## **UNCITRAL ARBITRATION**

PCA Case No. 2013-09

CC/Devas (Mauritius) Ltd.

Devas Employees Mauritius Private Limited and
Telcom Devas Mauritius Limited

CLAIMANTS

٧.

THE REPUBLIC OF INDIA

RESPONDENT

DIRECT TESTIMONY OF MR. A. VIJAY ANAND, JOINT SECRETARY, DEPARTMENT OF SPACE, GOVERNMENT OF INDIA

## WITNESS STATEMENT OF MR. A. VIJAY ANAND1

- I, A. Vijay Anand, hereby declare as follows:
- 1. I am currently the Joint Secretary, Department of Space, a department within the Government of India. I joined the Civil Services of India in 1980 and have served the Government of India in various capacities ever since. I have been the Joint Secretary and Chief Vigilance Officer of the Department of Space since July 2009. This witness statement is based upon my personal knowledge, my experience acting in the aforesaid capacities and my review of documents relating to the subject matters addressed.
- 2. Under the 28 January 2005 contract between Antrix Corporation Limited ("Antrix"), a company owned by the Government of India, and Devas Multimedia Private Limited ("Devas"), Devas was to lease transponders on a satellite that was to be built and owned by the Indian Space Research Organisation ("ISRO").<sup>2</sup> Devas also had an option under the Devas Contract to lease transponders on a second satellite to be built and owned by ISRO.<sup>3</sup> In total, the transponders were to utilise 60 MHz of spectrum in the frequency range 2555-2635 MHz, which is called the S-BSS spectrum (standing for "S-band broadcast satellite service") and 10 MHz of spectrum in the frequency range 2670-2680 MHz in what is called the S-MSS spectrum (standing for "S-band mobile satellite service"). In India, the total amount of spectrum in the S-band that was

<sup>&</sup>lt;sup>1</sup> References herein in the form "<u>Ex. R-</u>" are to exhibits that are being submitted by the Respondent with its Statement of Defence. References in the form "<u>App. VA-</u>" are to the appendices hereto. It should be noted that certain of the documents are being produced in redacted format to prevent the disclosure of information regarding defence and security planning and initiatives that is of a sensitive nature.

<sup>&</sup>lt;sup>2</sup> Ex. R-1, Agreement for the Lease of Space Segment Capacity on ISRO/Antrix S-Band Spacecraft by Devas Multimedia Pvt. Ltd., 28 January 2005 (the "Devas Contract").

<sup>&</sup>lt;sup>3</sup> *Id.*, Fifth WHEREAS Clause and Article 3(j).

allocated for space services as of the time the Devas Contract was executed was 80 MHz in the S-BSS spectrum and 70 MHz in the S-MSS spectrum. Thus, the transponders that had been the subject of the lease agreement consumed 75% of India's S-BSS spectrum and almost 50% of the total S-band.<sup>4</sup>

- 3. Over the last decade, the military and security agencies within India have been demanding satellite capacity in the S-band to meet their growing needs for high quality, reliable communications and data transmission systems. The S-band is a particularly good spectrum for military and security applications because its frequencies are such that they can be picked up by small receivers (hand-held devices, laptops and tablets) with omni-directional antennae. This means that military and security forces can remain in contact with headquarters even while in motion without great risk of loss of communications and data reception capabilities.
- 4. Originally, the armed forces and security agencies were satisfied with satellite services carried on the S-MSS frequencies, as the agencies mostly required reliable two-way mobile communications (essentially satellite-based telephony services). However, with advances in technology and the use of such technology by advanced armed forces throughout the world (as well as by terrorist organisations), the Indian military and security agencies required, in addition to reliable telephony services, the ability to transmit large amounts of data (e.g., satellite and surveillance photographs, maps, and the like) to forces in remote locations, such as those serving in border regions or in coastal or naval operations. Data transmissions of this type consume large amounts

<sup>&</sup>lt;sup>4</sup> India had originally been allocated a total of 190 MHz in the S-band for satellite services. However, prior to the time that the Devas Contract was executed, 40 MHz of the spectrum (in two 20 MHz blocks on either end of the S-BSS band) were shifted from satellite use (under the Department of Space) to terrestrial use (under the Department of Telecommunications), leaving 150 MHz for satellite use.

of bandwidth, particularly when the data must be transmitted quickly. Because 80 MHz of the S-band had been designated within India for broadcast satellite services, this band was particularly good for the data transmissions required by the military and security forces as such transmissions could be made on distinct frequencies without interfering with simultaneous mobile communications (two-way communications) on mobile communications bandwidths.

- 5. The following chronology reflects the growing military needs and the consultation process among various agencies within the Government of India to address those needs.
  - In May 2003, ISRO launched a satellite for military purposes. This satellite used a 20 MHz segment of S-MSS capacity. Following this launch, the military was looking for higher performance and capacity and demanded from ISRO a communication system with increased data rates and the ability to service a larger number of terminals (i.e., receiving units).<sup>5</sup>
  - In April 2004, the military ordered a dedicated satellite for Naval use.<sup>6</sup>
     This satellite, using 8 MHz of S-MSS, was launched in August 2013.<sup>7</sup>
  - In October 2005, a Note by a senior military officer described the importance of space technology for defence, particularly starting in

<sup>&</sup>lt;sup>5</sup> The S-MSS frequencies, which are used for two-way communications, cannot effectively be used at the same time for high-speed large content data transmissions. This is due to the fact that two-way communications (e.g., mobile telephone communications) slow down data transmissions, and those two-way communications will themselves be slowed down or interrupted when data is being transmitted. The S-BSS band, a one-way broadcast band, is required for such data transmissions because the military and security forces will be in motion, reacting to information as it is received, and need to have devices (e.g., computers) with omni-directional antennae to assure continuous connectivity with headquarters for the data feeds.

<sup>&</sup>lt;sup>6</sup> <u>App. VA-1</u>, Directorate of Naval Signals, *Draft Naval Staff Qualitative Requirements for Naval Communications Satellite*, 5 April 2004, ¶¶ 9, 11 ("Naval communications are indeed most intricately complex, because of four distinct participants viz. ships, submarines, aircraft and shore authorities. All need to communicate with each other in real time. . . . Ship shore communications serve command and control functions, need to be global in nature and are therefore termed strategic communications.").

<sup>&</sup>lt;sup>7</sup> The satellite was originally scheduled to be launched in 2011. However, during 2010, ISRO experienced two launch failures from its Geosynchronous Satellite Launch Vehicle (GSLV) program. These launch failures required technological changes and testing, resulting in the delay of a number of satellite launches.

2008 when a new five-year plan would enter in place.<sup>8</sup> The Note projected the bandwidth requirements of the Army, Navy and Air Force through 2010, 2015 and 2020. With regard to the S-band, the projected needs were for 86 MHz by 2010, 151 MHz by 2015 and 208 MHz by 2020.<sup>9</sup> The Note stated:

Space Systems are beginning to become an integral component of the total combat potential of many nations. It is but imperative that our Defence Forces do not lack in the exploitation of Space for War fighting. Till 2008 Indian Space capability and programmes have been defined and there is no alternative but to exploit available assets except for minor up gradations where feasible, during this time frame. However, beyond that period our Defence Forces should be able to examine and specify the needs to enable our technologists to support our requirements. capabilities are vital tools of the Information Revolution and critical to activities of the Defence Forces. emerging as a centre of gravity for information dependent forces and it is highly probable that continued and assured access to Space will be a major determinant of national power. 10

Based on this Note, the Department of Defence engaged in consultations with the Department of Telecommunications to reserve bandwidth for military needs.

 In February 2006, military leaders met with the Department of Space to address the S-band capacity required for the Defence Space Vision through 2020.<sup>11</sup>

<sup>&</sup>lt;sup>8</sup> The Government of India's national planning is conducted for five-year periods. The tenth plan period ran from the end of 2002 through the end of 2007, the eleventh plan period thereafter, through 2012, and so on.

<sup>&</sup>lt;sup>9</sup> <u>App. VA-2</u>, HQ Integrated Defence Staff, Note, 14 October 2005, Appendix H (including the projections made in the Defence Space Vision (DSV) 2020). This Note was attached to a 9 August 2006 letter which is discussed below in n. 12, *infra*. The Note also referred to other frequency bands that are used by the military for communications purposes.

 $<sup>^{10}</sup>$  *Id.*, ¶ 1. The Note further referred to the development of a Defence Space Vision, which "would be the Base Document for formulating the Space Strategy and Space Doctrine for the Armed Forces . . ." *Id.*, ¶ 4.

<sup>&</sup>lt;sup>11</sup> <u>App. VA-3</u>, Minutes of Third Task Force Meeting with DoS held on 21 February 2006 at HQ IDS New Delhi, 6 March 2006. The Chairman of the military task force "expressed a genuine concern at the rapid build up of Chinese Space Programme," noting that "[t]here is a need to take cognisance of this at the stage to identify & develop our Space programme to effectively combat this proliferation." *Id.*, ¶ 4. He also stated: "Services especially Army has an ambitious plan for phased development of MSS. Consequent of this there is inescapable necessity for continue of S-band [sic]. The total BW contemplated for S-band would be 86 MHz – 151 MHz – 208 MHz for short, medium & long term respectively (extract from DSV-2020)." *Id.*, ¶ 14.

- In August 2006, another Note from a senior military officer advised the Department of Telecommunications to block bandwidth in several orbital slots, including the S-band. The Note stated: "Refer to Bandwidth Projections of Service HQs for satellite communications given in DSV 2020 ( . . . dated 14 Oct 05), copy enclosed. It is requested that the matter be taken up Deptt of Telecommunications for blocking the bandwidth in S, C, Ku, Ka and UHF Bands for satellite communications by three services as per requirements envisaged in DSV 2020." 12
- In March 2007, the Ministry of Defence consulted with the Department of Space regarding the requirements of the Army for sufficient S-MSS bandwidth to support the enormous growth in the required mobile briefcase terminals. The requirements included 60 MHz by 2010, an additional 15 MHz by 2015 and an additional 45 MHZ by 2020.<sup>13</sup>
- In August 2007, India's military leaders formed an expert committee on S-band to assure the fulfilment of military needs.<sup>14</sup> In a September 2007 report, the expert committee stated:

Satellite services (MSS and BSS) in this band [S band] cannot coexist with the terrestrial services and hence the spectrum cannot be shared with terrestrial services like IMT or WIMAX. If the spectrum is not safeguarded against the bid by the commercial operators in India, this spectrum will not be available for any future utilization for the military applications. If this spectrum (2.5 – 2.69 GHz) is lost to commercial operators, it would severely jeopardize the future Defence services plans of providing mobile SATCOM connectivity. . . . [I]t is strongly recommended that the 'S' band Spectrum be safeguarded from being poached by the commercial operators for meeting the future requirements of the Defence Services. . . . The non availability of the

<sup>&</sup>lt;sup>12</sup> <u>App. VA-4</u>, HQ Integrated Defence Staff ops Branch/IW & IT Dte, Note, *Bandwidth Requirements – Satellite Commn*, 9 August 2006.

<sup>&</sup>lt;sup>13</sup> <u>App. VA-5</u>, Minutes of Integrated Space Cell Meeting held on 19 February 2007 at HQ IDS, 26 March 2007.

<sup>&</sup>lt;sup>14</sup> <u>App. VA-6</u>, HQ Integrated Defence Staff, Convening Order, Constitution of Expert Committee on Spectrum and Satellite Uses of Frequency Band 2.5 GHz to 2.69 GHz (S-Band) by Defence Services, 30 August 2007.

Spectrum could stymie the future operational plans of the Defence services. 15

- In November 2008, a special meeting to address issues relating to satellite communication systems was held between military leaders and ISRO. The minutes of that meeting state: "The requirement of 'S' band carriers by the Army was spelt out by the Chairman. Dr. A Bhaskaranarayana [of ISRO] stated that the scarce 'S' band spectrum should be optimally utilized. . . . He proposed that [the military] consolidate the requirement of 'S' band for various services, to enable optimal utilization by way of the dedicated 'S' band specific satellite." The military committed to providing the consolidated requirements in the near term.
- In May 2009, a task team was established at ISRO to address the needs for dedicated military S-band satellites.<sup>18</sup>
- In December 2009, following all of the foregoing consultations and analysis, the military provided ISRO with more definitive details regarding the national security requirements for satellite services.<sup>19</sup> The Armed Forces set forth their requirements for S-band as follows:
  - (i) To cater for requirements up to 2012 120 Carriers, 17.5 MHz. Out of which 50 Carriers are being used by the Armed Forces. (ii) Additional in 12<sup>th</sup> Plan 40 MHz. (iii) Additional in 13<sup>th</sup> Plan 50 MHz.<sup>20</sup>

<sup>&</sup>lt;sup>15</sup> App. VA-7, Report of the Expert Committee on Spectrum and Satellite Uses of Frequency Band 2.5 to 2.69 GHz (S-band) by Defence Services, September 2007, ¶¶ 10-12. In this context, the military was not addressing the 40 MHz of S-MSS that had long ago been shifted from the Department of Space to the Department of Telecommunications. See n. 4, supra. Rather, it was addressing the attempts that were being made by commercial operators, with the advances in technology relating to wireless broadband services, to have additional spectrum shifted from satellite use to terrestrial use for commercial purposes.

<sup>&</sup>lt;sup>16</sup> <u>App. VA-8</u>, Minutes of the Special ISC Meeting between Reps of ISRO & Reps of Three Services to Address Satellite Based Communication Related Issues, 25 November 2008, ¶ 4.

<sup>&</sup>lt;sup>17</sup> *Id.*, ¶¶ 4, 14.

<sup>&</sup>lt;sup>18</sup> <u>App. VA-9</u>, ISRO/Department of Space, Office Order, *Task Team for Configuring an S-band Communication Satellite for HQ IDS*, 20 May 2009.

<sup>&</sup>lt;sup>19</sup> <u>App. VA-10</u>, Minutes of Meeting held on 15 December 2009 at ISAC, Bangalore between ISC of HQ IDS, MOD and ISRO, 25 January 2010.

<sup>&</sup>lt;sup>20</sup> *Id.*, p. 3.

- 6. As the foregoing chronology shows, the military need for S-band was vetted and developed over a long period of time. In addition to the satellite that had been ordered and was launched in August 2013 (with 8 MHz of S-MSS capacity for naval operations), the military requires an additional 107.5 MHz of S-band for its communications and data transmission requirements over the next ten years. On top of the military needs, other agencies, including the Border Security Force, the Central Industrial Security Force, the Central Reserve Police Force, the Coast Guard and the Police, as well as the Indian Railways, also have needs for communications and data transmission services that require the use of S-band.<sup>21</sup>
- 7. This was the situation that confronted the Department of Space in December 2009 with respect to needs for S-band. With only 150 MHz of total S-band available for satellite applications, and with the Devas Contract consuming 70 MHz of that capacity, including 60 MHz of the S-BSS spectrum that was dedicated to broadcast services, there was grave risk that the military and security needs would not be met.
- 8. Separately, in November 2009, shortly after I had been appointed Joint Secretary, and prior to the time that I had become aware of the details regarding the defence and security needs for S-band capacity, I was informed of certain claimed irregularities in connection with the Devas Contract.<sup>22</sup> In response to this information,

<sup>&</sup>lt;sup>21</sup> See, e.g., <u>Ex. R-30</u>, Department of Space, Note to Space Commission, *Agenda Item 4: GSAT-6/6A – Contract between M/s. Antrix Corporation Limited (ACL) and M/s. DEVAS Multimedia Pvt. Ltd.*, signed 2 July 2010, ¶ 8.3; <u>Ex. R-24</u>, Minutes of 117<sup>th</sup> Meeting of the Space Commission Held at DOS Branch Secretariat, New Delhi, on 2 July 2010, signed 21 July 2010, ¶ 117.6.3 ("There are further demands for S band transponders from internal security agencies viz., BSF, CISF, CRPF, Coast Guard and Police for meeting their secured communication needs. Indian Railways have also projected S band requirements for traintracking.").

<sup>&</sup>lt;sup>22</sup> See <u>App. VA-11</u>, Department of Space, Memorandum, *Source Information*, 13 June 2012. This memorandum, which I prepared (since, in my capacity as Chief Vigilance Officer for the Department of Space, I was the recipient of the information reported therein), was provided to the Claimants in the format presented (with the name of the person who reported the information to me redacted) in response

under my direction, the Department of Space conducted a preliminary, internal review of certain of the allegations.

9. For example, I was advised that minutes of a meeting of the Technical Advisory Group ("TAG") of the Indian Satellite Coordination Committee ("ICC") in connection with the experimental licence that had been granted to Devas had been altered. The meeting in question took place on 6 January 2009.<sup>23</sup> A version of the minutes of that meeting was circulated on 29 October 2009 by Dr. S. V. Kibe, who attended the meeting at the request of Dr. Bhaskaranarayana. It stated in relevant part:

After a detailed deliberation on various aspects of the proposed Experimental Plan, the review team recommended that the experiment can be conducted under ISRO guidance.<sup>24</sup>

Following circulation, a number of the participants at the meeting sent letters to Dr. Kibe stating that the minutes were inaccurate in material ways. In a letter dated 4 November 2009, Mr. N. Jain of the Department of Telecommunications stated:

The minutes do not reflect the deliberations held by the members during the meeting regarding experiments to be conducted by a private party. It was discussed that DEVAS will have to submit a proposal to the Apex Committee for the experimental plan and apply for license for spectrum to WPC. WPC representative stated that license for terrestrial transmission is permitted in certain allocated bands but not in this portion of S-band.

to a request under India's Right to Information Act. This was provided as Annexure 5 to the Claimants pursuant to the decision of the Central Information Commission dated 13 April 2012 and Order of the Hon'ble High Court of Delhi dated 1 June 2012. The memorandum was prepared on 8 November 2009, shortly after I had met with the person whose name has been redacted.

<sup>&</sup>lt;sup>23</sup> The 6 January 2009 meeting was actually a meeting of a TAG "review committee" that had been established on 26 December 2008 following a meeting of the TAG at which Devas made a presentation regarding its hybrid satellite-terrestrial system for purposes of obtaining an experimental licence.

<sup>&</sup>lt;sup>24</sup> <u>App. VA-12</u>, Minutes of 6 January 2009 Meeting of TAG Review Committee, circulated on 29 October 2009.

However, it was viewed that Government organization like ISRO may conduct experiments, if required.

Finally, it was agreed that ISRO / DoS [Department of Space] will be required to obtain a license / permission from WPC for terrestrial transmission in this band.

Hence, it is requested that the minutes of the meeting be amended to include the actual discussions & decisions taken during the meeting.<sup>25</sup>

10. I asked Dr. Kibe about this, and he showed me the original version of the minutes he prepared, which he had submitted to Dr. Bhaskaranarayana, who chaired the TAG review committee.<sup>26</sup> Those minutes included the following passage:

Members observed that DEVAS will have to apply for license for spectrum to WPC and submit a proposal to the APEX Committee for the experimental plan. WPC reps stated that license for terrestrial transmission is permitted in certain allocated bands but not in this portion of S-band.

DDG (DS), DOT stated that the application for experimental plan would have to be reviewed as DEVAS Multi Media is a private party and normally clearance for experimental plan is much more easily given to a Govt. agency.

Finally, it was agreed that the experimental plan will be carried out by ISRO/DOS on behalf of DEVAS Multi Media. ISRO/DOS will be required to obtain a license from the WPC for terrestrial transmission in this band.<sup>27</sup>

Dr. Kibe advised me that Dr. Bhaskaranarayana had crossed this language out and asked that it be replaced with the language that was included in the version of the

<sup>&</sup>lt;sup>25</sup> <u>App. VA-13</u>, Letter from Mr. N. Jain, Department of Telecommunications, to Dr. S. V. Kibe, INSAT, 4 November 2009. *See also* <u>App. VA-14</u>, Letter from Mr. A. K. Kalia, Network Operations Control Centre, Department of Telecommunications, to Dr. S. V. Kibe, INSAT, 6 November 2009.

<sup>&</sup>lt;sup>26</sup> <u>App. VA-15</u>, Minutes of 6 January 2009 Meeting of TAG Review Committee, as originally drafted by Dr. Kibe.

<sup>&</sup>lt;sup>27</sup> Id.

minutes that was circulated on 29 October 2009. The handwriting on the document that Dr. Kibe showed and then gave to me is Dr. Bhaskaranarayana's handwriting.<sup>28</sup>

11. The change in the TAG minutes that Dr. Bhaskaranarayana directed was not an inconsequential one. The question of whether S-band that had been allocated to the Department of Space should be re-deployed for terrestrial use had been the subject of debate over time, as more and more providers of terrestrial services were demanding S-band for 3G mobile telephone and broadband wireless applications, even after 40 MHz of S-MSS spectrum had been shifted from the Department of Space to the Department of Telecommunications in 2001.<sup>29</sup> However, the S-BSS frequencies (2555-2635 MHz), which were the main frequencies that Devas intended to use, had been shielded from this debate and preserved for space-to-earth broadcasting. At the TAG review committee meeting, the representatives of the Wireless Planning and Coordination Wing of the Department of Telecommunications ("WPC"), which is headed by the Wireless Advisor to the Government of India and is responsible ultimately for spectrum allocation and approval of operating licences, advised that the terrestrial use of this spectrum was not permitted. That position was obviously contrary to what Devas intended to do. To use this spectrum for transmission in the terrestrial part of the Devas system would have required a change in policy within the Government of India. Removing the statement of the WPC representatives from the minutes was an inappropriate alteration of the record of an official meeting. That is particularly important in India, where people are periodically re-assigned to new jobs within the bureaucracy.

<sup>&</sup>lt;sup>28</sup> *Id.* A revised version of the minutes was subsequently sent. See <u>App. VA-16</u>, Minutes of 6 January 2009 Meeting of TAG Review Committee, as modified to reflect the original minutes.

<sup>&</sup>lt;sup>29</sup> See n. 4, *supra*.

- 12. It was the disclosure of the allegations regarding irregularities and disturbing information resulting from the Department of Space's preliminary investigation that led to my recommendation and the decision by the Department of Space to ask a former member of the Space Commission, Dr. B. N. Suresh, to undertake a review of the Devas Contract.<sup>30</sup>
- 13. Dr. Suresh issued his report in May 2010. While he acknowledged that the Devas concept was "technically sound and reliable" and "has a potential to succeed," he also noted that the satellites required the use of substantial S-band capacity that "would bring in certain limitations on the availability of spectrum for any essential demands in the future." He made the following specific recommendation in this regard:

The utilization of the S-band frequency spectrum allotted for satellite based services to ISRO/DOS for satellite communications is extremely important. Therefore this aspect has to be critically examined considering all usages including GSAT-6 and GSAT-6A by a competent technical team on high priority. The strategic and other essential needs of the country should also be considered.<sup>33</sup>

14. Given the increased demands for S-band capacity for strategic use and the recommendation of Dr. Suresh, we decided that the best course of action was to consult with the Department of Telecommunications, which is the other agency most concerned with spectrum issues and where the WPC is housed, and the Ministry of Law

<sup>&</sup>lt;sup>30</sup> See <u>App. VA-17</u>, ISRO, Memorandum, Constitution of a Committee to Look into Devas Multimedia Contract and Terms of Reference, 8 December 2009. Dr. Suresh was asked to "review and examine the legal, commercial, procedural and technical aspects related to licensing of spectrum/frequency and leasing of transponders with reference to Devas Multimedia Contract."

 $<sup>^{31}</sup>$  <u>Ex. R-25</u>, Report on GSAT-6, submitted by Dr. B. N. Suresh, Director, Indian Institute of Space and Technology, May 2010, ¶ 5.

<sup>&</sup>lt;sup>32</sup> *Id.*, ¶ 11.

<sup>&</sup>lt;sup>33</sup> *Id.*, ¶ 15(i).

and Justice. This consultation process was carried out in accordance with the Government of India's (Transaction of Business) Rules, which require agencies to consult with other affected agencies before reaching a final determination on an issue that might have implications for such other agencies.

15. The advice of the Ministry of Law and Justice was straight-forward. It stated:

[T]he Central Government (Department of Space), in exercise of its sovereign power and function, if so desire and feel appropriate, may take a policy decision to the effect that due to the needs of strategic requirements, the Central Govt/ISRO would not be able to provide orbit slot in S band for operating PS1 to the ANTRIX for commercial activities. In that event, ANTRIX in terms of Article 7 (c) read with Article 11, of the agreement may terminate the agreement and inform M/s DEVAS accordingly. However on such termination ANTRIX shall be required to reimburse DEVAS all the Upfront Capacity Reservation Fees and corresponding service taxes received by ANTRIX till that date.<sup>34</sup>

16. The Department of Telecommunications, through the WPC, advised as follows:

The agreement between DOS and ANTRIX indicates that M/S Devas is allowed to use part of frequency bands 2555-2635 MHz and 2500-2535 & 2655-2690 MHz whereas DOS sought the ITU coordination for MSS to be used for strategic operations. The spectrum planned by DOS for strategic use is not to be shared with commercial applications as in the case of M/s Devas Multimedia.<sup>35</sup>

The Department of Telecommunications also noted that, in accordance with the 2008 National Frequency Allocation Plan, only a part of the S-band "has been enabled for

<sup>&</sup>lt;sup>34</sup> App. VA-18, Opinion of Advisor to the Minister for Law and Justice, 18 June 2010, ¶ 12.

<sup>&</sup>lt;sup>35</sup> **App. VA-19**, WPC, Memorandum, 6 July 2010 (mistakenly dated 6 July 2007), ¶ 2(i).

BWA [broadband wireless access] applications in view of the satellite based strategic requirement projected by DOS."<sup>36</sup>

17. The Additional Secretary to the Department of Space, Mr. G. Balachandhran, issued a Note on agenda item 4 (dealing with the Devas Contract) for the 117<sup>th</sup> meeting of the Space Commission.<sup>37</sup> The Note advised the Space Commission of various military and security requirements for S-band, as detailed in the meeting between the Directorate of the Integrated Space Cell of the Ministry of Defence and ISRO in December 2009.<sup>38</sup> The Note also pointed out a number of irregularities in the manner in which Space Commission and Cabinet approval for the satellites in 2005 had been obtained, and issues associated with the lack of transparency in the implementation of the Devas Contract.<sup>39</sup> The Note sought the Space Commission's advice and instructions.<sup>40</sup>

18. The Space Commission was comprised of: (i) the Secretary of the Department of Space; (ii) the Minister of State, Prime Minister's Office; (iii) the Cabinet Secretary; (iv) the Principal Secretary to the Prime Minister; (v) the National Security

<sup>&</sup>lt;sup>36</sup> *Id.*, ¶ 2(ii). The S-BSS frequencies (2555-2635 MHz) had not been allocated for terrestrial use and, accordingly, the WPC advised that if such use were to be permitted, the spectrum would need to be auctioned in accordance with the 28 August 2007 recommendations of the Telecom Regulatory Authority of India (the "TRAI"). *Id.*, ¶¶ 2(v)-2(vi). These were issues that were collateral to the question of commercial use of the spectrum in the face of defence and strategic needs, but were nonetheless important from the perspective of the WPC, which is concerned with providing a level playing field for competing services in the growing terrestrial telecommunications marketplace. It also noted that the use of spectrum for providing broadcast services should be discussed with the Ministry of Information and Broadcasting under the aegis of the TRAI and that if terrestrial services in the S-BSS band were to be permitted under any service licence, an operating licence will be required. *Id.*, ¶¶ 2(iii), 3.

<sup>&</sup>lt;sup>37</sup> Ex. R-30, Department of Space, Note to Space Commission, *Agenda Item 4: GSAT-6/6A – Contract between M/s. Antrix Corporation Limited (ACL) and M/s. DEVAS Multimedia Pvt. Ltd.*, signed 2 July 2010. The Note was prepared in advance of the meeting, but is dated the date of the meeting as a matter of routine.

<sup>&</sup>lt;sup>38</sup> *Id.*, ¶ 8.2.

<sup>&</sup>lt;sup>39</sup> *Id.*, ¶¶ 9.1, 13.2.

<sup>&</sup>lt;sup>40</sup> *Id.*, ¶ 16.

Advisor; (vi) the Principal Scientific Advisor to the Government of India; (vii) the Secretary, Department of Economic Affairs; (viii) the Director, ISRO Satellite Centre; (ix) Finance Member, Space Commission; and (x) a Professor of Aerospace Engineering. It met on 2 July 2010. The minutes of the meeting referred to the presentation by one of its members, Mr. Shivshankar Menon, India's National Security Advisor, regarding the defence and strategic needs for S-band, noting that:

The Integrated Space Cell of IDS [Integrated Defence Staff], Ministry of Defence have projected a need of 17.5 MHz in S band for meeting the immediate requirements of Armed Forces, another 40 MHz during the 12th plan period and an additional 50 MHz during the 13th plan period. Armed Forces have also projected the need to build S band satellite capacity through GSAT-7S, for national security related mobile communications. There are further demands for S band transponders from internal security agencies viz., BSF, CISF, CRPF, Coast Guard and Police for meeting their secured communications needs. Indian Railways have also projected S band requirements for train-tracking.<sup>41</sup>

19. The Minutes then state: "Commission noted that, in view of these emerging requirements, there is an imminent need to preserve the S band spectrum for vital strategic and societal applications." They also state that after discussing "the various dimensions of the issue in detail," the Commission concluded:

Space spectrum is a vital national resource and it is of utmost importance to preserve it for emerging national applications for Strategic uses and societal applications. Given the limited availability of S band spectrum, meeting

<sup>&</sup>lt;sup>41</sup> Ex. R-24, Minutes of 117<sup>th</sup> Meeting of the Space Commission Held at DOS Branch Secretariat, New Delhi, on 2 July 2010, signed 21 July 2010, ¶ 117.6.3. The National Security Advisor is the chief executive of the National Security Council and a main advisor to the Prime Minister for issues of internal and external security.

<sup>&</sup>lt;sup>42</sup> *Id.*, ¶ 117.6.4.

the strategic and societal needs is of higher priority than commercial/entertainment sectors.<sup>43</sup>

- 20. After considering the various issues, the Space Commission gave the following directions:
  - (a) Department, in view of priority to be given to nation's strategic requirements including societal ones[,] may take actions necessary and instruct Antrix to annul the Antrix-Devas Contract.
  - (b) Department may revive the ICC mechanism.
  - (c) Department may evolve a revised utilization plan for GSAT-6 and GSAT-6A satellites, taking into account the strategic and societal imperatives of the country.
  - (d) Department may also review the working of Antrix and restructure it appropriately. Commission agreed to Chairman's suggestion that this could be done by a Committee chaired by Member (Finance), Space Commission. He will take assistance of DOS Administration, as and when required.
  - (e) Department shall take necessary internal actions on the report to be submitted by AS, DOS on Suresh Committee Report and issues arising from therein, and keep the Commission apprised of the same.<sup>44</sup>
- 21. Following the meeting of the Space Commission, the Department of Space sought advice from the Additional Solicitor General in terms of the steps to be taken in implementation of the determinations of the Space Commission. In his opinion dated 12 July 2010, the Additional Solicitor General stated as follows:

The S band spectrum is crucial for several strategic and societal services. The Integrated Space Cell of IDS, Ministry

<sup>&</sup>lt;sup>43</sup> *Id.*, ¶ 117.6.6.

<sup>&</sup>lt;sup>44</sup> *Id.*, ¶ 117.6.12.

of Defence have projected a need for 17.5 MHz in S band for meeting the immediate requirements of Armed Forces, another 40 MHz during the 12<sup>th</sup> plan period and an additional 50 MHz during the 13<sup>th</sup> plan period. Armed Forces have also projected the need to build S band satellite capacity through GSAT-7S, for national security related mobile communications. There are further demands for S band transponders from international security agencies viz., BSF, CISF, CPRF, Coast Guard and Police for meeting their secured communication needs. Indian Railways have also projected S band requirements for train tracking.

. . . .

It is noticed that when the agreement was entered into between Antrix and Devas, way back in the year 2005, the circumstance was vastly different than what it is today. The governmental policies with regard to allocation of satellite spectrum ha[ve] undergone a sea change and there has been a tremendous demand for allocation of spectrum for national needs, including for the needs of the Defence, paramilitary forces, railways and other public utility services as well as for societal needs. There can be no dispute whatsoever that the Government of India is the owner of satellite spectrum space and any policy taken by the Government of India with regard to allocation and use of S [bandwidth], including those which are subject matter of contractual obligations, would fall within the doctrine of force majeure, as envisaged in the very agreement between Antrix However, I only wish to add one note of and Devas. occasion. It is always advisable that in the present case, instead of the Department of Space taking a decision to terminate, it would be more prudent that a decision is taken by the Government of India, as a matter of policy, in exercise of its executive power or in other words, a policy decision having the seal and approval of the Cabinet and duly gazetted as per the Business Rules of the Government of That would give a greater legal sanctity to the decision to terminate the contract in as much as the contractual provisions expressly stipulate that for the force majeure event, to disable one of the parties to perform its obligations under the contract, the act must be an act by the governmental authority acting in its sovereign capacity. Several reasons exist to resort to this sovereign power for preserving national interest. In my view, instead of the Department of Space directing Antrix to terminate the contract, it will be advisable from a legal perspective that the

direction comes from the Department of Space on the basis of a governmental policy decision, as indicated above.<sup>45</sup>

22. Based upon the advice of the Additional Solicitor General, the Additional Secretary of the Department of Space drafted a Note to the Cabinet Committee on Security, which is the ultimate authority within India on matters of internal and external security and defence.<sup>46</sup> After reviewing the Note and deliberating, the Cabinet Committee on Security took the following decision:

Taking note of the fact that government policies with regard to allocation of spectrum have undergone a change in the last few years and there has been a[n] increased demand for allocation of spectrum for national needs, including for the needs of defence, para-military forces, railways and other public utility services as well as for societal needs, and having regard to the needs of the country's strategic requirements, the Government will not be able to provide orbit slot in S band to Antrix for commercial activities, including for those which are the subject matter of existing contractual obligations for S band.

In the light of this policy of not providing orbit slot in S Band to Antrix for commercial activities, the "Agreement for the lease of space segment capacity on ISRO/Antrix S-band spacecraft by Devas Multimedia Pvt. Ltd." entered into

<sup>&</sup>lt;sup>45</sup> Ex. R-32, Opinion of the Additional Solicitor General to the Department of Space, 12 July 2010, pp. 1, 4.

<sup>&</sup>lt;sup>46</sup> Ex. R-23, Department of Space, Note for the Cabinet Committee on Security, Annulling the "Agreement for the Lease of Space Segment Capacity on ISRO/Antrix S-band Spacecraft by Devas Multimedia Pvt Ltd.," 16 February 2011, ¶¶ 45.1-45.2. The Cabinet Committee on Security is comprised of the Prime Minister, the Minister of Defence, the Minister of Home Affairs, the Minister of External Affairs and the Minister of Finance. The functions of the Cabinet Committee on Security include, inter alia: "(i) to deal with all Defence related issues; (ii) to deal with issues relating to law and order, and internal security; (iii) to deal with policy matters concerning foreign affairs that have internal or external security implications including cases relating to agreements with other countries on security related issues; (iv) to deal with economic and political issues impinging on national security ..." Ex. R-34, Government of India (Transaction of Business) Rules, 1961, First Schedule.

between Antrix Corporation and Devas Multimedia Pvt. Ltd. on 28<sup>th</sup> January, 2005 shall be annulled forthwith.<sup>47</sup>

- 23. On 23 February 2011, based upon the decision by the Cabinet Committee on Security, the Department of Space informed Antrix that the Devas Contract "shall be annulled forthwith" and directed Antrix "to take necessary actions immediately and report compliance."
- 24. The spectrum that was to be utilised for the Devas lease agreement has not been sold, leased or otherwise promised to any third party for commercial purposes. In accordance with the decision of the Cabinet Committee on Security, the spectrum is dedicated solely to defence and other national security purposes. The Department of Space has made alterations to the two satellites to conform them to defence needs. It is currently anticipated that one of the satellites will be launched in the near future and the second sometime next year.<sup>49</sup>

Ex. R-36, Press Information Bureau, Government of India, *CCS Decides to Annul Antrix-Devas Deal*, 17 February 2011. Both the Space Commission and the Cabinet Committee on Security addressed matters that were collateral to the needs of the defence and security agencies for S-band that required annulment of the Devas Contract. Thus, both considered the lack of transparency surrounding the entering into the Devas Contract, including the failure to have brought the Devas Contract to the ICC and to have the technology reviewed by the TAG, the failure to have advised the Space Commission and the Parliament that there was a contract for the lease of 90% of the transponder capacity in place at the time the satellites were authorised, and the imbalances in the Devas Contract, which required the satellites to be built on a specified schedule, with delay penalties, among other things. These matters did not lead to the annulment decision. They were, nonetheless, important matters that required the attention of the Government so that future lapses of a similar nature could be prevented. These matters were the subject of reviews by a number of Committees that undertook investigations following the annulment decision and resulted in the re-vitalisation of the ICC process, the re-structuring of the leadership roles for several of the agencies within the space hierarchy in India and the sanctioning of various individuals for their actions and omissions.

<sup>&</sup>lt;sup>48</sup> See **Ex. R-38**, Letter from the Department of Space to Antrix, 23 February 2011.

<sup>&</sup>lt;sup>49</sup> As already noted, ISRO experienced two launch failures in 2010 that required the re-evaluation and testing of India's indigenously developed launching equipment. This resulted in the delay of a number of satellite launches. *See* n. 7, *supra*.

I affirm that the facts stated in this witness statement are true and correct to the best of my knowledge.

A. Vijay Anand

Dated: 2 December 2013