportionate basis.
- There was a provision for inspection of customer's earth station by DOS at the request of Tata Sky, where as this facility was not extended to the other DTH service providers.
- Tata Sky was allowed to assign any of its rights or delegate any of its obligations to its affiliates upon reasonable prior written notice to DOS, whereas this was not extended to the other DTH service providers.
- Chairman of Tata group was one of the non-functional directors in the board of directors of Antrix. Although there might be no direct impact on the decision making process within Antrix, allocation of Ku band transponders of INSAT 4A on exclusive basis to Tata Sky does raise the question of conflict of interest.

While admitting the above, DOS stated (December 2012) that the contract with Tata Sky was entered during initial period of marketing INSAT/GSAT system with a vision to bring private users towards INSAT/GSAT system. DOS added (March 2014) that such clauses were

accepted based on customer specific request as a part of negotiations and were intended to provide certain confidence to the users as well as flexibility in contract management.

The reply needs to be viewed in the context that the special terms benefited Tata Sky as explained under para 2.2.2 (ii), 3.4.1 and 3.4.2. Further, substantial differences between agreement entered into with Tata Sky vis-à-vis other transponder lease agreements, especially grant of exclusive rights over the prime orbital slot, were also noticed by Ministry of Finance, which requested (March 2013) DOS to re-negotiate the terms of agreement entered with Tata Sky. However, this was yet to be done (as of June 2014).

4.2.3 Loss due to undercharging of transponder prices

DOS entered (February 2005) into agreement with Sun DTH for the lease of 4 transponder units³² in INSAT 4B satellite. Subsequently DOS decided (February 2007) to lease additional 2.25 transponders to Sun DTH and charge for only six transponders at the rate of ₹4.75 crore per transponder against 6.25 transponders on the ground that Sun DTH had agreed for leasing with the condition that they would be charged only for six transponders. The justification was however, not acceptable as DOS leased 6.25 transponders to the firm. Under charging of transponders resulted in a loss of ₹2.94 crore over the period from 15 January 2008 to 6 July 2010.

Audit further observed that without citing any reason, DOS also reduced the price of these transponders with effect from January 2010 to ₹4.70 crore per transponder, which resulted in loss of ₹46.92 lakh to DOS as shown in Table 10.

Table-10: Under charging of transponders

Sl. No.	Period	Number of transponders leased	Rate as per agreement (₹ lakh)	Rate charged (₹ lakh)	Duration	Loss (₹ lakh)
1.	21 January 2010 to 7 July 2010	06	475	470	5 months and 17 days	13.92
2.	08 July 2010 to 07 December 2010	01	480	470	5 months	4.17
3.	08 July 2010 to 31 December 2010	01	480	470	5 months 24 days	4.83
4.	08 July 2010 to 30 November 2012	01 ³³	480	470	28 months and 24 days	24.00
TOTAL						46.92

³² One transponder is equivalent to 36 Mhz. Sun DTH was leased four transponders of 36 MHz each and three transponders of 27 MHz each.

³³ Due to power constraints in INSAT 4B, the allocation was reduced to one transponder and four transponders were arranged from the foreign satellite Measat 3.

While repeating the justification, DOS stated (March 2014) that the Standing Committee was empowered to take the decision. The reply is not acceptable as already mentioned above.

4.2.4 Allocation of bonus time

The agreement entered between DOS and Sun DTH provided that the customer was permitted free access to the capacity 60 days prior and three months after the start of the lease period as an early bid incentive to the customer. DOS, however, allowed bonus free period of 1.5 months after the permitted three months time to Sun DTH. The additional free time was allowed in lieu of the delay in getting operational approvals required for providing the DTH service. Since obtaining operational approvals was the responsibility of the customer, the additional bonus free time resulted in unintended benefit³⁴ of ₹ 3.56 crore to Sun DTH.

DOS stated (March 2014) that the decision was taken by the Standing Committee, which was empowered to take the decision. The reply of DOS is not acceptable since the Standing Committee was only mandated to establish the minimum price for each type of transponders and was not mandated to extend bonus free time for usage of transponders.

4.2.5 Revenue of ₹ 5.90 crore not collected due to failure to sign MoU

Article 2.6.5 of NGP of SATCOM Policy stipulated that for leasing of capacity, DOS was to enter into transponder lease agreements with the DTH service providers. DOS, however, did not enter into such an agreement with DD instead, signed MoU (March 2004) with Prasar Bharti for leasing five transponders of INSAT 4B to DD for DTH service. Although the MoU stated that DD would be charged for the Ku band transponders at the prevailing rates, the rates to be charged were not indicated.

Prasar Bharti requested (May 2012) DOS for allocating one additional Ku band transponder in INSAT 4B for DD's DTH service. It also requested for an assurance for allocation of sixth transponder and its frequency details so as to carry out procurement and installation of additional ground facilities required for the additional transponder. DOS allocated (May 2012) the additional transponder to Prasar Bharti but it neither provided the information sought by Prasar Bharti nor entered into a firm agreement/MoU. Due to non-receipt of advance information from DOS, Prasar Bharti was unable to procure the equipment and obtain the necessary clearances in time. Prasar Bharti further informed (June 2013) that the additional Ku Band transponder was not put to use since MOU had not yet been signed. As

³⁴ 1.5 x 4.75 x 6 /12.

a result, revenue of ₹5.90 crore³⁵ worked out as lease charges for the additional transponder from May 2012 up to July 2013 was not collected by DOS.

DOS replied (March 2014) that Prasar Bharti subsequently signed MOU and had agreed to pay lease charges for the additional Ku band transponder with effect from May 2012. DOS, however, remained silent on the status of the said payment.

4.3 Outstanding dues from back to back agreements

As discussed in para 2.3, DOS arranged foreign satellite capacity to Indian DTH service providers for short term period through Antrix as a temporary measure to ensure that the service could be brought back to INSAT system when Indian satellite capacity was eventually available. DOS entered in back to back agreements for Dish TV, Sun DTH, Airtel, Reliance and Videocon. Audit observed that transponder lease charges to the tune of ₹62.55 crore remained to be recovered from these parties.

DOS stated (March 2014) that amount of ₹57.17 crore was since recovered. The balance of ₹5.38 crore remained outstanding. Outstanding dues in back to back arrangement suggest that in these cases Antrix did not collect money in advance from service providers as per the conditions of the transponder lease agreements and allowed them to make payment on credit basis, thereby extending undue favour and resultant accumulation of transponder lease charges.

³⁵ Outstanding amount as on June 2013 (A) = ₹5,48,87,256. Amount for July to September 2013 = ₹1,23,59,600. Amount for July 2013 (B) = ₹1,23,59,600/3 = ₹41,19,866.67. Total (A+ B) = ₹5.90 crore

