## Antrix-Devas

## Scam

ଞ What Ails ISRO

Antrix is an arm of ISRO

"If as a matter of fact, fraud as projected by Antrix, stands established, the motive behind the victim of fraud, coming up with a petition for winding up, is of no relevance. If the seeds of the commercial relationship between Antrix and Devas were a product of fraud perpetrated by Devas, every part of the plant that grew out of those seeds, such as the Agreement, the disputes, arbitral awards etc., are all infected with the poison of fraud. A product of fraud is in conflict with the public policy of any country including India." – Supreme Court of India

#### Newsroom24x7 Network



Finance Minister Nirmala Sitharaman

A day after the Supreme Court of India dismissed a petition challenging the concurrent orders of NCLT (National Company Law Tribunal) and NCLAT (National Company Law Appellate Tribunal) to shut down Devas Multimedia Private Limited, India's Finance Minister Nirmala Sitharaman in a press conference said on Tuesday 18 January that the deal between ISRO`s commercial arm Antrix and Devas Multimedia that was signed in 2005 under the Congress-party led government was a fraud and has caused massive damage to the exchequer.

The Finance Minister said the satellite deal between ISRO`s commercial arm Antrix and Devas Multimedia signed in 2005 was a fraud against the country.

The Supreme Court has observed "...allowing Devas and its shareholders to reap the benefits of their fraudulent action, may nevertheless send another wrong message namely that by adopting fraudulent means and by bringing into India an investment in a sum of INR 579 crores, the investors can hope to get tens of thousands of crores of rupees, even after siphoning off INR 488 crores."

With this in focus, the central Government also should inform the people of India the exact amount, in hundreds of crores, that has been paid and also the names of the law firms that have received this money as fees to represent ANTRIX in the Antrix-Devas case in India and abroad.



A two Judge Bench of Justice Hemant Gupta and Justice V Ramasubramanian has said in its order in response to a petition by Devas Multimedia Private Limited: "We do not know if the action of Antrix in seeking the winding up of Devas may send a wrong message, to the community of investors. But allowing Devas and its shareholders to reap the benefits of their fraudulent action, may nevertheless send another wrong message namely that by adopting fraudulent means and by bringing into India an investment in a sum of INR 579 crores, the investors can hope to get tens of thousands of crores of rupees, even after siphoning off INR 488 crores.

Senior Counsel Mukul Rohtagi appeared for Devas Multimedia – the company in liquidation; Senior Counsel Arvind P. Datar, appeared for the shareholderappellant; and Additional Solicitor General N. Venkataraman appeared for Antrix Corporation Limited.

The apex cort has observed: "If as a matter of fact, fraud as projected by Antrix, stands established, the motive behind the victim of fraud, coming up with a petition for winding up, is of no relevance. If the seeds of the commercial relationship between Antrix and Devas were a product of fraud perpetrated by Devas, every part of the plant that grew out of those seeds, such as the Agreement, the disputes, arbitral awards etc., are all infected with the poison of fraud. A product of fraud is in conflict with the public policy of any country including India. The basic notions of morality and justice are always in conflict with fraud and hence the motive behind the action brought by the victim of fraud can never stand as an impediment." This observation came, especially in reponse to the contention that the actual motive behind Antrix seeking the winding up of Devas, is to deprive Devas, of the benefits of an unanimous award passed by the ICC Arbitral tribunal presided over by a former Chief Justice of India and the two BIT awards and that such attempts on the part of a corporate entity wholly owned by the Government of India would send a wrong message to international investors.

Another contention raised on behalf of the appellants was that the criminal complaint filed for the offences punishable under Section 420 read with Section 120B IPC, has not yet been taken to its logical end. Therefore, it is contended that in case the officials of Antrix and shareholders of Devas are acquitted after trial, the clock cannot be put back, if the company is now wound up. The Supreme Court has said -"Attractive as it may seem at first blush, this contention cannot hold water, if scrutinised a little deeper. The standard of proof required in a criminal case is different from the standard of proof required in the proceedings before NCLT. The outcome of one need not depend upon the outcome of the other, as the consequences are civil under the Companies Act, 2013 and penal in the criminal proceedings. Moreover, this argument can be reversed like the handle of a dagger. What if the company is allowed to continue to exist and also enforce the arbitration awards for amounts totaling to tens of thousands of crores of Indian Rupees (The ICC award is stated to be for INR 10,000 crores and the 2 BIT awards are stated to be for INR 5,000 crores) and eventually the Criminal Court finds all shareholders guilty of fraud? The answer to this question would be abhorring.

The apex Court order points out that the officials of the Department of Space and Antrix were in collusion and that it was a case of fence eating the crop (and also allowing others to eat the crop), by joining hands with third parties, is borne out by the fact that the Note of the 104th Space Commission did not contain a reference to the Agreement. The Cabinet Note dated 17 November 2005 prepared after ten months of signing of the Agreement, did not make a mention about Devas or the Agreement, but proceeded on the basis as though ISRO received several Expressions of Interest. These materials show the complicity of the officials to allow Devas to have unjust enrichment.

Also it is on record that the minutes of the meeting of the Sub-Committee dated 6 January 2009 were manipulated and the experimental license was granted on 7 May 2009. Only thereafter, the original minutes were restored on 20 November 2009 and that too after protest.



## S-band deal shows systemic failure

LALIT SHASTRI BHOPAL, FEB. 5

The huge scam linked with the 20 2005 agreement Antrix Corporation Limited (Antrix) of Department of Space (DoS) and Devas Multimedia Limited for lifetime lease of 90 per cent capacity of S-band transponders of two satellites that were to be built by Indian Space Research Organisation (Isro) has opened up the pandora's box, indicating a huge conspiracy and show-ing total systemic failure that could have even jeopardised the country's secu-

In the midst of allegations and mudslinging, the Antrix-Devas agreement, signed when Mr G. Madhavan Nair was Isro chairman, was cancelled last February.

Commenting on the findings of the high-powered review panels and the government's action taken report released by Isro, a ministry of space source on Sunday told The Asian Age that the proposal from Devas was not put on the agenda when the Antrix Board took it up for consideration without even a proper quorum. Even the minutes of the board meeting have not been signed. He went on to point out that all talk of restructuring Antrix and reforms in the Space Commission would amount to putting the same wine in the same bottle unless the posts of chairman of Space Commission, secretary, Department of Space, and chairman of Isro are not segregated.



G. Madhavan Nair

A high-powered review committee (HPRC) of B.K. Chaturvedi, Prof. Roddam Narasimha, appointed by government of India had reviewed the technical, commercial, procedural and financial aspects of the agreement and categorically pointed out that the agreement with Devas indicated certain financial and strategic gaps and the then chairman Antrix Board/secretary DoS, director Satcom, Isro member finance, and Space Commission were primarily responsible for the lapse. Another five-member high level team (HLT) constituted under the chairmanship of Pratyush Sinha IAS (Retd.) and former CVC, with the mandate to examine acts of omission and commission submitted

ment on September 2, 2011.

The Satcom policy was approved by the Union Cabinet in January 2000 and the Insat Coordination Committee (ICC) was authorised to earmark at least certain percentage of Insat transponders capacity for use by non-governmental users. While the ICC met 78 times between 1978 and 2004, it failed to meet even once between

its report to the govern-

2004 and 2009. The responsibility of calling the ICC meeting lay with secretary, DoS and director (SCPO), who are chairman and secretary of ICC.

When technology for multimedia mobile services based on space platform was evolving in 2004-5, a proposal was received by Antrix/Isro from Forge Advisors of US for a joint venture in April 2004.

The Charurvedi-Narasimha panel pointed out in its report that the agreement signed with Devas in January 2005, which provided for two satellites PS1 and PS2 had several weaknesses.

The agreement was signed with a company which had paid up share capital of only \$1.00,000. Antrix/Isro had to launch the satellite and penalty had to be paid by them if they did not adhere to the agreed time frame. Isro committed itself to launching the satellite and incurring the risk of searching for alternative users if Devas failed to develop the new technology for mobile services.

While Isro was to invest about ₹800 crores in two satellites and their launches, it provided 90 per cent of the 2500-2690 MHz band leaving very little spectrum with Isro for any strategic or societal use in future. It was also pointed out that any other multimedia mobile service (MMS) use in the band would not have been efficient due to interference of signals.

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A delegation, led by the then Isro chairman Dr K. Kasturirangan, had visited US in July-August 2003.

The big expose by Lalit Shastri, Editor-in-Chief Newsroom24x7

Supreme Court has underscored in its order that SATCOM Policy perceived telecommunication and broadcasting services to be independent of each other and also mutually exclusive. Therefore, a combination of both was not permitted by law. It is especially so since no deliberation took place with the Ministry of Information and Broadcasting. Moreover, unless ICC allocates space segment, to a private player, the same becomes unlawful. This is why the conduct of the affairs of the company became unlawful.

Supreme Court of India has said that the kind of licenses obtained such as ISP and IPTV licenses and the object for which FIPB approvals were taken but showcased as those sufficient for fulfilling the obligations under the Agreement of 28 January 2005 demonstrated that the affairs of the company were conducted in a fraudulent manner. This is fortified by the fact that a total amount of Rs.579 crores was brought in, but almost 85% of the said amount was siphoned out of India partly towards establishment of a subsidiary in the US, partly towards business support services and partly towards litigation expenses. We do not know if the amount of Rs.233 crores taken out of India towards litigation services, also became a part of the investment in a more productive venture, namely, arbitration. The manner in which a misleading note was put to the cabinet and the manner in which the minutes of the meeting of TAG subcommittee were manipulated, highlighted by the Tribunal, also shows that the affairs of the company were conducted in a fraudulent manner. Thus, the second limb of Section 271(c), namely, the conduct of the affairs of the company in a fraudulent manner, also stood established. [ Click for Supreme Court order

#### **Backgound of the case**

Antrix Corporation Limited (hereinafter referred to as Antrix), incorporated on 28 September 1992 under the Companies Act, 1956, is the commercial arm of the Indian Space Research Organisation (ISRO), which is wholly owned by the Government of India and coming under the administrative control of the Department of Space.

On 28 July 2003, Antrix entered into a Memorandum of Understanding with Forge Advisors, LLC, a Virginia Corporation. The intent, as spelt out in the MOU, was to make both parties become "strong and vital partners in evaluating and implementing major new satellite applications across diverse sectors including agriculture, education, media and telecommunications". Apart from other things, the MOU contemplated Forge Advisors to provide a broad array of advisory services that included near-term tactical projects in the areas of sales, marketing, business development, strategic partnership negotiations and other related business areas and long term projects in the areas of corporate strategy, market opportunity assessment, business case development for new services, launch of new application services etc.

On 22 March 2004, Forge Advisors made a presentation proposing an Indian joint venture, to launch what came to be known as "DEVAS" (Digitally Enhanced Video and Audio Services). It was projected in the said proposal that DEVAS platform will be capable of delivering multimedia and information services via satellite to mobile devices tailored to the needs of various market segments such as (i) consumer segment, comprising of entertainment and information services to digital multimedia consoles in cars and vehicles; (ii) commercial segment, comprising of high value information services to Commercial Information Devices in commercial transport vehicles; and (iii) social segment, comprising of Developmental Information Services to Rural Information kiosks in underserved areas.

The presentation on 22 March 2004 was followed by a proposal on 15 April 2004. The proposal was to form "a strategic partnership to launch DEVAS, a new service that delivers video, multimedia and information services via satellite to mobile receivers in vehicles and mobile phones across India". The proposal of 15 April 2004 indicated that DEVAS was conceived as a new National Service, expected to be launched by the end of 2006, that would deliver video, multimedia and information services via satellite to mobile receivers in vehicles and mobile phones across India. The proposal contemplated the formation of a joint venture and an obligation on the part of ISRO and Antrix to invest in one operational SBand satellite with a ground space segment to be leased to the joint venture. In return, ISRO and Antrix were to receive lease payments of USD 11 million annually for a period of 15 years.

The concept of DEVAS, as indicated in the penultimate paragraph of the Executive Summary of the proposal of 15 April 2004, was based upon the evolution and performance of similar services in other markets such as XM Radio and Sirius Radio in the United States and Mobile Broadcasting Corporation's multimedia services via satellite in Korea and Japan.

After this proposal several meetings were held between the representatives of Forge and ISRO/Antrix and a Committee headed by one Dr. K.N. Shankara, Director of SAC (Space Application Centre) was constituted to examine the proposal.

On 17 December 2004 Devas Multimedia Private Limited, (the 'company in liquidation') was incorporated as a private company under the Companies Act,1956. Immediately thereafter, Antrix entered into an Agreement with this company on 28 January 2005. The Agreement was titled as "Agreement for the lease of space segment capacity on ISRO/Antrix S Band spacecraft by DEVAS". The preamble of the Agreement stated that Devas was developing a platform capable of delivering multimedia and information services via satellite and terrestrial system to mobile receivers, tailored to the needs of various market segments and that Devas had, therefore, requested Antrix, space segment capacity for the purpose of offering SDMB service, a new digital multimedia and information service, including but not limited to audio and video content and information interactive services, across India that will be delivered via satellite and terrestrial system via fixed, portable mobile receivers including mobile phones, mobile video/audio receivers for vehicles etc.. What was to be leased out by Antrix to Devas was 5 numbers of C X S transponders each of 8.1 MHz capacity and 5 numbers of S X C transponders each of 2.7 MHz capacity on the Primary Satellite 1 (PS1). The leased capacity was agreed to be delivered by Antrix to Devas from a fully operational and ready PS1 within 30 months of the agreement, with a further grace period of six months.

The agreement contained provisions for the termination of the Agreement by either of the parties, with certain consequences to one or the other, depending upon the circumstances under which termination was made.

Devas obtained approvals from Foreign Investment Promotion Board (FIPB) during the period May 2006 to September 2009. Subsequently, Devas brought into India, an investment of about INR 579 crores. Devas also obtained an Internet Service Provider (ISP) License from the Department of Telecommunications on 2 May 2008.

Devas then obtained permission from the Department of Telecommunications on 31 March 2009 for providing Internet Protocol Television (IPTV) Services within the scope of the terms and conditions of ISP license. Devas claims to have conducted experiments on the emerging technologies for satellite and terrestrial system in September 2009.

However the Agreement of 28 January 2005 was terminated by Antrix by a Communication dated 25 February 2011.

Newsroom24x7 and more particularly Lalit Shastri have been in the forefront to expose the Antrix-Devas scam

#### Lalit Shastri



# S-band deal shows systemic failure

BHOPAL, FEB. 5

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Another five-member high level team (HLT) constituted under the chairmanship of Pratyush Sinha IAS (Retd.) and former CVC, with the mandate to examine acts of omission and commission submitted its report to the government on September 2, 2011.

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#### Vested interests batting for compensation in the Antrix-Devas case

This 2012 news item says it all....

A news item in a popular section of the media with the title "Vodafone, Antrix/ Devas: When government goes back on commitments made, it scares away investors" is obviously batting for the vested interests – especially with regard to the Antrix-Devas agreement that was abandoned due to alleged criminal offence by those who steered and materialised it.

When it comes to Antrix-Dewas, it is not a case of government going back on any commitment. Its a case of crime, where the CBI has already done its investigation and found enough prima facie evidence to book the accused under multiple Sections of IPC and anti corruption law, including criminal conspiracy.

The Indian government is not bound by any compensation ordered by an American Court, any other court or tribunal. The culprits have to be brought to book and that should be the priority of the Government of India.

#### Lalit Shastri



An Indian start up operating out of Bengaluru with the brand name Pixxel, promises 24-hour global coverage with hyperspectral imaging. They want to deploy constellation of 30 small satellites for this purpose. The startup company has been founded by two young graduates from BITS Pilani. Their first satellite is slated to be launched through PSLV C51 in second half of February 2021.

PSLV-C51, which is the 53rd mission of PSLV, will launch Amazonia-1 of Brazil as primary satellite and 20 Co-passenger satellites from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota. The launch is tentatively scheduled at 1023 Hrs IST on February 28, 2021, subject to weather conditions.

PSLV-C51/Amazonia-1 is the first dedicated commercial mission of NewSpace India Limited (NSIL), a Government of India company under Department of Space. NSIL is undertaking this mission under a commercial arrangement with Spaceflight Inc. USA.

#### Is it another Antrix-Devas like Scam in ISRO

The 20 co-passenger satellites include one from ISRO (INS-2TD), four from IN-SPACe (three UNITYsats from consortium of three Indian academic institutes and One Satish Dhawan Sat from Space Kidz India) and 15 from NSIL.

Within days of Pixxel entering into a formal collaboration with NewSpace India Limited, ISRO announced that Pixxel's first satellite Anand will be launched in its PSLV-C51.

On the launch of communication satellite 'CMS-01' onboard PSLV-C50 on 17 December 2020 from Sriharikota, ISRO Chairman K Sivan had announced that the upcoming PSLV-C51 mission will be fruition of the space reforms recently introduced in the country."

Sivan, who was addressing scientists from the Mission Control Centre after the successful launch of communication satellite "CMS-01", said: "The first satellite 'ANAND' from a start-up called Pixxel India, is going to be launched."

Doubt rose how could Pixxel, a startup, build their satellite and payload so fast without even having previous experience. A research of news reports do not throw up any photograph of their satellite building facility.

Newsroom24x7 did a research and found out that Pixxel Space Technologies, Inc. is registered with the U.S. Security and Exchange Commission and was incorporated in 2019 and registered on 22 July 2020. It is understood that all its data downloading and dissemination facilities are in USA or some other country but not in India.

Pixxel Space Technologies Inc is founded by Naseem Alduri Awais Ahmed and Khandelwal Kshitij Gokul. Both of them are also founders of Syzygy Space Technologies Pvt Ltd, founded on 27 March 2019 and registered in Bangalore as subsidiary of a "Foreign Company" with a paid up capital of Rs 10,000.

From available information, it appears there is an undisclosed US Company behind Sygyzy Space Technologies.

#### Is it another Antrix-Devas like Scam in ISRO

It is learnt that Pixxel, USA filed with the US Government on 26 June 2020 for clearance for data transmission in SBand for their hyperspectral imaging Cubesat. It means that they will receive their data only in USA and not in India.

Questions are being raised in knowledgeable circles and it is being alleged that PIXXEL is a front of an undisclosed US Company, masquerading as Indian start up with the romantic story of a 22 year old greenhorn CEO. The foreign company angle raises serious doubts and there is total lack of transparency with regard to data reception and its dissemination, especially whether or not India will have full control in this matter. Since it is being pointed out that the start up is designed to avail the launch by PSLV at throw away cost, available for Indian start ups, there is need for investigation to find out whether the Pixxel project is designed to save launch cost taking advantage of ISRO's concession for start ups.

Space Commission clearance was sought for launch of 1st PIXXEL satellite at throwaway price with concession (Rs. 5 lakh per launch as per rumour) along with Rs. 1 lakh as testing charge. The satellite is a 1ftx1ftx1ft size. So we expect a mass of around 10 kg. With typical cost of launch of min. Rs 21 lakh per kg, the cost of launch will be around Rs. 2 cr minimum.

It is learnt that Member Finance Department of Space (DoS) Sanjeev Kumar, IAS, placed on record his objection as PIXXEL is a foreign company. Now the proposal for launch of satellite is said to have been passed for Sygyzy Space Technologies without mentioning that it is a subsidiary of a foreign company.

Charges are flying, some ISRO insiders have alleged that those at the helm of India's apex space agency are hand in glove with a foreign company to hoodwink the Indian Government. They are wondering is this another Antrix-Devas like scam.

**Postscript**: "Expansion in the United States is a priority," .... "A lot of our agriculture and oil and gas customers are based there." – Pixxel CEO Awais Ahmed to *SpaceNews* in August 2020 (check hyperlink for SpaceNews report on Pixxel, it's American dream and the projection that Pixxel is an Indian startup).



#### Newsroom24x7 Network

**Washington/Bengaluru:** The order passed on Tuesday 27 October by Judge Thomas S. Zilly of the US District Court of Western District of Washington asking Antrix Corporation, the commercial arm of the Indian Space Research Organization (ISRO), to pay Devas Multimedia Pvt Ltd a compensation of \$1.2 billion for canceling a business agreement with Devas will remain only on paper as the advise from those in knowledgeable circles in India is that Antrix should ignore the order as it does not have any business interest in the US.

Earlier in September, Judge Thomas S Zilly of the US District Court, Western District of Washington had lifted the stay on the proceedings of the lawsuit filed by Devas against Antrix.

After Antrix terminated its agreement with Devas in January 2011, Devas has been seeking legal remedy both in India and abroad.

Devas had filed the law suit in the US District Court two years ago taking the plea that three international tribunals had declared the termination of the Devas-Antrix Agreement as wrong and bad in law.

## Antrix will be better off ignoring the US Court order for enforcement and payment of \$1.2 billion compensation to Devas

Antrix, on its part, had raised the issue of jurisdiction and demanded that the suit be dismissed. It was also underscored by Antrix that a decision in the arbitration award would violate the sovereignty of India. The issue of corruption was also brought into focus keeping in view the case registered by the CBI following investigation into the Antrix-Devas agreement.

#### **Lalit Shastri**

The termination of Antrix-Devas Agreement leading to Arbitration by the PCA under the UNCITRAL Arbitration Rules and BIPA brings us to the core issue. Such bilateral agreements to promote and protect investments need to be re-looked at and revised with ex post facto effect. There cannot be bilateral agreements between countries that provide a protective shield and the possibility of massive gains in the form of compensation through arbitration to those involved in money laundering, corruption and criminal conspiracy.

Among the accused in the Antrix-Devas scam being prosecuted by the CBI on charges of corruption and criminal conspiracy, are the then director of Devas M G Chandrasekhar and Director of Devas Multimedia D Venugopal, who are linked to companies that have gone to the Principal Court of Arbitration (PCA) at The Hague as claimants demanding compensation from Government of India due to the termination of a contract for the provision of satellite-based services between Devas Multimedia and Antrix, have worked with ISRO in important capacities in the past.

The claimant companies are Devas (Mauritius) Limited, Devas Employees Mauritius Private Limited, Telecom Devas Mauritius Limited. Republic of India is the respondent in this case (case no 2013-9. The arbitration concerns the termination of a contract concluded on January 28 2005 for the provision of satellite-based services. PCA is acting as registry in this arbitration being conducted under the UNCITRAL Arbitration Rules 1976. The basis of arbitration in this case is the Bilateral Investment Protection Agreement (BIPA) which entered into force during the Prime Ministership of Atal Bihari Vajpayee on June 20, 2000 between the Government of Mauritius and the Government of India for the promotion and protection of investments.

Venugopal, the Devas co-founder and Chief Technical Officer, is an Electronics and communications engineer specializing in satellite communications. He has worked at ISRO between 1980 and 1998.

Chandrasekhar, the former Scientific Secretary, ISRO, Member-Secretary of the Apex Management Council of ISRO and Director, Earth Observations Programme, left ISRO in December 1997 and became Chief Operating Officer and Executive Vice President of WorldSpace in 2000. Later, he became the Vice President, International Sales for GeoEye LLC in 2005; and subsequently that year joined Devas as Chairman of the Board of Directors.

Also facing trial in the Antrix-Devas case is Dr Madhavan Nair, the former Chairman of the Space Commission, ISRO, and Antrix. He was also Secretary Department of Space, Government of India from September 2003 to October 2009. The controversial agreement between Antrix and Devas was signed when he was Heading Antrix.

Antrix Corporation Ltd, an Indian corporation wholly owned by the Government of India, is under the administrative control of DOS and operates as the commercial marketing arm of ISRO and DOS. Antrix was created to promote the commercial exploitation of India's space program.

Devas (Mauritius) Limited was formed in 2006 and has its registered office in Port Louis, Mauritius. It is affiliated with Columbia Capital LLC, a venture capital firm based in Alexandria, Virginia.

Devas Employees Mauritius Private Limited was formed in 2009. It also has its registered office in Port Louis, Mauritius. It is a subsidiary of Devas Employees Fund US, LLC, a Delaware limited liability company with membership units owned by certain non-Indian Devas employees pursuant to an Equity Incentive Plan.

Devas Multimedia Private Limited, is an Indian company incorporated in Karnataka, Bangalore, India on 17 December 2004.

The three claimant companies that approached the PCA at The Hague hold shares in Devas and made their alleged investments in India through this company

Ramachandran Viswanathan, who headed Forge Advisors LLC, a U.S. company, is also the CEO of Devas.

A case was registered by the CBI on 16 March 2015 against the then Executive Director, Antrix Corporation Limited, Bengaluru; two Advisors of USA-based company; Bengaluru based private multi media company and other unknown officials of Antrix Corporation Limited /Indian Space Research Organization (ISRO)/Department of Space (DoS). It was alleged that during the period from 2004 to 2011 then Executive Director Antrix Corporation Ltd in criminal conspiracy with both Advisors of USA based company and others gave rights for delivery of Video, Multimedia and Information Services to Mobile receivers in vehicles & mobile phones via S-Band through GSAT-6 & GSAT-6A Satellites and Terrestrial systems in India, to ineligible company based at Bangalore in violation of the laid down guidelines pertaining to leasing of INSAT capacity. Consequently, alleged loss of Rs. 578 crore was caused to Government Exchequer.

Eighteen-months later on 11 August 2016, CBI had filed the chargesheet in the Court of Special Judge, CBI cases at the Patiala House Courts in New Delhi against G Madhavan Nair, K. R. Sridhara Murthi, former Executive Director of Antrix Corporation Ltd, Viswanathan Ramachandran, the then Managing Director of Forge Advisors LLC and CEO of Bangalore based Devas Multimedia three of its ex-Directors, and then Additional Secretary, Department of Space; then Director, SCPO, ISRO under Section 120-B r/w 420 of IPC and Section 13(2) read with 13(1)(d) of Prevention of Corruption Act, 1988 and substantive offences for allegedly being party to a criminal conspiracy with an intent to cause undue gain to themselves or others by abusing official positions (by public servants) and causing loss to Antrix Corporation Ltd and ISRO by lease of INSAT Transponders capacity on GSAT 6 & 6A satellites to the accused Bangalore based Private Multimedia Company.

It is strange that the arbitration proceedings are currently on under the Principal Court of Arbitration at The Hague within the framework of the UNCITRAL Arbitration Rules and Bilateral Agreement between the Government of Mauritius and the Government of India. Question arises, how can PCA continue arbitration proceedings involving a group of claimant companies while their top brass stands accused and is facing trial on charges of criminal conspiracy and corruption linked with the Antrix-Devas Agreement? Since the CBI charge-sheet has exposed the modus operandi of the accused named in this case, it is pointless at this stage to arbitrate merely on technicalities revolving around the lofty goal of "promotion and protection of investments" under international rules. The CBI charge-sheet should be the *force majeure* to bring the arbitration proceedings at The Hague to a grinding halt.

The termination of Antrix-Devas Agreement leading to Arbitration by the PCA under the UNCITRAL Arbitration Rules and BIPA brings us to the core issue. Such bilateral agreements to promote and protect investments need to be re-looked at and revised with *ex post facto* effect. There cannot be bilateral agreements between countries that provide a protective shield and the possibility of massive gains in the form of compensation through arbitration to those involved in money laundering, corruption and criminal conspiracy.

The claimants who have gone to the PCA have emphasized that this is not a case based on a breach of contract, but rather a treaty claim. The Claimants are focusing on the rights ensuing to Devas from the Agreement. Government of India has responded by placing additional significance on Antrix's "corresponding obligations" — arguing that they are limited in nature.

The Devas Agreement provided for the lease of transponder capacity on a first satellite "GSAT-6" and it also gave Devas the option to lease transponders on a second "GSAT-6A". The Agreement provided for the lease of 75% of India's S-BSS allocation

(30 MHz for each satellite, for a total of 60 MHz of India's total of 80 MHz of S-BSS) and 10 MHz of the S-MSS allocated for use by Department of Space (DoS). Overall, it was agreed that 90% of the total bandwidth of the satellites was allocated to Devas, and the other 10% was allocated to DOS.

In the plea for arbitration, the claimants stressed that the Devas Agreement provided that the Leased Capacity would be a "Non-Preemptible service, except as specifically provided for in Article 7 9of the agreement)," which gave Devas the exclusive right to the Leased Capacity. The Claimants also have underscored that, under the Devas Agreement, Devas could assign the Leased Capacity at its sole discretion upon sixty days'advance notice to Antrix, which enabled Devas to undertake a range of transactions with investors.

Under the Devas Agreement, Devas was required to pay Antrix an upfront capacity reservation fee of the INR equivalent of USD 20 million, to be paid in three equal instalments, in order to reserve transponder capacity on the first satellite. The first such instalment was due upon notice from Antrix that it had received all necessary approvals for the capacity lease service for the satellite. Within 30 months of payment of the first installment of that fee (with a 6-month grace period), ISRO was required to deliver a fully operational and ready GSAT-6. Devas had to pay an upfront capacity reservation fee of the INR equivalent of USD 20 million to reserve transponder capacity on the second satellite as well. In addition to these upfront fees, Devas was also required to pay Antrix an ongoing annual lease fee for the transponders of the INR equivalent of USD 9 million, rising to the INR equivalent of USD 11.25 million once Devas became cash flow positive the Devas Agreement provided for "Delay Damages" of USD 416,666 per month (for a cap of USD 5 million after 12 months' delay) if Antrix failed to deliver GSAT-6 within three years of the first upfront capacity reservation payment. It also provided that the failure to deliver GSAT-6 within four years from the first payment would be a material breach of the agreement.

Notwithstanding the water tight conditions specifying breach of agreement, the Devas Agreement also had Article 11 that provided that neither Devas nor Antrix was "liable for any failure or delay in performance of its obligations" in the event of a *force majeure* as defined in this Article. A *force majeure* event was limited to matters "beyond reasonable control of the party affected" which prevented performance "despite all efforts of the Affected Party to prevent it or mitigate its effects."

The annulment of the Devas Agreement followed a policy decision taken by the Government of India to reserve a part of the electromagnetic spectrum known as the S-band "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." Part of that spectrum had originally been leased to Devas under the Devas Agreement for the purpose of offering broadband wireless access and audio-video services throughout India.

#### Antrix-Devas case and PCA: BIPA with Mauritius needs to be relooked at

Government of India has argued before the tribunal that its policy decision was intended to satisfy the national security needs of the nation; that Devas had no right to proceed with the Devas Agreement uninterrupted by any governmental action; and that the Claimants have no claim under the Treaty.

On Jurisdiction and merits of this case, the Tribunal under the PCA, The Hague, on 25 July 2015 decided and awarded as follows:

- (a) Unanimously, that the Claimants' claims relate to an "investment" protected under the Treaty;
- (b) Unanimously, that the notice of termination of the Devas Agreement sent by Antrix to Devas constituted an act of State attributable to the Respondent.
- (c) By majority, that the Tribunal lacks jurisdiction over the Claimants' claims insofar as the Respondent's decision to annul the Devas Agreement was in part directed to the protection of the Respondent's essential security interests;
- (d) By majority, that the Respondent has expropriated the Claimants' investment insofar as the Respondent's decision to annul the Devas Agreement was in part motivated by considerations other than the protection of the Respondent's essential security interests;
- (e) By majority, that the protection of essential security interests accounts for 60% of the Respondent's decision to annul the Devas greement, and that the compensation owed by the Respondent to the Claimants for the expropriation of their investment

shall therefore be limited to 40% of the value of that investment;

- (f) Unanimously, that the Respondent has breached its obligation to accord fair and equitable treatment to the Claimants between July 2, 2010 and February 17, 2011.
- (g) Unanimously, that the Claimants' other claims shall be dismissed;

(h) Unanimously, that any decision regarding the quantification of compensation or damages, as well as any decision regarding the allocation of the costs of arbitration, shall be reserved for a later stage of the proceedings.

The Tribunal has already decided that the invocation of "force majeure" by Antrix is attributable to the State under Article 8 of the ILC Articles. The Claimants' claim under "full protection and security" therefore has been rejected.

Regarding the alleged violation by the Government of India of the "full legal protection and security provision", the Tribunal disagreed with the Claimants' conclusion.

The Tribunal, by majority, has already concluded that, although extraneous factors may have played a role in the decision (to terminate the Agreement), the Government of India had reasonable justification of military and other societal needs to take that decision partly under Article 11(3) and partly under Article 6 of the Treaty.

The Tribunal has also taken the stand that it would be to no avail for the Government of India to argue that such strategic information could not be communicated to the Claimants. Indeed, the required disclosure would not entail informing the Claimants of the nature of those needs or revealing any secret information. The Government of India could and should have simply informed the Claimants that the Agreement was in jeopardy because of societal and strategic needs; it would then have been up to the Claimants to decide how much financial and other resources they were willing to put at risk.

Leaving aside the requirement of "utmost good faith" contained in the Agreement, The Tribinal has said that Government of India's conduct constitutes a clear breach of the simple good faith required under international law and the Fair and Equitable Treatment (FET) clause of Article 2 of the Treaty; the Government of India must be liable for this wrongful behaviour and must compensate the Claimants for damages that they may have suffered thereby from July 2, 2010 to February 17, 2011, the date of the decision by the Cabinet Committee on Security (CCS) to reserve S-band for non-commercial, strategic use, prohibiting its use by all private parties, Indian and foreign.

#### Antrix-Devas case and PCA: BIPA with Mauritius needs to be relooked at

One of the Arbitrators, David R. Haigh, disagreed on the determination by which the majority of the Arbitrators – Marc Lalonde (Presiding Arbitrator) and Justice Anil Dev Singh – assessed and apportioned percentages to reflect as reasonable "allocations of spectrum directed to "essential security interests" and "other public interest purposes".

After the Arbitral Tribunal had issued their award on Jurisdiction and Merits on 25 July 2016, the Government of India had reiterated that it had invoked the essential security interests through a well reasoned, valid and proper CCS decision. The Government had also asserted its commitment to pursue the larger national interests, including sovereign strategic security interests in this matter.

Simultaneously, the Enforcement Directorate, also issued a show cause notice to Devas for violation of FEMA, 1999 and investigations were on under Prevention of Money Laundering Act, 2002.

### CBI files charge sheet against former Secretary of Space and ED of Antrix Corporation



#### Newsroom24x7 Staff

New Delhi: The Central Bureau of Investigation today filed a chargesheet in the Court of Special Judge, CBI cases at the Patiala House Courts in the capital against G Madhavan Nair, ex-Secretary, Department of Space and Chairman, ISRO & Antrix, K. R. Sridhara Murthi, former Executive Director of Antrix Corporation Ltd, the then Managing Director of USA based company and President & CEO of a Bangalore based Private Multimedia Company; three of its ex-Directors, and then Additional Secretary, Department of Space; then Director, SCPO, ISRO under Section 120-B r/w 420 of IPC and Section 13(2) read with 13(1)(d) of Prevention of Corruption Act, 1988 & substantive offences for allegedly being party to a criminal conspiracy with an intent to cause undue gain to themselves or others by abusing official positions (by public servants) and causing loss to Antrix Corporation Ltd and ISRO by lease of INSAT Transponders capacity on GSAT 6 & 6A satellites to the accused Bangalore based Private Multimedia Company.

### CBI files charge sheet against former Secretary of Space and ED of Antrix Corporation

A case was registered on 16 March 2015 against the then Executive Director, Antrix Corporation Limited, Bengaluru; two Advisors of USA-based company; Bengaluru based private multi media company and other unknown officials of Antrix Corporation Limited /Indian Space Research Organization (ISRO)/Department of Space (DoS). It was alleged that during the period from 2004 to 2011 then Executive Director Antrix Corporation Ltd in criminal conspiracy with both Advisors of USA based company and others gave rights for delivery of Video, Multimedia and Information Services to Mobile receivers in vehicles & mobile phones via S-Band through GSAT-6 & GSAT-6A Satellites and Terrestrial systems in India, to ineligible company based at Bangalore in violation of the laid down guidelines pertaining to leasing of INSAT capacity. Consequently, alleged loss of Rs. 578 crore was caused to Government Exchequer.

Further investigation is continuing regarding issues of demand of S-Band frequencies by other users including Ministry of Defence for strategic purpose & DoT; DVB-SH Technology developed by ETSI and the affairs of USA based company, FDI received and funds transferred from the accounts of Bangalore based private company into the foreign accounts and offences under criminal breach of trust by public servants.

#### **Lalit Shastri**



The CBI has taken a long time in completing the entire round of investigations into the Antrix-Devas scam and has registered a case against the accused only under Section 120-B, besides Section 420 of IPC and Section 13(2) read with 13(1)(d) of PC Act, 1988.

Section 120-B of the I.P.C. prescribes punishment for criminal conspiracy. It is not necessary that each conspirator must know all the details of the scheme nor be a participant at every stage. It is necessary that they should agree for design or object of the conspiracy. Conspiracy is conceived as having three elements:

- (1) agreement
- (2) between two or more persons by whom the agreement is effected; and

(3) a criminal object, which may be either the ultimate aim of the agreement, or may constitute the means, or one of the means by which that aim is to be accomplished.

### Question arises why Sections 34, 120 and 120-A, and 149 of IPC have been left out by the CBI while registering case against the accused.

Halsbury's Laws of England describes Criminal Conspiracy as follows: "Conspiracy consists in the agreement of two or more persons to do an unlawful act or to do a lawful act by unlawful means. It is an inevitable offence of common law, the punishment for which is imprisonment or fine or both at the discretion of the Court.

Section 34 of IPC also applies in this case as the ANTRIX-Devas Agreement was an act done by several persons in furtherance of common intention . Under this Section, When a criminal act is done by several persons in furtherance of the common intention of all, each of such persons, is liable for that act in the same manner as if it were done by him alone. The section is framed to meet a case in which it may be difficult to distinguish between the act of individual members of a party or to prove exactly what part was played by each of them. The reason why all are deemed guilty in such cases is, that the presence of accomplices gives encouragement, support and protection to the person actually committing the act.

Section 120 is for concealing design to commit offence punishable with imprisonment.—Whoever, intending to facilitate or knowing it to be likely that he will thereby facilitate the commission of an offence punishable with imprisonment, voluntarily conceals, by any act or illegal omission, the existence of a design to commit such offence, or makes any representation which he knows to be false respecting such design, If offence be committed—if offence be not committed.—shall, if the offence be committed, be punished with imprisonment of the description provided for the offence, for a term which may extend to one-fourth, and, if the offence be not committed, to one-eighth, of the longest term of such imprisonment, or with such fine as is provided for the offence, or with both.

According to Section 120-A of the Indian Penal Code, 1860, "when two or more persons agree to do, or cause to be done: 1) An illegal act, or 2) An act which is not illegal by illegal means, such an agreement is designated a criminal conspiracy:Provided that no agreement except an agreement to commit an offence shall amount to a criminal conspiracy unless some act besides the agreement is done by one or more parties to such agreement in pursuance thereof.

Even Section 149 of IPC should have been applied by the CBI in this case. This particular Section says: If an offence is committed by any member of unlawful assembly in prosecution of common object of that assembly, or such as the members of that assembly knew to be likely to committed in prosecution of that object, every person who, at the time of the committing of that offence, is a member of the same assembly, is guilty of that offence.

#### **ANTRIX-Devas Agreement and National Security**

Even though the conspiracy leading to the agreement betwen Antrixc and Devas was jeopardising and threatening national security, CBI has booked the accused only under Section 120-B which prescribes punishment for criminal conspiracy, besides 420 and relevant sections of the Prevention of Corruption Act.

The then Additional Solicitor-General Mohan Parasaran had given his views on annulment of the agreement of January 28, 2005 between Antrix and Devas Multi Media Private Limited. In his reply to a query by the Department of Stace, he stated:

"Antrix Corporation Limited is a Public Sector Undertaking and is an arm of the Department of Space, Government of India. It entered into a commercial contract, after nearly two years of negotiation, on January 28, 2005 with M/s. Devas Multi Media Private Limited (hereinafter referred to as 'DEVAS'), for lifetime lease of 90 per cent capacity of S Band Transponder of 2 satellites, built by the Indian Space Research Organisation (ISRO) [GSAT – 6 and 6A]. However, after the signing of the said agreement, it has been realised by the Government of India that the Antrix-Devas lease agreement on GSAT-6 and 6A would take away most of the total S band spectrum available. The S band spectrum is crucial for several strategic and societal services. The Integrated Space Cell of IDS, Ministry of Defence has projected a need for 17.5 MHz in S band for meeting the immediate requirements of Armed Forces, another 40 MHz during the Twelfth Plan period and an additional 50 MHz during the Thirteenth 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, CRPF, Coast Guard and Police for meeting their secured communication needs. Indian Railways have also projected S band requirements for train tracking.

In view of these emerging requirements, there is an imminent need to preserve the S band spectrum for vital strategic and societal applications. Besides this, there were also certain concerns on the technical, commercial, managerial and financial aspects of Antix-Devas contract, such as severe penalty clauses for delayed delivery of the spacecraft and for performance failure/service interruptions, violation of ICC guideline of 'non-exclusiveness' in leasing the capacity, the contract enabling Devas to sub-lease the capacity without any approvals which could even given rise to security concerns etc.

It is evident that the two satellites together, if launched, would require about 70 MHZ of the S band spectrum of 150 MHz allocated to ISRO for satellite in the orbit. This will result in serious consequences strategically affecting the needs of the Defence and other departments concerned with national security, including para-military departments, Indian Railways etc."

#### CBI statement after registering a case

The CBI press statement of March 18, 2015, after the case was registered against the accused in the ANTRIX – Devas scam, is as follows:

The Central Bureau of Investigation has registered a case U/s 120-B, 420 of IPC and Section 13(2) r/w 13(1)(d) of PC Act, 1988 against the then Executive Director, Antrix Corporation Limited, Bengaluru; two officials of USA-based company; Bengaluru based private multi media company and other unknown officials of Antrix Corporation Limited /ISRO/Department of Space. It is alleged that then Executive Director of Antrix Corporation Ltd in conspiracy with other unknown officials of Antrix Corporation Limited /ISRO/Department of Space and Bengaluru based company had cheated the Government of India & caused favours to said company. The accused public servants had allegedly given the rights to an ineligible company of Bengaluru for delivery of video, multimedia and information services to mobile receivers in vehicle and mobile phones via S-Band through GSAT-6 and GSAT-6A satellites and terrestrial systems in India. An alleged loss of Rs.578 crores (approx) was caused

It is further alleged that an agreement between Antrix Corporation Limited and Bengaluru based private company was signed on January 28, 2005 for the lease of 10 S-band Transponders for the said services. On behalf of Antrix Corporation Limited, the then ED signed the said agreement. After the agreement, the two Advisors of said USA based company were appointed as Directors of Bengaluru based company. There was also change in the Board of Directors of Bengaluru based company and both the Advisors, through USA based company, took over the charge & control of Bengaluru based company which was against the spirit of Shankara Committee that recommended for agreement to be executed with an Indian company. This change was never checked and verified by officials of Antrix Corporation Limited. Further, when a proposal seeking budgetary support of Rs. 269 crores (approx) for approving design, manufacture and launch of GSAT-6/INSAT-4E (PSI) was placed in the 104th meeting of the Space Commission on May 26, 2005, it was not informed that the agreement had already taken place with Bengaluru based company for leasing out the S-Band.

It is also alleged that a note for the Cabinet was submitted for building the GSAT 6 satellite as earlier approved by the Space Commission. Information regarding the agreement between Antrix Corporation Limited and Bengaluru based company was suppressed from the Cabinet and the wrong information regarding utilization of satellite capacity was given to the Cabinet with respect to multiple expressions of interest, though the agreement was signed with Bengaluru based company without any multiple expressions of interest. The proposal was approved by the Cabinet in December 2005. After coming to know the omissions and commissions on the part of the accused persons, the agreement dated 28.01.2005 was annulled by Antrix Corporation Limited in accordance with the decision dated 17.02.2011 of Cabinet Committee on Security (CCS).

It is also alleged that Bengaluru based company had submitted false, wrong and incorrect information claiming that it had the technology and was fully capable of delivering the S-DMB services to get the rights of delivering same in India through PS1 and PS2 and consequently, Bengaluru based company allegedly got wrongful gain of more than Rs.578 crores(approx) from various investors from USA, Mauritius, Singapore etc. The two Advisors were allegedly beneficiaries of above said transactions, besides others. The Bengaluru based private company with the intent to siphon off the amount from its bank accounts in India, got a subsidiary in another name incorporated in USA and a substantial part of wrongful gain was remitted to this new company of USA on the pretext of services, salaries, etc. The illegal gratification was allegedly paid to the accused public servants.

Searches are being conducted at certain places in Bengaluru.



# S-band deal shows systemic failure

BHOPAL, FEB. 5

The huge scam linked with the 2005 agreement agreement between Antrix Corporation Limited (Antrix) of Department of Space (DoS) and Devas Multimedia Private Limited for lifetime lease of 90 per cent capacity of Sband transponders of two satellites that were to be built by Indian Space Research Organisation (Isro) has opened up the pandora's box, indicating a huge conspiracy and showing total systemic failure that could have even jeopardised the country's security

In the midst of allegations and mudslinging, the Antrix-Devas agreement, signed when Mr G. Madhavan Nair was Isro chairman, was cancelled last February.

Commenting on the find-ings of the high-powered review panels and the government's action taken report released by Isro, a ministry of space source on Sunday told The Asian Age that the proposal from Devas was not put on the agenda when the Antrix Board took it up for consideration without even a proper quorum. Even the minutes of the board meeting have not been signed. He went on to point out that all talk of restructuring Antrix and reforms in the Space Commission would amount to putting the same wine in the same bottle unless the posts of chair-man of Space Commission, secretary, Department of Space, and chairman of Isro are not segregated.



A high-powered review

G. Madhavan Nair

committee (HPRC) of B.K. Chaturvedi, Prof. Roddam Narasimha, appointed by government of India had reviewed the technical, commercial, procedural and financial aspects of the agreement and categorically pointed out that the agreement with Devas indicated certain financial and strategic gaps and the then chairman Antrix Board/secretary director Satcom, Isro member finance, and Space Commission were primari-ly responsible for the lapse. Another five-member high level team (HLT) con-stituted under the chairmanship of Pratyush Sinha IAS (Retd.) and former CVC, with the mandate to examine acts of omission and commission submitted its report to the govern-

ment on September 2, 2011. The Satcom policy was approved by the Union Cabinet in January 2000 and the Insat Coordination Committee (ICC) was authorised to earmark at least certain percentage of Insat transponders capacity for use by non-governmental users. While the ICC met 78 times between 1978 and 2004, it failed to meet even once between

2004 and 2009. The responsibility of calling the ICC meeting lay with secretary, DoS and director (SCPO), who are chairman and secretary of ICC.

retary of ICC.
When technology for multimedia mobile services based on space platform was evolving in 2004-5, a proposal was received by Antrix/Isro from Forge Advisors of US for a joint venture in April 2004.
The Chaturvedi-

The Chaturvedi-Narasimha panel pointed out in its report that the agreement signed with Devas in January 2005, which provided for two satellites PS1 and PS2 had several weaknesses.

The agreement was signed with a company which had paid up share capital of only ₹1,00,000. Antrix/Isro had to launch the satellite and penalty had to be paid by them if they did not adhere to the agreed time frame. Isro committed itself to launching the satellite and incurring the risk of searching for alternative users if Devas failed to develop the new technology for mobile services.

While Isro was to invest about ₹800 crores in two satellites and their launches, it provided 90 per cent of the 2500-2690 MHz band leaving very little spectrum with Isro for any strategic or societal use in future. It was also pointed out that any other multimedia mobile service (MMS) use in the band would not have been efficient due to interference of signals.

A delegation, led by the then Isro chairman Dr K. Kasturirangan, had visited US in July-August 2003.

Exclusive news based on independent inquiry conducted by me as a journalist and the revelations Published on February 6, 2012

#### **Lalit Shastri**



The Central Bureau of Investigation (CBI) has registered a case against K.R. Sridharamurthi (former MD of ANTRIX), Ram Vishwanathan of USA based Forge Advisors LLC, MG Chandrasekhar, a former ISRO official and chairman of Devas and Devas Multimedia Pvt Ltd of Bangalore in the huge Antrix-Devas S-band Transponders scam.

The 2005 agreement between Antrix Corporation Limited (ANTRIX) of Department of Space (DoS) and DEVAS Multimedia Private Limited for lifetime lease of 90 per cent capacity of S-band Transponders of two Satellites that were to be built by Indian Space Research Organisation (ISRO) is a huge scam that opened up the Pandora's box and points to high-level conspiracy and total systemic failure that could have even jeoparised the security of India.

#### CBI registers case in the huge Antrix-Devas scam

In the midst of allegations and mudslinging, the ANTRIX-Devas agreement, which was signed when Mr G. Madhavan Nair was chairman ISRO, was canceled in February 2011. Commenting on the findings of the high powered review panels and the Government's action taken report released by ISRO, a Ministry of Space source had told me at that point of time that the proposal from Devas was not put on the agenda when the ANTRIX Board took it up for consideration without even a proper quorum. Even the minutes of the Board meeting were not signed. He went on to point out that all talk of restructuring ANTRIX and reforms in the Space Commission would amount to putting the same wine in the same bottle unless the posts of Chairman of Space Commission, Secretary Department of Space, and Chairman of ISRO are not segregated.

A High Powered B.K. Chaturvedi-Prof Roddam Narasimha Review Committee (HPRC), appointed by government of India had reviewed the technical, commercial, procedural and financial aspects of the Agreement and categorically pointed out that the agreement with Devas indicated certain financial and strategic gaps and the then Chairman ANTRIX Board/Secretary DOS, Director SATCOM, ISRO member Finance, and Space Commission were primarily responsible for the lapse.

Another five-member High Level Team (HLT) constituted under the chairmanship of Pratyush Sinha IAS (Retd) and former CVC, with mandate to examine acts of omission and commission submitted its report to the Government on September 2, 2011.

The SATCOM Policy was approved by the Union Cabinet in January 2000 and the INSAT Coordination Committee (ICC) was authorised to earmark at least certain percentage of INSAT transponders capacity for use by non-governmental users. While ICC met 78 times between 1978 and 2004, it failed to meet even once between 2004 and 2009. The responsibility of calling the ICC meeting lay with Secretary, DOS and Director (SCPO), who were chairman and secretary of ICC.

When technology for multimedia mobile services based on space platform was evolving in 2004-05 a proposal was received by ANTRIX/ISRO from Forge Advisors of USA for a joint venture in April 2004.

### CBI registers case in the huge Antrix-Devas scam

The Chaturvedi-Narasimha panel pointed out in its report that the agreement signed with Devas in January 2005, which provided for two satellites PS1 and PS2 had several weaknesses. The agreement was signed with a company which had paid up share capital of only Rs. 100,000. ANTRIX/ISRO had to launch the satellite and penalty had to be paid by them if they did not adhere to the agreed time frame. ISRO committed itself to launching the satellite and incurring the risk of searching for alternative users if Devas failed to develop the new technology for mobile services. While ISRO was to invest about Rs. 800 crore in two satellites and their launches, it provided 90 per cent of the 2500-2690 MHz band leaving very little spectrum with ISRO for any strategic or societal use in future. It has been pointed out that any other multimedia mobile service (MMS) use in the band would not have been efficient due to interference of signals.

A delegation, led by the then ISRO chairman Dr. K. Kasturirangan, had visited the US in July-Agust 2003. Before that Forge Advisors, a consulting firm, had visited India and made presentation to ISRO in March-May 2003. During Dr. Kasturirangan's US visit an MoU was signed between ANTRIX and FA-USA. Nothing was mentioned about MMS in this MoU. Subsequently a proposal was submitted by FA-USA stating that ISRO was to invest in the space segment and FA-USA in the ground segment for forming a strategic partnership for launching a satellite based national service. Even while a committee headed by Dr. K.N. Shankara, Director Space Application Centre, Ahemedabad was examining the proposal, the ANTRIX Board unanimously accorded in principle approval for processing the JV proposal with Devas on June 11, 2004.

Subsequently, after the Shankara Committee had suggested that Devas would pay annual fee of \$11.25 million instead of proposed \$ 9 million for the lease period "when Devas became cash positive", the ANTRIX Board approved the draft agreement with Devas. It was also noted that FA-USA were promoting the establishment of an Indian company called Devas Multimedia Pvt. Limited, which would establish the service and lease the capacity for it. This was a company formed by former ISRO scientists.

### CBI registers case in the huge Antrix-Devas scam

On May 26, 2005, a proposal was placed in the meeting of Space Commission for approving design, manufacture and launch of GSAT-6/INSAT-4E. The proposal was approved by the Cabinet in December 2005 and on February 2, 2006 ANTRIX informed Devas of receipt of approvals on the satellite frequency coordination and the contract thus became effective from that date.

The contract was formalized when it was not clear what technologies FA-USA had access to full intellectual Property Rights (IPR). Knowledge on this count was important for the business model of transponder leasing eventually adopted by ANTRIX as the satellite system had to be configured keeping the available technology required for hand-held devices in perspective. The High Powered Committee set up by the Government made it clear that the ANTRIX-Devas Project was a clear violation of government policy and the ANTRIX-Devas agreement, which had provided 90 per cent of the transponder capacity of the first satellite and the same proportion of a second satellite to be used by Devas. This meant utilization of a large part of the S-band spectrum by one private user-Devas. This was against the INSAT Policy, which was "non-exclusive.

The Committee also took the view that from the national security perspective, allocation of a large part of the spectrum to a private player like Devas was unjustified from the security point of view. This was more so since Devas had later entered into an agreement and transferred the controlling rights to Deutsche Telekom AG (DT). The committee pointed out specifically that for this failure, which undermines the security needs of the country, the responsibility primarily lay with the then Secretary DOS and Director SATCOM, and Chairman ISRO/ANTRIX Board.

In a statement on February 4, 2012, ISRO had issued a statement and pointed out that a High Powered Review Committee and a High Level Team have been reconstituted to conduct necessary investigation for possible acts of omission and commission linked with the ANTRIX-DEVAS Agreement h by bringing in new people and dropping others including those whose names have surfaced in the reports of the High Powered Review Committee and the High Level Team.

If and when the Government decides to institute criminal or other charges against any person, that person will be provided appropriate opportunity and due process shall be followed.

### CBI registers case in the huge Antrix-Devas scam

The Union Ministry of Corporate Affairs and Department of Revenue were asked to conduct necessary investigation for possible acts of omission and commission leading to the agreement between Antrix Corporation Limited (ANTRIX) of Department of Space (DoS) and Bangalore based DEVAS Multimedia Private Limited on January 28, 2005 for lifetime lease of 9 per cent capacity of S-band Transponders of two Satellites, to be built by Indian Space Research Organisation (ISRO).

Inquiries by me at that time had revealed that the Ministry of Corporate Affairs had initiated a probe but the Enforcement Directorate had not started investigations into the leasing of two satellites by Anrix to a company lacking credible standing.

Government of India had set up the High Powered Review Committee (HPRC) on February 10, 2011, to review the technical, commercial, procedural and financial aspects of the Agreement Antrix Corporation Limited (ANTRIX) had entered into with DEVAS. ISRO later clarified that appropriate Committees have been reconstituted by bringing in new people and dropping others including those whose names have surfaced in the reports of the High Powered Review Committee and the High Level Team (HLT).

The HLT had sought "clarifications" from all the officers who at any point in time had dealt with the files concerning the Antrix-DEVAS agreement and the decisions on the satellites. Apart from G Madhavan Nair (former Secretary of DOS); A. Bhaskaranarayana, (former Director of SATCOM Office and former Scientific Secretary of ISRO); and S.S. Meenakshisundaram (former Member Finance, Space Commission),the HLT included to the list, K.R. Sridharamurthi (former MD of ANTRIX); Dr. K.N. Shankara (former Director of ISRO Satellite Centre and Chairman of the Committee for evaluation of DEVAS proposal); Ms. Veena S. Rao (former Additional Secretary, DoS); G. Balachandhran (former Additional Secretary/FA, DoS) and Dr. R.G. Nadadur (Additional Secretary/FA, DoS and former Joint Secretary, DoS), for seeking clarifications.

#### Newsroom24x7 Network

The chinks had started showing in **Indian Space Research Organistion** (ISRO) and its functioning when the Antrix-Devas scam had hit the headlines about 10 years ago. The news clipping below says a lot.....



# S-band deal shows systemic failure

LALIT SHASTRI

The huge scam linked with the 2005 agreement between Antrix Corporation Limited
(Antrix) of Department of
Space (DoS) and Devas
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Limited for lifetime lease of 90 per cent capacity of S-band transponders of two satellites that were to be built by Indian Space Research Organisation (Isro) has opened up the pandora's box, indicating a huge conspiracy and showing total systemic failure that could have even jeop-ardised the country's secu-

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Commenting on the findings of the high-powered review panels and the government's action taken report released by Isro, a ministry of space source on Sunday told *The Asian Age* that the proposal from Devas was not put on the agenda when the Antrix Board took it up for consideration without even a eration without even a proper quorum. Even the minutes of the board meeting have not been signed. He went on to point out that all talk of restructuring Antrix and reforms in the Space Commission would amount to putting the same wine in the same bottle unless the posts of chairman of Space Commission, secretary, Department of Space, and chairman of Isro are not segregated.



G. Madhavan Nair

A high-powered review committee (HPRC) of B.K. Chaturvedi, Prof. Roddam Narasimha, appointed by government of India had reviewed the technical, commercial, procedural and financial aspects of the agreement and categorically pointed out that the agreement with Devas indicated certain financial and strategic gaps and the then chairman Antrix strategic gaps and the then chairman Antrix Board/secretary DoS, director Satcom, Isro member finance, and Space Commission were primarily responsible for the lapse. Another five-member high level team (HLT) constituted under the chairmanship of Pratyush Sinha IAS (Retd.) and former CVC, with the mandate to examine acts of omission and commission submitted its report to the govern-

and commission submitted its report to the govern-ment on September 2, 2011. The Satcom policy was approved by the Union Cabinet in January 2000 and the Insat Coordination Committee (ICC) was authorised to earmark at least certain personage of least certain percentage of Insat transponders capaci-ty for use by non-govern-mental users. While the ICC met 78 times between 1978 and 2004, it failed to meet even once between

2004 and 2009. The responsibility of calling the ICC meeting lay with secretary, DoS and director (SCPO), who are chairman and secretary of ICC.

When technology for multimedia mobile services based on space platform was evolving in 2004-5, a proposal was received by

was evolving in 2004-5, a proposal was received by Antrix/Isro from Forge Advisors of US for a joint venture in April 2004. The Chaturvedi-Narasimha panel pointed out in its report that the agreement signed with Devas in January 2005, which provided for two satellites PSI and PS2 had several weaknesses.

several weaknesses.

The agreement was signed with a company which had paid up share capital of only \$1,00,000.

Antrix/Isro had to launch the satellite and penalty had to be paid by them if they did not adhere to the agreed time frame. Isro committed itself to launching the satellite and incurring the risk of searching for alternative users if Devas failed to develop the new technology for mobile

while Isro was to invest about ₹800 crores in two satellites and their launches, it provided 90 per cent of the 2500-2690 MHz band leaving very little spectrum with Isro for any strategic or societal use in future. It was also pointed but that was also pointed out that any other multimedia mobile service (MMS) use in the band would not have been efficient due to inter-

ference of signals.

A delegation, led by the then Isro chairman Dr K. Kasturirangan, had visited US in July-August 2003. After Pawan Kumar Goenka has taken over as Chairperson of In-SPACe, Dr. Raghunandan G Nadadur, who is a former Additional Secy & F A Department of Space (28 february 2011 and 5 January 2012) and was earlier a Director with ISRO between 6 December 2010 and 28 February 2011, has published a post on his facebook wall with the heading "A request to Sri Pawan Kumar Goenka, Chairman, IN-SPACe". It points to "Orders in respect of the Indian National Space Promotion and Authorization Center (IN-SPACe) published in the Government Gazette.

Obviously Nadadur is addressing those in the knowledgeable circles and those who matter. Still, to drive home his point, while advising the IN-SPACe Chairperson how he should carry out his responsibilities, the excivil servant has chosen to be repetitive while rolling out point-wise the work of IN-SPACe as outlined in the website of ISRO, as follows:

- 1) IN-SPACe is to be established as a single window nodal agency, with its own cadre, which will permit and oversee the following activities of Non Government Private Entities (NGPEs).
- 2) Space activities including building of launch vehicles and satellites and providing space based services as per the definition of space activities.
- 3) Sharing of space infrastructure and premises under the control of ISRO with due consideration to on-going activities.
- 4) Establishment of temporary facilities within premises under ISRO control based on safety norms and feasibility assessment
- 5) Establishment of new space infrastructure and facilities, by NGPEs, in pursuance of space activities based on safety norms and other statutory guidelines and necessary clearances.
- 6) Initiation of launch campaign and launch, based on readiness of launch vehicle and spacecraft systems, ground and user segment.
- 7) Building, operation and control of spacecraft for registration as Indian Satellite by NGPEs and all the associated infrastructure for the same.
- 8) Usage of spacecraft data and rolling out of space based services and all the associated infrastructure for the same.
- 9) IN-SPACe will draw up an integrated launch manifest considering the requirements for ISRO, NSIL and NGPEs based on priorities and readiness level.
- 10) IN-SPACe will work out a suitable mechanism for promotion & hand holding, sharing of technology and expertise to encourage participation of NGPEs in space activities.
- 11) In order to carry out the space activities, capital-intensive, high technology facilities will be required by NGPEs. These facilities, spread across various ISRO Centres, shall be permitted for use by NGPEs.
- 12) IN-SPACe will work out a suitable mechanism to offer sharing of technology, expertise and facilities on free of cost wherever feasible or at reasonable cost basis to promote NGPEs.
- 13) IN-SPACe will act as an autonomous body, under DOS, as a single window nodal agency for enabling and regulating space activities and usage of ISRO facilities by NGPEs.
- 14) IN-SPACe will also permit establishment of facilities, within ISRO premises, based on safety norms and feasibility assessment.

- 15) The marketing, sharing and dissemination of remote sensing data shall be governed by Remote sensing policy. Each application requiring examination as per new policy will be examined and permitted by IN-SPACE factoring legal and security aspects.
- 16) The decision of IN-SPACe shall be final and binding on all stakeholders including ISRO. NGPEs will not be required to seek separate permission from ISRO.
- 17) A multi-disciplinary review and assessment mechanism comprising of four Directorates for Technical, Legal, Safety & Security, Monitoring & Promotion and will assist IN-SPACe in carrying out its functions.

Underscoring these points, Nadadur goes on to inform his audience that as a former civil service officer, has been conditioned to understand that Government takes decisions "in its infinite wisdom".

Fruther, he says: "I am sure that a great deal of thought has gone into the decision to set up IN-SPACe. Hence, I will not venture to question the decision of Government in setting up IN-SPACe."

"A study of the roles of the Indian Space Research Organization (ISRO), the Antrix Corporation Limited (ACL) and the New Space India Limited (NSIL) shows that all the work that has been entrusted to IN-SPACe is now being performed by these three bodies."

"I am sure that there are going to be situations in which IN-SPACe comes into conflict with ISRO or Antrix Corporation or NSIL. I wonder which authority will be the referee in such a case. Will it be Secretary, Department of Space (DOS) or Chairman, Space Commission or the PM himself? As of now, Chairman, ISRO is also Secretary DOS and Chairman, Space Commission. So, will all conflict situations be referred to the PM or will an independent person be appointed as Chairman, Space Commission too?"

"As a person who has spent many years serving in ISRO, I am familiar with the personnel who are still serving in that great organization. I have also been reading about the stellar accomplishments of Chairman, IN-SPACe. I must confess that I am quite apprehensive about the ability of the personnel in ISRO to face up to the challenges that may be posed by IN-SPACe and the team that will be assembled by its redoubtable Chairman."

"I believe that ISRO is an organization that has served and is continuing to serve Bharatmata in a very dedicated manner. The activities of ISRO are not just commercial. There are activities that relate to the spheres of development and welfare, societal needs, national security and defence. I am sure that many activities of ISRO will not be of interest to the partners of IN-SPACe. Indeed, those partners are not in the game for philanthropy. Such being the case, it is important that the level of morale and motivation of all the personnel in ISRO is always maintained at a very high level."

"I know that we cannot ask Chairman, IN-SPACe to give anything less than his very best to the new organization that he now heads. He has entered upon his new assignment with the same energy and enthusiasm that he has displayed during his several decades of service. Indeed, I am also sure that there are great expectations from him from several authorities, including the PM himself."

"I would only like to request Sri Pawan Kumar Goenka, Chairman, IN-SPACe to take every step in a measured manner and also only after thinking about its likely impact on ISRO and its personnel. It is in the interest of Bharatmata that ISRO and IN-SPACe work in tandem to bring greater glory to our dear country."



Tapan Misra with NASA Administrator, acclaimed astronaut and former Space Shuttle Commander, Charles Bolden, who visited SAC in 2013 to specifically visit the lab where RISAT could be built at so much economical cost under leadership of Tapan Misra

In a no-holds barred response to this, distinguished scientist, former Advisor ISRO and Director Space Application Centre (SAC) Tapan Misra has commented on the former civil servant's facebook post.

Misra's post says a lot and we are publishing it in varbatim - "

### Tapan Misra says:

"I see all the lamentations. Like Gandhari's crying after Mahabharata war was over. Had Vidur and Bhishma exhibited their spines during disrobing of Draupadi, Gandhari need not have to see the day. I saw the ugly face of ISRO. Centre Director was poisoned in august presence of full ISRO council, all evidences were wiped out literally by water and fake enquiry was conducted. Then none of the seniors, some of whom are now lamenting, did any semblance of protest. Then there was litany of failures - RISAT-1 destruction, PSLV heat shield not opening, GSAT 6A Failure, ugly attempt to scuttle GSAT 11 launch, or recent GISAT launch failure. On top of it, Chandrayan 2 lander fiasco and brazen attempt to cover it up (sic) and many other criminal activities, which I do not want to recount. In space business, we should learn from mistakes. But repeated failures? How can you learn, when the failure analysis reports will even make donkeys laugh? ISRO was on a steady downhill. From Kiran Sir's time and continuing. Government cannot just watch. They have to take corrective action. What will you do when malaise is no longer a disease but cancer? It can no longer be covered up by friendly press report. No point in crying. At the end of the day, we were being pampered by taxpayers, because they trusted us. We no longer could live upto the trust, reposed on us by the nation. Nation is above ISRO.

## Lalit Shastri



The newly created New Space India Ltd (NSIL), a Central Public Sector Enterprise (CPSE) under

Department of Space, seems to be drifting like a stricken satellite in outer space. It is more than two years since this new outfit was created with a vision to provide space-related products and services flowing or emanating from the Indian Space Programme to global customers and to spur the growth of Indian Industry in undertaking technologically challenging space-related activities.

NSIL has been set up to function as a nodal agency for carrying out PSLV production through Indian Industry under the consortium route. The industry consortium will be responsible for producing, assembling and integrating the launch vehicle, by making use of the existing ISRO facilities under GOCO model.

### NSIL is in a state of drift: Will the PMO take note and act?



NSIL also has the mandate to provide transponder capacity in C, Ku, Ka and S band on INSAT / GSAT fleet of satellite to Indian users for various SATCOM based broadcasting and telecom services like DTH, TV, DSNG, VSAT, etc. NSIL is also mandated to provide Remote Sensing Services and Mission Support Services to the global users.

NSIL charter includes, catering to emerging global small satellite launch service market by opening the avenues for the development and manufacture of Small Satellite Launch Vehicle (SSLV) through Indian Industry partners.

NSIL, with technical support of ISRO, is also supposed to create a fully functional ecosystem in India for building satellite systems, subsystems and ground infrastructure by engaging the private and corporate sector

### NSIL is in a state of drift: Will the PMO take note and act?

Ten ISRO communication satellites owned by the President of India have already been transferred to NSIL and around 800 crores of business has been generated by transferring all new transponder leases to it. Still, the Department of Space has not deemed it fit to give this company a regular Board. All that it has are a few government directors from ISRO and DoS sitting on its Board and a Chairman-cum-Managing Director (CMD) – nominated by the Chairman ISRO and approved by the Prime Minister's Office (PMO). When fully constituted, NSIL Board is supposed to comprise of 9 Directors. Apart from the CMD, 2 Government (nominee) Directors and 2 ISRO (nominee) Directors, it should also have Director Finance and 3 Independent Directors.

NSIL is a Schedule A category company under DoS and rightfully it should have got a CMD appointed through the Public Enterprises Selection Board but ISRO still acts as if this company can be run the way Antrix Corporation was run.

It is doubtful whether or not NSIL has an MOU with the Department of Public Enterprises like other PSU's and it definitely has no Board level committee to oversee contracts, corporate governance, finance etc and left to drift this way without proper superintendence and accountability, another Antrix Devas like scam will not be far away. Will the PMO take note and act?

## Jotting of a distinguished scientist who should have headed India's Space Programme

#### Newsroom24x7 Network

After closely watching the achievements and also investigating the major causes behind successive failures of ISRO during the last one decade, Newsroom24x7 is saying with full conviction what we have underscored in the above heading. We are maintaining total objectivity and saying this keeping national interest in absolute focus.



We are republishing a post on facebook by distinguished scientist Tapan Misra, who was not allowed to head ISRO. In this post, Misra reflects on a photo – his most commented photo on facebook in 2012.

Under the latest jotting by Tapan Misra are hyperlinks of exclusive news coverage and edits on ISRO published by Newsroom24x7 over last several years. They expose in detail a lot of what was either perpetuated or given a go by at great cost to the nation.

## Jotting of a distinguished scientist who should have headed India's Space Programme

### **Jotting of a distinguished Scientist**

Great moment after being praised by then PM (Dr Manmohan Singh) for my contribution in RISAT. We launched RISAT on 26th April 2012, started imaging from 1st May 2012. Fastest operationalisation. Honourable PM met ISRO team on 4th May. I remember, I was spending days and months together, away from home, in ISAC, in launch pad and in NRSC, Hyderabad. I had 2-3 pairs of jeans, some tee shirts and a pair of dirty sneakers. All my meagre wardrobe and myself required urgent overhaul. I flew from Hyderabad to Delhi on 3rd May. I purchased a pair of dresses and a pair of shoes in Delhi, reasonable for the occasion and also for my purse. I was tense on that day. When in his august company, I observed our honourable PM was a person with very sharp intellect, extraordinary grasping power, a photographic memory and was also very witty. He knew exactly who is who. He kept all of us at surprising ease.

It was a great day. Felt proud, like an elephant, for building something which has not been built before. In later part of my career, there were queer turns. *Little did I realise that day that elephants are hunted for their tusks, their valuable possession.* Some days to remember, some days to forget.

#### Newsroom24x7 Network



**Bengaluru**: Exercising powers conferred on the National Company Law Tribunal, especially under Section 273 and other extant provisions of Companies Act, 2013, under Chapter XX, Part 1, the Bengaluru Bench of NCLT comprising of Rajeswara Rao Vittanala, Member Judicial and Ashutosh Chandra, Member Technical on Wednesday 20 January admitted the Petition by Antrix Corporation, the marketing arm of ISRO, and passed directions pending finalization of winding up of Devas Multimedia Private Limited petition.

The bench also granted time to the petitioner and respondent Devas Multimedia, to file their Replies.

NCLT has appointed the Official Liquidator, Bangalore attached to the High Court of Karnataka at Bangalore, as Provisional Liquidator for the Respondent Company.

NCLT also has directed the existing Management of Devas to extend full cooperation to the Provisional Liquidator to carry out his duties under the extant provisions of Companies Act, 2013.

The Provisional Liquidator has been permitted to initiate appropriate action, in accordance with extant provisions of Companies Act, to take control of Management of Devas and to take custody or control all the property, effects and actionable claims to which Devas is or appears to be entitled to and take such steps and measures, as may be necessary, to protect and preserve the properties of the Company and to avoid misuse of its property.

Further, the Provisional Liquidator, has been directed to strictly adhere to the extant provisions as applicable to the instant case, as mentioned under Chapter XX. Part 1 of Companies Act, 2013 (6).

The NCLT order will be without prejudice to the Parties in the pending litigation before the High Court of Delhi and the Supreme Court of India.

The case has been posted on 8 February, 2021 for further hearing.

The petition by Antrix Corporation Limited states that the then officials' of Antrix Corporation Limited ('then officials' to distinguish them from the Petitioner company and hereinafter referred to as the then officials), including its then Chairman, had executed contract dated 28/01/2005 in favour of the Respondent No. 1 Company, which was ultimately led to its termination by letter dated 25.02.2011, as it was obtained fraudulently in connivance with the then officials. Further, various Statutory Authorities have unearthed the fraud in the executing the Agreement. This fraud has been the subject matter of investigation by two premiere investigation agencies namely, the CBI and Enforcement Directorate (ED). The CBI had filed two charge sheets dated 11.08.2016 and supplementary charge sheet dated 08.01.2019. The ED had issued show-cause notice dated 06.06.2016 and 24.12.2018. Further, the adjudication order dated 30.01.2019 was passed under the Foreign Exchange Management Act, besides initiating PMLA proceedings in O.C. 703 of 2017. When the Ministry of Corporate Affairs had initiated investigation and they were proceeding to issue show cause notices to adjudicate the matter.

Government of India on 18 January had issued notification authorising Rakesh Sasibhushan, Chairman- cum- Managing Director, Antrix Corporation Limited (a Government Company) to present a petition before the National Company Law Tribunal (NCLT) for winding up of Devas Multimedia Private Limited on the grounds specified under clause (c) of Sub-section (1) of Section 271 of the Companies Act, 2013 (18 of 2013).

The petition by Antrix states that the then officials of Antrix Corporation Limited, including its then Chairman, had executed contract dated 28/01/2005 in favour of the Respondent No. 1 Company (Dewas), which ultimately led to its termination by letter dated 25.02.2011, as it was obtained fraudulently in connivance with the then officials. Further, various Statutory Authorities have unearthed the fraud in the executing the Agreement. This fraud has been the subject matter of investigation by two premiere investigation agencies namely, the CBI and Enforcement Directorate (ED). The CBI had filed two charge sheets dated 11.08.2016 and supplementary charge sheet dated 08.01.2019. The ED had issued show-cause notice dated 06.06.2016 and 24.12.2018. Further, the adjudication order dated 30.01.2019 was passed under the Foreign Exchange Management Act, besides initiating PMLA proceedings in 2017.

It is further stated in the petition that the Petitioner itself a victim of the fraud and corruption, to which its then Chairman and other officials were party, and on account thereof has suffered an Arbitral Award dated 14.09.2015, passed in Case No. 18051/CYK titled as Devas Multimedia Pvt. Ltd. Vs. Antrix Corporation Ltd. into more than half a billion dollars, which with inter 4/15 to more than a billion dollars today. The Petitioner has preferred an Application before the Hon'ble High Court of Delhi, against the impugned Arbitral Award dated 14.09.2015, and various Criminal and other penal proceedings are presently underway, under the Prevention of Corruption Act, 1988, the Indian Penal Code, 1872, the Prevention of Money Laundering Act, 2002 ('PMLA) and the Foreign Exchange Management Act, 1997 ("FEMA), against the individuals/entities concerned, including CMD and Directors of the Respondent No. 1 company, as well as the then Secretary to the Government of India in the Department of Space, and other government officials.

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## Police officers behind fake ISRO spy case should be tried for treason: #JusticeforNambiNarayanan

#### **Lalit Shastri**

The IB officials and kerala police officers along with their bosses, who had framed S Nambi Narayanan in the ISRO espionage case, are guilty of sedition and should be tried and sentenced to death.

This is the view shared by few of those who have been closely associated with ISRO and Indian's space programme. The CBI had held that the then top police officials in Kerala were responsible for Nambi Narayanan's illegal arrest.

On September 14, 2018, the Supreme Court of India had set up a three-member panel headed by Justice D.K. Jain, a former Supreme Court judge, and directed the Kerala Government to pay Rs 50 lakh as compensation to Nambi Narayanan. The High-level probe panel has submitted its report to the apex Court on Nambi Narayanan's illegal arrest in the ISRO espionage case.

Distinguished ISRO scientist Nambi Narayanan was most diabolically accused in the ISRO espionage case by a number of Police and Intelligence Bureau officers, including IB's Ratan Sehgal, who was later caught spying against India for CIA and has now settled in the USA. He was very close to former Vice President Hamid Ansari. Sehgal was supported to the hilt by superiors officers and was allowed a smooth exit from service in 1996, when he was caught clandestinely meeting CIA officials in Delhi.

Former Gujarat Police Chief RB Sreekumar, is another police officer, who was in IB in 1994 when Nambi was accused of selling classified information about the cryogenic engine to foreign agents. Sreekuumar was also after the Modi led Gujarat Government and was instrumental in blowing up the 2002 Gujarat riot and Ishrat Jehan encounter cases. He had even filed a defamation and criminal conspiracy case against Narendra Modi (when he was the prime ministerial candidate), Rajnath Singh (Union Defense Minister and the then BJP President) Nambi Narayanan and BJP spokesperson Meenakshi Lekhi, accusing them of hatching a conspiracy and raising the issue of the ISRO spy case ahead of the 2014 Lok Sabha election.

## Police officers behind fake ISRO spy case should be tried for treason: #JusticeforNambiNarayanan

In May 1992, a key Senate committee had voted to block further U.S. economic aid to Russia if Moscow went ahead with a \$250-million rocket sale linked with the India's cryogenic engine development programme. This was against India's interst as India's efforts to acquire the Cryogenic engine from Russia was aimed at putting it's space programme at another level by advancing from the PSLVs to GSLVs.

Distinguished scientist and former Advisor in the Department of Space Tapan Misra in an article published by Newsroom24x7 on Monday 5 April has written: He (Nambi) was the father of Vikas engine, still the workhorse liquid engine of PSLV and GSLV. Unfortunately we could not improve upon it till now. When he was dragged into the spy scandal, he was leading the development of cryo engine. Tapan Goes on to add that he discretely enquired of him and from grassroots to top people -rather every one concurred about his seminal contributions and him, being definitely with leadership quality suitable for future Chairmanship. In later dates, when his experience matured about inner workings of ISRO, in the fag end of his career, Tapan understood his twin qualities: exemplary leadership and very significant contribution to indigenising critical space technologies, but this became his own nemesis. He became the target of foreign agents and their cohorts hiding in our midst. After all, the best way to weaken a scientific organisation is to eliminate inspiring leaders, with proven track record of building new things in the country itself, says Tapan after a long innings with India's Department of Space.

Tapan further writes – He (Nambi) was sent to police custody, subjected to inhuman torture for months to extract confession. I am sure, senior police officers would have enrolled themselves in the stratagem. The worst part was the indifference of his colleagues and bosses to his predicament.

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Though not directly connected, but the finger of suspicion as far as act of ommission or commission is concerned, also points to former ISRO Chief Kasturirangan, especially from what Nambi revealed earlier in an interview. In Nambi's own words:

"April 1994, K Kasturirangan assumed office as the chairman of ISRO. I was the deputy director of VSSC. Our director was the senior-most person eligible for the post of chairman, and I had expected a promotion as director. I had informed the chairman in advance that I will opt for VRS if I don't get the promotion. I submitted the VRS application on August 1994 and the espionage case was registered on October 20".

Before entering into an agreement with NSIL, Pixxel had announced last year that their first satellite was scheduled to be launch towards the end of the 2020 on a Russian Soyuz rocket. According to available information, it is after this that ISRO and NSIL brought Pixxel on board by offering them financial benefit/incentive for launching their satellite through PSLV C51.

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#### Check

GoI orders winding up of Devas after a US Court had ordered payment of \$1.2 billion compensation



Newsroom24x7 Network

**New Delhi:** Three-months after the western District Court of Washington ordered for enforcement and payment of \$1.2 billion compensation to Devas, the Central Government has authorised Rakesh Sasibhushan, Chairman- cum- Managing Director, Antrix Corporation Limited (a Government Company) to present a petition before the National Company Law Tribunal (NCLT) for winding up of Devas Multimedia Private Limited on the grounds specified under clause (c) of Sub-section (1) of Section 271 of the Companies Act, 2013 (18 of 2013).

Under Section 271 of the Companies Act, a company may, on a petition under section 272, be wound up by the Tribunal. Clause (c) of this section specifies – on an application made by the Registrar or any other person authorised by the Central Government by notification under this Act, the Tribunal is of the opinion that the affairs of the company have been conducted in a fraudulent manner or the company was formed for fraudulent and unlawful purpose or the persons concerned in the formation or management of its affairs have been guilty of fraud, misfeasance or misconduct in connection therewith and that it is proper that the company be wound up.

Once Devas gets wound up there will be no entity left to demand compensation.

#### **Lalit Shastri**



The Prime Minister's Office (PMO) has been grappling with attempts to reform Indian Space Research Organisation (ISRO). Many Parliamentary committees have recommended separation of the post of Secretary Department of Space and Chairman ISRO. Perhaps there is no other organisation in Government of India where a subordinate office controls the main department as it happens in the case of Department of space and ISRO. The result is that ministerial control and parliamentary accountability gets diluted. The chairmanship of the Space Commission under the chairman ISRO has been taken as a virtual Carte Blanche to push it's own agenda. Seldom are the user departments consulted or a comprehensive review done on where is ISRO vis-a-vis other space faring nations in terms of technologies. A lot many satellites have been launched with 2 to 5 years lag in setting up of ground segments. The recent aborted GISAT-1 launch too falls in the category of disconnect with user departments. The undue weightage given to ISRO vis-a-vis Department of Space has lead to a go-by to procedures, proper project management and monitoring. After all Department of Space is the custodian of procurement and financial control. It is precisely due to these reasons that scandals such as Antrix-Devas happen. Post Devas, a slew of measures were implemented but with the passage of time they have been by-passed or diluted. Department of Space is a pale shadow of itself with a demoralised and sidelined bureaucracy. It is time to bifurcate the top post in ISRO and to codify it's selection and promotion policy and put it on the net. No institution can grow without public accountability. The same is true of the newly formed directionless New Space India Ltd and Antrix Corporation. The PMO has to bell the cat.

## Lalit Shastri



An Indian start up operating out of Bengaluru with the brand name Pixxel, promises 24-hour global coverage with hyperspectral imaging. They want to deploy constellation of 30 small satellites for this purpose. The startup company has been founded by two young graduates from BITS Pilani. Their first satellite is slated to be launched through PSLV C51 in second half of February 2021.

PSLV-C51, which is the 53rd mission of PSLV, will launch Amazonia-1 of Brazil as primary satellite and 20 Co-passenger satellites from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota. The launch is tentatively scheduled at 1023 Hrs IST on February 28, 2021, subject to weather conditions.

PSLV-C51/Amazonia-1 is the first dedicated commercial mission of NewSpace India Limited (NSIL), a Government of India company under Department of Space. NSIL is undertaking this mission under a commercial arrangement with Spaceflight Inc. USA.

The 20 co-passenger satellites include one from ISRO (INS-2TD), four from IN-SPACe (three UNITYsats from consortium of three Indian academic institutes and One Satish Dhawan Sat from Space Kidz India) and 15 from NSIL.

Within days of Pixxel entering into a formal collaboration with NewSpace India Limited, ISRO announced that Pixxel's first satellite Anand will be launched in its PSLV-C51.

On the launch of communication satellite 'CMS-01' onboard PSLV-C50 on 17 December 2020 from Sriharikota, ISRO Chairman K Sivan had announced that the upcoming PSLV-C51 mission will be fruition of the space reforms recently introduced in the country."

Sivan, who was addressing scientists from the Mission Control Centre after the successful launch of communication satellite "CMS-01", said: "The first satellite 'ANAND' from a start-up called Pixxel India, is going to be launched."

Doubt rose how could Pixxel, a startup, build their satellite and payload so fast without even having previous experience. A research of news reports do not throw up any photograph of their satellite building facility.

Newsroom24x7 did a research and found out that Pixxel Space Technologies, Inc. is registered with the U.S. Security and Exchange Commission and was incorporated in 2019 and registered on 22 July 2020. It is understood that all its data downloading and dissemination facilities are in USA or some other country but not in India.

Pixxel Space Technologies Inc is founded by Naseem Alduri Awais Ahmed and Khandelwal Kshitij Gokul. Both of them are also founders of Syzygy Space Technologies Pvt Ltd, founded on 27 March 2019 and registered in Bangalore as subsidiary of a "Foreign Company" with a paid up capital of Rs 10,000.

From available information, it appears there is an undisclosed US Company behind Sygyzy Space Technologies.

It is learnt that Pixxel, USA filed with the US Government on 26 June 2020 for clearance for data transmission in SBand for their hyperspectral imaging Cubesat. It means that they will receive their data only in USA and not in India.

Questions are being raised in knowledgeable circles and it is being alleged that PIXXEL is a front of an undisclosed US Company, masquerading as Indian start up with the romantic story of a 22 year old greenhorn CEO. The foreign company angle raises serious doubts and there is total lack of transparency with regard to data reception and its dissemination, especially whether or not India will have full control in this matter. Since it is being pointed out that the start up is designed to avail the launch by PSLV at throw away cost, available for Indian start ups, there is need for investigation to find out whether the Pixxel project is designed to save launch cost taking advantage of ISRO's concession for start ups.

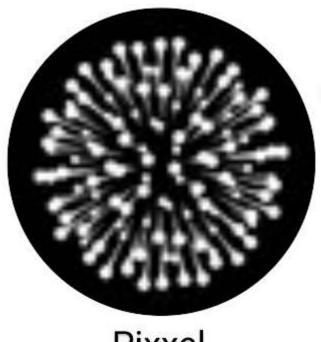
Space Commission clearance was sought for launch of 1st PIXXEL satellite at throwaway price with concession (Rs. 5 lakh per launch as per rumour) along with Rs. 1 lakh as testing charge. The satellite is a 1ftx1ftx1ft size. So we expect a mass of around 10 kg. With typical cost of launch of min. Rs 21 lakh per kg, the cost of launch will be around Rs. 2 cr minimum.

It is learnt that Member Finance Department of Space (DoS) Sanjeev Kumar, IAS, placed on record his objection as PIXXEL is a foreign company. Now the proposal for launch of satellite is said to have been passed for Sygyzy Space Technologies without mentioning that it is a subsidiary of a foreign company.

Charges are flying, some ISRO insiders have alleged that those at the helm of India's apex space agency are hand in glove with a foreign company to hoodwink the Indian Government. They are wondering is this another Antrix-Devas like scam.

**Postscript**: "Expansion in the United States is a priority," .... "A lot of our agriculture and oil and gas customers are based there." – Pixxel CEO Awais Ahmed to *SpaceNews* in August 2020 (check hyperlink for SpaceNews report on Pixxel, it's American dream and the projection that Pixxel is an Indian startup).

#### Newsroom24x7 Network



Pixxel

Newsroom24x7 had conducted investigation and found out that Pixxel Space Technologies, Inc. is registered with the U.S. Security and Exchange Commission and was incorporated in 2019. All its data downloading and dissemination facilities are in USA or some other country but not in India. We had reported this, when ISRO and more particularly K Sivan, Secretary Department of Space and ISRO chairman, had announced that the PSLV C51 mission (Taking off on Sunday) is a special mission as it will launch a satellite from Pixxel Space called Anand from its Firefly fleet of earth observation satellites.

On the launch of communication satellite 'CMS-01' onboard PSLV-C50 on 17 December 2020 from Sriharikota, the ISRO Chairman had announced that the upcoming PSLV-C51 mission will be fruition of the space reforms recently introduced in the country."



Dr. K. Sivan, Chairman, ISRO/Secretary, DOS as Chief Guest inaugurated Pixxel's office at Bangalore on 20 January in.

Addressing scientists from the Mission Control Centre after the successful launch of communication satellite "CMS-01", Sivan had said: "The first satellite 'ANAND' from a start-up called Pixxel India, is going to be launched."

Point to be noted is that within days of Pixxel entering into a formal collaboration with NewSpace India Limited, ISRO had created hyperbole around the announcement that Pixxel's first satellite Anand will be launched in its PSLV-C51.

The objection we had raised was that Anand -the Pixxel satellite – was being launched through ISRO's PSLV C51 at a subsidised cost on the pretext of encouraging an Indian startup under the Policy reforms for the Space Sector introduced by the Indian Government.

After our exclusive news story was published and days before the scheduled launch of PSLV C51 on Sunday 28 February, Pixxel announced that they were calling off the launch of their satellite for now due to technical reasons.

Subsequent investigation by Newsroom24x7 to establish that Pixxel is a company incorporated in the US has revealed that Awais Ahmed Nadeem Alduri, CEO Pixxel Space Technlogies, Inc. ("Pixxel") had submitted under 15 C.F.R. § 960.5(b), the following license Public Summary of the private remote-sensing spacecraft license that the National Oceanic and Atmospheric Administration's National Environmental Satellite, Data and Information Service ("NESDIS") issued Pixxel on March 20, 2020 (Pixxel PX2019Public Summary of Private Remote L1).

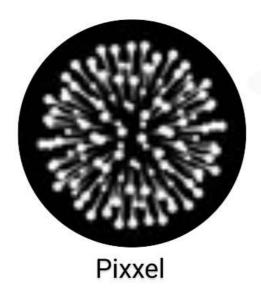
The mailing address and telephone number of the licensee Pixxel Space Technologies, Inc. provided by the company was 3260 Hillview Ave, Palo Alto, CA 94304 USA +1 (301) 379 4511 https://pixxel.space and its and affiliate or subsidiary was Syzygy Space Technologies Private Limited 677, 1st Floor, 13th Cross Road, 27th Main Rd, 1st Sector, HSR Layout, Bengaluru, Karnataka, 560102, India +91 96119 47866.

The relevant NESDIS license authorizes Pixxel to operate a private electrooptical hyperspectral Earth imaging satellite over which Pixxel will maintain operational control. The satellite is called Anand and the spacecraft will be in a sun synchronous orbit operating at an altitude of 530-600 km and 97-98 deg inclination.

The name and address given by Pixxel for receiving mail and services provided to the US licensing authority was as follows: Ken Sunshine, Chief Operating Officer, Pixxel Space Technologies, Inc. 3260 Hillview Ave, Palo Alto, CA 94304 USA +1 (301) 379 4511 ken@pixxel.space

### Pixxel abandons satellite launch through PSLV C51

Newsroom24x7 Network



**Bengaluru**: In the midst of a raging controversy, Pixxel, on Tuesday 23 February, cited "some software issues" as the reason and called off the much hyped and publicised launch of its satellite through ISRO's PSLV later this month.

It was in the fag end of 2020 that Pixxel had signed an agreement with NewSpace India Limited (NSIL), a state-run company under Department of Space, to launch the country's first private remote-sensing satellite on an ISRO PSLV rocket. The announcement in this regard got entangled into huge controversy as news spread that ISRO chief K Sivan was going out of his way to offer the satellite launch facility to a US based company at subsidised rates on the pretext of encouraging Indian startups.

Newsroom24x7 was the first to expose that Plxxel is registered as a company in the US and is not an Indian start up as it was being projected by ISRO and more particularly the ISRO Chief.

"The Department of Space is happy to have one of India's leading private space start-ups, Pixxel, onboard with this mission. We realize the potential that Pixxel's earth imaging satellites have to solve some pressing issues of our time and we are looking forward to a positive outcome from this launch," Department of Space Secretary and ISRO Chairman K. Sivan had said in the statement last year.

## ISRO is silent about Lander Vikram; Chandrayaan-3 and Gaganyaan are the new focus



ISRO Chairman, Dr. K Sivan and the Scientific Secretary, Umamaheswaran, at the inauguration of Pixxel's new Bengaluru facility.

Before entering into an agreement with NSIL, Pixxel had announced last year that their first satellite was scheduled to be launch towards the end of the 2020 on a Russian Soyuz rocket. According to available information, it is after this that ISRO and NSIL brought Pixxel on board by offering them financial benefit/incentive for launching their satellite through PSLV C51.

Sources have informed that the PMO and the Cabinet Secretary took strong exception and told the ISRO Chief and the Scientific Secretary, ISRO, to charge Pixxel on commercial.basis.

In a statement published on twitter on 23 February Pixxel has said: "Due to certain software issues that surfaced during the final satellite testing, we have decided not to proceed with our launch on the PSLV C51 mission scheduled for the 28th of this month. Given the time and effort that has gone into making the satellite, it did not make sense to rush a satellite to launch in which we do not have complete condence (confidence?) at this time. We have thus decided to push aur launch by a few weeks, reevaluate the satellite software, and test it rigorously over the next few weeks as we look for the next closest launch opportunity.

## ISRO is silent about Lander Vikram; Chandrayaan-3 and Gaganyaan are the new focus

We would like to specially thank the ISRO, IN-SPACe and NSIL teams for the immense support they have been to us during this entire endeavour. From making testing facilities available to our satellite to providing support over the entire launch campaign. the help has been very encouraging to see We wish the PSLV C51 mission the absolute best as it takes off on 28th Feb, 2021, albeit without us.

We'll keep you posted as we gear up for the launch."



ISRO Chairman K Sivan addressed a press meet at the ISRO headquarters in Bengaluru on 1 January 2019

An official ISRO communiqué, based on a press meet addressed by the chairman of the organisation K Sivan and released by ISRO on Wednesday 1 January, sums up the achievements of India's Apex Space research organisation during the year 2019 without a word about the Chandrayaan-2 Mission that was supposed to be 98 per cent successful as claimed by the ISRO chief and widely publicised by the media immediately after all contact had been lost with Lander Vikram moments before its scheduled touchdown on the lunar surface on 7 September 2019.

## ISRO is silent about Lander Vikram; Chandrayaan-3 and Gaganyaan are the new focus

Sivan had lost no time in telling the world that the Lander had been located and efforts were on to re-establish contact with it. ISRO also had announced in black and white that "Vikram lander has been located by the orbiter of Chandrayaan-2, but no communication with it yet. All possible efforts are being made to establish communication with lander".

When NASA released pictures in the first week of December to indicate that the Lander had crashed and broken up into pieces, Sivan again went on record stating that there was nothing new in what NASA had projected since ISRO had located the Lander much earlier. Till now neither Sivan nor his organisation has laid bare before the people of India any proof to establish the basis for this announcement. ISRO also has failed to show any video of the Lander's separation from the Orbiter.

A fact that should not be lost track of in this connection is that even the **Department of Space press statement projecting the achievements of ISRO during the year 2019 is silent about the Lander** and talks only about GSLV-MKIII M1 and the Orbiter.

Matters have reached such a pass that people have started asking if Vikram Lander had even been launched. The best ISRO can do to dispel such doubts, even if they are unnecessary and uncalled for, is that it can release pictures or videos of the Lander's separation from the Orbiter and also give proof of what formed the basis of the claim by ISRO that the Lander had been located. Any "strategy" on the part of ISRO to hold back evidence would cause irreparable damage to the image and reputation of ISRO's leadership. The going forward approach is remarkable but it would be an ideal situation only if one doesn't get the impression that efforts are on to cover up the tracks. The ghost of Devas-Antrix scam and the issue of compensation linked with it already continues to haunt ISRO and also those in knowledgeable circles.

ISRO reported earlier that the Vikram Lander followed the planned descent trajectory from its orbit of 35 km to just below 2 km above the surface. All the systems and sensors of the Lander functioned excellently until this point and proved many new technologies such as variable thrust propulsion technology used in the Lander. The success criteria was defined for each and every phase of the mission till 7 September, and it was claimed that 98% of the mission objectives had been accomplished and would continue to contribute to Lunar science, notwithstanding the loss of communication with the Lander.

Taking at its face value Sivan's claim in terms of percentage of success visa-vis Chandrayaan-2 (At IIT Bhubaneshwar convocation, ISRO chief said that Chandrayaan 2 mission has achieved 98% success), question arises, why ISRO has now chosen to go silent about its achievement when it comes to the variable thrust propulsion technology and the systems and sensors associated with the Lander and also the success linked with its separation from the Orbiter. ISRO's silence is most intriguing and cannot be ignored. The ISRO leadership will have to be held accountable in this matter.

A Press Meet was organised on January 01, 2020, at ISRO Headquarters, Bengaluru on the New Year's Day. Addressing media persons, **Sivan** outlined ISRO's achievements during the last one year and also the plans to be accomplished during the current year.

According to the ISRO chief, **Chandrayaan-3 mission to the moon,** comprising a lander and a rover has been approved by the **Government and activities for its realisation are in progress.** 

Sivan said that Chandrayaan-3 mission will have a lander and a rover, but not an orbiter. This gives rise to the question whether Chandrayaan-3 will have the same lander that was not sent along with Chandrayaan-2 orbiter when it was decided to send both the orbiter and the lander with the Chandrayaan-2 Mission. In that case, it would not be a major leap forward when it comes to building and launching Chandrayaan-3 in 9 months and at the projected low cost.

Talking about **India's first human space flight mission Gaganyaan**, Sivan said "We've made good progress in the mission. The process of Astronaut selection for the mission is completed". He further added that four astronauts have been selected, who will undergo extensive training.

#### **Achievements of 2019**

**During 2019, six launch vehicle and seven satellite missions were realiSed by ISRO**. The year also marked the 50th launch of the Polar Satellite Launch Vehicle (PSLV). Sivan said that two new variants of the PSLV were introduced. For the first time, the spent fourth stage of the PSLV was successfully demonstrated as an experimental orbital platform. Indigenously developed Vikram processor by Semi-Conductor Laboratory was flight tested during the year. International mobile standards body 3rd Generation Partnership Project (3GPP) approved India's regional navigation satellite system NavIC which would facilitate NavIC's use in mobile phones.

On the capacity building front, a second launch port, exclusively for the Small Satellite Launch Vehicle (SSLV), is planned to be established in Thoothukudi district, Tamil Nadu. "Land acquisition activities are presently in progress", said Sivan. A second Vehicle Assembly Building in SDSC SHAR Sriharikota was dedicated to the nation during the year for increasing the launch frequency. As part of the enhanced outreach activity, a launch viewing gallery was operationalised in Sriharikota to facilitate viewing of launches live by the public.

In an effort towards horizontal expansion of ISRO, Space Technology Cells, Space Technology Incubation Centres and Regional Academic Centres for Space were established during the year and many more such centres are planned in the future. A special programme for school children called "Yuva Vlgyani KAryakram (YUVIKA)" aimed at imparting basic knowledge on Space Technology, Space Science and Space Applications was also introduced during the last year.

To carry forward the industry production of space systems, **ISRO** incorporated New Space India Limited (NSIL), under the Department of Space and efforts in realising PSLVs from industry initiated.

Other projects during the year include SSLV, GSLV with 4m ogive payload fairing, GSAT-20 satellite, NavIC with indigenous atomic clocks, Indian Data Relay Satellite System, Aditya-L1 and XPOSAT.

Postscript: ISRO is talking of Chandrayaan-3 and Gaganyaan but with regard to remote sensing, there is no word about operationalisation of RISAT 2B series radar imaging satellites. There is no word about the fate of performance of much touted Cartosat 3A satellite. Who will talk about the performance audit of ISRO's payloads and satellites is needed by an independent agency?

Between 2009 and 2019 India has spent over Rs. 4000 crore on a series of navigation satellites (NavIC). One failed and a replacement had a launch failure. These satellites have a short life span. The much touted desi GPS has nothing on the ground – neither in terms of civil or military applications and use. The crux of the problem is that ISRO went full steam ahead and started launching the satellites in the Indian navigation system in quick succession, without bothering to ensure the chip sets required for ground support were also developed simultaneously to roll out the services that could be availed on mobile handsets just like the United States' Global Positioning System (GPS) and Russia's Global Navigation Satellite System (GLONASS) are fully operational GNSSs, with China's BeiDou Navigation Satellite System (BDS) and the European Union's Galileo.

Planetary missions like aditya L1 are also delayed. Such delays are leading to waste of resources and wrong priorities.

#### **Read more**

#### Lalit Shastri



We have a situation where a top post was degraded and instead of a senior officer at the Additional Secretary level holding fort as Financial Advisor in DoS and ISRO, an officer at the Joint Secretary level was posted there. It is learnt that even the present Joint Secretary and FA, Anoop Shrivastava, an Indian Defence Accounts Service officer, has sought and got premature repatriation as he was unable to work with the present ISRO leadership.

ISRO has been in news and in sharp focus in recent months, especially due to the failure of Lander Vikram to softland on the lunar surface on 7 September this year.

If ISRO had succeeded in achieving this goal, India would have become the fourth country to make a soft landing on the Moon's surface.

Notwithstanding the end result, what is most unfortunate is that ISRO has become a target of criticism and ridicule more due to the ISRO chairman's controversial remarks and the public stance of ISRO on the fate of Lander Vikram.

ISRO was quick in going public and telling the world that there was a hard landing, the Lander had been located and efforts were on to rebuild contact with it

There was total gloom at the ISRO control facility in the early hours of 7 September, when in the presence of the Prime Minister, people glued to their TV sets had watched with bated breath how the Lander trajectory graphically represented on a big screen suddenly went tangent from its linear course and came to a halt moments before the scheduled touchdown. Few hours down the line (8 September), K Sivan, the ISRO Chairman had said that the Vikram lander was located by Chandrayaan-2 and efforts were being made to restore contact.

After some gap of time, it was revealed by NASA, on the basis of the "findings of a Chennai based techy", that the Moon Lander had crashed and broken up into pieces. This was followed up by ISRO telling the world that there was nothing new in what NASA was highlighting since they had much earlier located the Lander. Question that remains to be answered by ISRO is where 's the proof for what they have been claiming. Why no photographs or a video of the Lander's undocking from the Lunar Orbiter have been made public till now.

Only an objective probe will find answers to the questions regarding Chandrayaan-2 and what led to the Lander's failure.

There are also many lapses that should make the citizens of India, who fund ISRO's working, sit up straight. In April 2018 there was an innocuous notice published on the ISRO/Department of Space Website. The notice referred to an application dated 1 July 2016 filed by one Jupiter Satellite India Limited for securing an Indian orbital slot at 104 degrees East longitude to provide Ka-band services for broadband beams covering the Indian mainland and Andaman and Nicobar Islands. The notice was put out by CAISS, the Committee for Administration of the Indian Satellite System. To the uninitiated, the notice made no sense but on delving deep, *Newsroom24x7* came to the obvious conclusion that it was the making of another Antrix-Devas.

Process is on to offer Ka-band services without auction: Is it a backdoor deal?

Responding to a specific query in 2018, ISRO had replied that it had only the post of Secretary while other Apex scale posts were approved by the Appointments Committee of the Cabinet "as and when required". The organization ducked the question conveniently as to whether the posts are sanctioned or not. Usually up to the level of Joint Secretary, the power to create posts vests in the Finance Minister. Above that it is the Union Cabinet that decides. In the Merit Promotion scheme practiced by Department of Space, and Department of Atomic Energy, there is a cap at the level of Director or at the Jt Secretary level. But beyond that, successive Chairmen have created and operated posts with impunity. In fact in every proposal sent by the Department of Space to the DoPT in this regard, on the basis of peer review done by secretary Atomic Energy and Chairman ISRO, the first line has always conveyed the lie that the Department of Space has "two sanctioned Posts in the Apex Scale". Its at the whims of these top functionaries that the apex scale is awarded to a scientist they wish to see as the next ISRO chairman and in the process, often due to personal biases the meritorious are left out.

#### Decline of ISRO

Giving a go-bye to quality assurance, to increase launch frequency appears to be the main reason why Indian Space Research Organisation's (ISRO's) GSAT-6A mission ended in failure. According to ISRO insiders, the duration of pre-shipment checks was being cut short only to increase launch frequency as every chairman was after glory. ISRO is collectively guilty and the top man more so.

Two days after India's Geosynchronous Satellite Launch Vehicle (GSLV-F08) launched GSAT-6A Satellite into Geosynchronous Transfer Orbit (GTO) on 29 March 2018, the authorities confirmed they had lost contact with the powerful communications satellite designed to improve communication for Defence forces.

#### Losing contact with GSAT-6A puts ISRO authorities in dock

The successful launching of a series of satellites in India's ambitious navigation satellites system (NavIC) by ISRO notwithstanding, those running and administering India's space programme owe an explanation to the nation and they will have to tell the people of this country why there has been so much delay in making the desi GPS a reality.

Between 2009 and 2019 India has spent over Rs. 4000 crore on a series of navigation satellites (NavIC). One failed and a replacement had a launch failure. These satellites have a short life span. The much touted desi GPS has nothing on the ground – neither in terms of civil or military applications and use. The crux of the problem is that ISRO went full steam ahead and started launching the satellites in the Indian navigation system in quick succession, without bothering to ensure the chipsets required for ground support also developed simultaneously to roll out the services that could be availed on mobile handsets just like the United States' Global Positioning System (GPS) and Russia's Global Navigation Satellite System (GLONASS) are fully operational GNSSs, with China's BeiDou Navigation Satellite System (BDS) and the European Union's Galileo. This is more merely a lapse but has led to criminal waste of public money. Those responsible will have to be identified and held accountable.

# Desi GPS: Space Application Centre lacks priority at great cost to the nation

The Chairman ISRO is also Secretary Department of Space. The main objective of DoS is to harness space technology for national development, while pursuing space science research and planetary exploration. Its Mission is to Design and develop launch vehicles and related technologies for providing access to space; design and develop satellites and related technologies for earth observation, communication, navigation, meteorology and space science; run the Indian National Satellite (INSAT) programme for meeting telecommunication, television broadcasting and developmental applications; spearhead the Indian Remote Sensing Satellite (IRS) programme for management of natural resources and monitoring of environment using space based imagery; provide Space based Applications for Societal development; and carry forward Research and Development in space science and planetary exploration.

The lofty goals notwithstanding, we have a situation where a top post was degraded and instead of a senior officer at the Additional Secretary level holding fort as Financial Advisor in DoS and ISRO, an officer at the Joint Secretary level was posted there. It is learnt that even the present Joint Secretary and FA (27 November 2017 onward), Anoop Srivastava, an Indian Defence Accounts Service officer, has sought and got premature repatriation as he was unable to work with the present ISRO leadership.

**Postscript:** There is simmering discontent in ISRO. The Prime Minister must intervene to stem the rot and prevent a world class organisation from declining.

#### Lalit Shastri

Indian Space research Organisation, popularly known as ISRO, continues to be in news for some time now, especially due to the ambitious Chandrayaan-2 Mission.

The main objectives of the Chandrayaan-2 Vikram Lander were to demonstrate the ability to soft-land on the lunar surface and operate a robotic rover on the Moon surface to explore the "unexplored South Pole of the Moon". The primary purpose of this mission, according to ISRO" was to "expand the lunar scientific knowledge through detailed study of topography, seismography, mineral identification and distribution, surface chemical composition, thermo-physical characteristics of top soil and composition of the tenuous lunar atmosphere, leading to a new understanding of the origin and evolution of the Moon".

Unfortunately moments before landing on 7 September 2019, all signals from the Lander had stopped and till now there is no trace of the Vikram Lander.

During the moment of failure, when gloom had descended at the Control facility at the ISRO headquarters, K Sivan, the ISRO Chairman, had wept and Prime Minister Narendra Modi had consoled him while stating that failure should not disappoint as the road to success, when it comes to scientific advancement, is marked by failure and the human ability and determination helps in charting the course of success.

Notwithstanding the words of encouragement from the Prime Minister when ISRO had failed completely in meeting the principal objective of Chandrayaan-2 Mission, the ISRO chief lost no time and went about telling the media that the Mission was 98% successful.

#### 98% success gimmick

Prior to the Lander's scheduled "soft landing on Moon", Sivan also tried to build up his image using his media managers to project himself as a poor farmer's son. But this gambit failed as many poor farmer's sons and daughters in ISRO started giving interviews. He was so sure of success that he built up a crescendo. When things failed he lied to the nation and the Prime Minister that lander was intact and only communication had been lost. Whereas, ISRO insiders have revealed that actually the Lander had hit the lunar surface at the speed of jet aircraft and probably broken into small pieces beyond recognition. In this backdrop, Sivan had tried to claim that Lander had a hard landing and it had also been imaged and was intact. Though he never released a photograph. When NASA images started raising doubts regarding his claims, he started playing the 98% success gimmick. When he was caught pants down with his empty claim, he started posing as a simple scientist who flies in Indigo in cattle class, not in business class. It is to be noted that Indigo domestic flights have no business class. In reality, he insists on flying in business class whenever business class is available, including during foreign trips, which he never misses.

There is sharp resentment against Sivan's working as ISRO chief. It is being said that he just cannot tolerate bright colleagues and that he has destroyed the work culture of ISRO by demolishing the middle level leadership. It has been revealed that he almost transferred around 100 engineers in the name of reorganising ISRO HQ. He has been charged of replacing capable leadership with his henchmen who will do his bidding. He has appointed 4 directors of IPRC, LPSC, IISU and SDSC with the paramount qualification – they belong to the same community to which he belongs.

In his quest for usurping all the credit of Chandrayan-2 and perhaps also to grab the Padma award, he had delayed the Chandrayaan-2 programme by two years though all the elements were ready in early 2017. The delay was to ensure the two main architects – Mylswamy Annadurai, who is called the Moon Man due to the success of Chandrayaan 1 in 2008, was retired and the director Space Application Centre was thrown out and given an innocuous posting.

Sivan saw to it that Annadurai was not given an extension of tenure though he had extended tenures of many less qualified persons like Diwakar and Nageswar Rao. He even instructed his colleagues not to attend Annadurai's farewell. Even Sivan himself did not bother to attend it nor did he invite Annadurai to witness Lander's landing on Moon on 7 September 2019.

In order to justify the delay, the cryogenic engine earmarked for Chandrayaan-2 was burnt down by 30 % overdrive against specification of 10%; its weight was unnecessarly increased to justify change of launcher from GSLV Mk II to Mk III; the configuration of Chandrayaan-2 Lander was changed from 4 thrusters to 5 thrusters, which finally led to its failure.

There was a feeling among ISRO leadership that Modi will lose 2019 election and in place a new government will come. So in place of giving credit of Chandrayaan-2 to an "outgoing PM", they wanted to gift Chandrayaan-2 to the new Government and a new PM. So they made all excuses to delay the launch beyond election. They thought they will placate the new Government and get mercy in criminal cases. But unfortunately, for these people Narendra Modi became the PM again. Now there was a rush to placate Modi but unfortunately the Lander became a failure.

Inquiries have revealed that Sivan had tried to stall indigenous High Throughput Satellite HTS GSAT 11, a brain child of the Director, Space Application Centre. The aim of recalling GSAT 11 from launch pad in Kourou in French Guiana was to get it destroyed and bringing in Hughes make Jupiter HTS in the same slot at a huge cost and huge national security risk. As the Director SAC had opposed the recalling of GSAT 11 from French Guiana without any valid technical reason, he was removed from post of Director, SAC and was replaced by DK Das.

As no fault could be found, to save face Sivan was forced to launch GSAT 11 by Dec 2018 by Arianespace. But it extracted a huge price by forcing ISRO to launch two satellites, GSAT 31 and 32 at a cost of Rs. 950 crore. If they were launched by GSLV, the cost would have been Rs. 400 crore.

ISRO insiders point out that Sivan was installed by DEVAS lobby or gang (as they call it). It comprised of MG Chandrashekhar of DEVAS (MGC), and former Chairmen of ISRO Kasturi Rangan, who is also called the Godfather of MGC, and Kiran kumar (MGC's nephew). It is alleged that the Devas lobby saw to it that ISRO loses the Antrix-DEVAS case by putting forward a weak defense and employing lawyers not capable of the task. The Permanent Court of Arbitration (PCA) tribunal at The Hague in 2016 had found that the action of "annulling a contract between Devas and Antrix and denying Devas commercial use of S-band spectrum constituted an expropriation" by the Government of India was illegal. the International Chamber of Commerce's International Court of Arbitration (ICA) had earlier ruled against Antrix, for "unlawfully terminating" Devas-Antrix agreement in 2011, and had directed Antrix to pay \$672 million plus an annual interest at 18 per cent post award.

This looks like a neat swindle game by successive chairmen of ISRO. In this swindle Sivan played master role. He even tried to take control of DEVAS papers from ANTRIX by unsuccessfully trying to dislodge its CMD and closing down ANTRIX.

A set of criminal investigations of grave defalcation and criminal actions also are going on in ISRO . These are apart from the DEVAS case.

Sivan is known in ISRO circles as "Kejriwal of ISRO". He gained promotions riding on other shoulders and then junking them as he climbed the ladders of promotion. He was project director of only one GSLV mission which exploded over SHAR on 24 Dec 2010. People say, he fails wherever he is involved.

**Postscript:** Sivan could have called Annadurai for review when Chandrayaan-2 Lander failed.

Regarding the Antrix-Devas case, it should be noted that MG Chandrasekhar attended former Director U R Rao Satellite Centre (URSC) Sivakumar's funeral on 13 April this year where he met Sivan, Kiran Kumar and others. This was not reported to the Government or the CBI. He has been evading CBI and ED summons but even a simple look out notice has not been issued. He keeps travelling in and out of India from the USA. Sivan also is in direct regular contact with Madhavan Nair and is manauvering for out of court settlement in the Devas-Antrix case.

#### Newsroom24x7 Network

What prevents ISRO from seeking a Cabinet sanction for a number of Apex scale posts and promoting all their Center Directors to that scale and then making a fair and equal selection for the post of Chairman? Accelerated pushes are taken care of in the Merit Promotion Scheme in place which rewards outstanding contributions through a process of peer reviews. To manipulate it at the top reeks of favoritism, nepotism and a subversion of laid down procedures. This is what Newsroom24x7 has been highlighting rather than belittling ISRO's achievements. If the community is so sensitive to criticism, it should have the capacity to introspect when mistakes are done and order mid-course corrections. – Lalit Shastri, Editor-in-Chief, Newsroom24x7

One person with username Balki and email ID ssbalki@hotmail.com has issued a rebuttal to the exclusive news story titled "Decline of ISRO", published by Newsroom24x7 on the working of ISRO.

We are reproducing the text by Balki. What he wrote is as follows:

**Dear Mr Lalit,** First of all, kindly note that there is no decline wrt (with respect to) ISRO either in its activities or efficiency. This is the only govt. organisation in India that is up to date technology in bringing benefits to its people, all by itself through indigenisation during the last four decades. Yes, a few actions taken by the present chairman could give a feeling of negativity. I'm sure that you are fed with wrong and malicious info by some at senior level as one of the affected has given an interview to NDTV, if I'm correct. Whomsoever has given has betrayed the organisation through which he or she has grown. Nothing wrong in appointment of any senior as advisor and it should not be seen with a squinted eye. This has happened with many directors in the last two decades, though I don't want to name anyone. Also please note that the previous chairman's term couldn't have been extended as he had crossed 65 and the youngster and smarter seniors had to be given a chance and hence it's not a blunder. The present chairman is one of the best or the best, I can say as he is very knowledgeable and a simple character. In my opinion, no one should be given extension beyond their superannuation, due to the same reason started above and in this regard, there is nothing wrong wrt previous URSC director's retirement. The Apex level posts though not available, the capable ones are elevated to shoulder the responsibility for the larger and bigger space missions in the forthcoming years, nothing wrong though I agree that the accelerated pushing could've brought in some amount of discontentment among the other scientists which need to be corrected by the present chief.

Your article straight away discredits which is unfair in my opinion. I'd like to see your open response without any favour or support to anyone.

#### Lalit Shastri¹ (Editor-in-Chief Newsroom24x7) responds:

There was no attempt to run down a great organization based upon the instigation by some disgruntled senior in ISRO.

Newsroom24x7 has always highlighted ISRO's achievements in the past. However it does not mean blind adulation of whoever is in the driver's seat, irrespective of what he or she does. There are some factual inaccuracies in your rebuttal.

# What prevents ISRO to seek Cabinet approval for more Apex scale posts

Newsroom24x7 had filed questions under the RTI many months back and not just at the happening of this incident. Many scientists are in the habit of bending rules to their advantage and in the past events like the Antrix-Devas embarrassment would not have happened if organisations of the stature of ISRO had stuck to their own rules and procedures.

As regards extension for A.S. Kiran Kumar, you may not be aware that the rules for the Chairman were amended during Madhavan Nair's tenure to make the retirement age as 66 years. I would have appreciated your view point if somebody junior and smart had been made the Chairman. Dr Sivan had crossed 60 years of age and was on an extension. By granting a non-sanctioned apex scale, a myth is sought to be perpetuated that he was already in the Secretary's scale and that it was not a promotion. The same myth was perpetuated for his two predecessors.

What prevents this august organisation (ISRO) from seeking a Cabinet sanction for say a number of Apex scale posts and promoting all their Center Directors to that scale and then making a fair and equal selection? Accelerated pushes are taken care of in the Merit Promotion Scheme in place which rewards outstanding contributions through a process of peer reviews. To manipulate it at the top reeks of favoritism, nepotism and a subversion of laid down procedures. This is what Newsroom24x7 has been highlighting rather than belittling ISRO's achievements. If the community is so sensitive to criticism, it should have the capacity to introspect when mistakes are done and order mid-course corrections.

Please see my earlier write-up on What ails ISRO

Also Check: Losing contact with GSAT-6A puts ISRO authorities in dock

#### **Lalit Shastri**

A few weeks ago an innocuous notice appeared on the ISRO/Department of Space Website. The notice referred to an application dated 1 July 2016 filed by one Jupiter Satellite India Limited for securing an Indian orbital slot at 104 degrees East longitude to provide Ka-band services for broadband beams covering the Indian mainland and Andaman and Nicobar Islands. The notice was put out by CAISS, the Committee for Administration of the Indian Satellite System. To the uninitiated, the notice makes no sense but if one delves deeper it is the making of another Antrix-Devas<sup>1</sup>.

Newsroom24x7 did some research. Some years back when the SATCOM Policy (Satellite Communication Policy) was formulated by the Government, it incidentally was not put on ISRO's website till recently. Under the policy, an operator can set up an Indian satellite system on fulfilling certain conditions. Once a satellite is procured or launched whether from India or abroad, the control station has to be brought inside India within a year and they are subject to Department of Telecom and Ministry Information and Broadcasting norms and control. The orbital slot if procured from another sovereign country has to be transferred to the Indian administration. The operator would thereafter pay royalty and other fees to the Government of India.

It is to be noted that orbital slots are allotted by International Telecommunications Union (ITU) to countries and not companies. ITU is the United Nations specialized agency for information and communication technologies – ICTs. This body allocates global radio spectrum and satellite orbits. Now here lies the catch. The orbital slot has been applied by India which has priority. In many countries, the orbital slots are auctioned off to satellite operators for a finite period to operate their services. In the case of Jupiter, a company registered with the Registrar of Companies in India, the matter has been hanging before 2016 and its application had been rejected by the Government.

Ka-band is a new band opening for high speed Internet services and ISRO plans to put in orbit the GSAT 11 which has developed a glitch before launch from Kourou, French Guiana. The already launched GSAT 19 is still to get its gateways and ground stations in place. This part of the business is highly lucrative and in Jupiter's favour as they have their systems ready though the launch and operationalisation is perhaps a few years away.

# What prevents ISRO to seek Cabinet approval for more Apex scale posts

According to available information, a procession of bureaucrats, technocrats and ex-chairmen of ISRO did not touch application in question even with a barge pole. Jupiter, which has links with Hughes of the USA, then began lobbying and there was tremendous pressure from officials in Department of Telecom and at other places to grant the approval. After initiating the process for according in-principle approval, the application has been put on the website for objections. The Prime Minister perhaps was never apprised of this issue. In the Antrix-Devas deal an orbital slot in S-band was given in the most opaque manner. The latest oblique move smacks of the same reasoning. An expression of interest should have been first put out enumerating the available slots followed by an auction as decreed by the Supreme Court. Otherwise, it smacks of a back-door deal. Will the PMO please take note and have this matter examined independently threadbare?

<sup>&</sup>lt;sup>1</sup> Antrix Corporation Limited is a Public Sector Undertaking and is an arm of the Department of Space, Government of

# Losing contact with GSAT-6A puts ISRO authorities in dock

#### **Lalit Shastri**

Giving a giving a go-bye to quality assurance, to increase launch frequency appears to be the main reason why Indian Space Research Organisation's (ISRO's) GSAT-6A mission ended in failure.

Two days after India's Geosynchronous Satellite Launch Vehicle (GSLV-F08) launched GSAT-6A Satellite into Geosynchronous Transfer Orbit (GTO) on March 29, 2018, the authorities confirmed they had lost contact with the powerful communications satellite designed to improve communication for Defence forces.

According to ISRO insiders, the duration of pre-shipment checks was being cut short only to increase launch frequency as every chairman was after glory. ISRO is collectively guilty and the top man more so. Inquiries revealed that the associate director of ISRO Satellite Center (ISAC) is also the Quality Assurance Head. This should never be the case as under such a scenario there is bound to be conflict of interest.

Reliability & Quality Assurance Team of ISAC is supposed to be the nodal unit in formulation of "Quality Systems, procedures and guidelines and ensuring their compliance, for the realization of highly reliable Spacecraft Systems. Reliability & Quality Assurance activity is spread across the entire project life cycle and is a continuous process".

During orbit raising, satellite power system goes into safe mode and switches to battery power. This time, somebody seems to have goofed up leading to the blowing up the power bus. It was pointed out in internal reviews but the warning signals were by-passed and go ahead for the launch was given. The ISRO Nano Satellites (INS) series, envisioned for future science and experimental payloads, has a history of failures. In Indian Regional Navigation Satellite System (IRNSS) – NavIC (IRNSS series), also failures have been there in satellites but nobody has bothered to revisit the design for an objective assessment of causes leading to the failures. GSAT -19, which still has no ground segment after 6 months of launch, also had a transmitter failure.

# Losing contact with GSAT-6A puts ISRO authorities in dock

Incidentally the satellite lost this time (GSAT-6A) was for military communication at border and remote areas using hand held terminals. The same frequency was originally contracted to Devas. It is rather unfortunate that ISRO was bartering surreptitiously such an important satellite frequency and orbital slot to Devas..

For more on Devas check:

Antrix-Devas Agreement, national security and CBI; and CBI registers case in the huge Antrix-Devas scam

ISRO insiders told Newsroom24x7 that there should be an independent fact finding by a non-scientist into the failure of the GSAT-6A mission.

The March 29 launch of GSLV was its twelfth and took place from the Second Launch Pad at Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota, the spaceport of India.

ISRO built GSAT-6A as a communication satellite to provide mobile communication services through multi beam coverage. For this, the satellite was equipped with S and C band transponders. This Satellite was scheduled to be commissioned into service after the completion of orbit raising operations and its positioning in the designated slot in GSO following in-orbit testing of its payloads.

#### **Lalit Shastri**

Serving and retired ISRO chiefs are getting Y category security cover each at a cost of about Rs. 60 to 70 lakh per year. Their security cover, includes one car plus one escort car and this facility is being extended to them for life.

Former ISRO chiefs K. Kasturirangan, G. Madhavan Nair, K. Radhakrishnan, and A. S. Kiran Kumar are all in the same boat in terms of security cover. Shailesh Kumar, who was with earth sciences and headed ISRO for a short term this January, has got no security.

It is learnt that one of the the first things K. Sivan, the new ISRO chief, did after assuming office this January was that he shot a letter to the ministry of Home Affairs asking when he would be getting the Y category security cover, which he also promptly got. What needs explanation is that Ministry of Home Affairs is supposed to do a periodic review and reduce security cover from Y to X to zero but it is not happening.

In addition there are so many Center, Programme and Group heads – for example there are scientists doing more sensitive and security related operations like heading the Brahmos Programme – who really need this cover but never get it.

It is being pointed out in knowledgeable circles that "a day before taking over as ISRO chief there was no threat to Sivan's life but everything changed the very day he took up the high profile assignment which mainly involves the task of placing satellites in orbit. On the other hand we have scientists doing more sensitive and security related operations like heading the BRAHMOS programme but such scientists go without any security."

On the issue of security to former ISRO chiefs the lid is off as one of them is now under the CBI net. The principal investigation agency of Government of India has registered an FIR against G Madhavan Nair, ex-Secretary, Department of Space and former Chairman ISRO along with others under Section 120-B r/w 420 of IPC and Section 13(2) read with 13(1) (d) of Prevention of Corruption Act, 1988 & substantive offences for allegedly being party to a criminal conspiracy with an intent to cause undue gain to themselves or others by abusing official positions (by public servants) and causing loss to Antrix Corporation Ltd and ISRO by lease of INSAT Transponders capacity on GSAT 6 & 6A satellites to an accused Bangalore based Private Multimedia Company.

Investigation by CBI is continuing regarding issues of demand of S-Band frequencies by other users including Ministry of Defence for strategic purpose & DoT; DVB-SH Technology developed by ETSI and the affairs of USA based company, FDI received and funds transferred from the accounts of Bangalore based private company into the foreign accounts and offences under criminal breach of trust by public servants.

It is learnt that ISRO continues to foot the bill for the escort vehicles provided to Madhavan, who is an accused in the criminal conspiracy case linked to his tenure as ISRO chief.

# Who Shrunk ISRO | Newsroom24x7

#### **Lalit Shastri**

Newsroom24x7 has published a series of exclusive stories exposing how leadership deficit in ISRO has retarded the progress of India's space programme in recent years. We have also unearthed scams and serious irregularities in ISRO – most of it during the tenure of Dr K Sivan, the Present Secretary Department of Space and ex-officio Chairman ISRO. After repeated extensions in service, everyone connected with ISRO is now asking wheher or not Sivan, who was given a one-year extension last year, will get one more extension. Sivan is due to retire on 14 January 2022.

Sivan can be given another extension only for 6 months as he cannot remain in Government of India service after attaining the maximum permissible age of 65.

Questions are being asked in knowledgeable circles whether or not Sivan would himself seek or accept extension for another six months because everyone knows that if he takes extension, he would be playing the most uncomfortable role of presiding over the disbanding of a lot that has been built over long years by committed and ditinguished scientists for ISRO and India's space programme. For the gullible all this would be normal since private players have been allowed entry into the space sector and, with passage of time, no one will ask "Who shrunk ISRO". The knowledgeable would prefer to ignore and the less informed will never know that approval for private sector participation by the Modi Cabinet was approved apparently by:

- falling standards of leadership when it came to steering India's space programme coupled with intolerance of bright colleagues
- poorer mission quality (like poor image quality and mispointing of many flagship remote sensing satellites)
- mission failures like Chandrayan 2 lander and GSAT 6A
- NAVIC atomic clock failure
- public spectacle of attempt to stall India's first HTS GSAT 11, which ultimately had to be launched but with escalated cost
- loss in focus in application of remote sensing data and stalling the easy availability of Remote Sensing data to multiple users
- lack of action in Gaganyaan programme.

# Who Shrunk ISRO | Newsroom24x7

The present ISRO leadership has falsely tried to take the credit for the space sector reform process set in motion by the Cabinet presided by Prime Minister Modi. In fact, the present dispensation virtually scuttled the privatisation move and had issued only an expression of interest in 2019. It also closed the small satellite program and virtually killed most of the societal applications.

Furthermore, when the Space Sector is being opened up, it needs, along with a strong legal framework, a regulatory mechanism that should not become a sinecure for retired ISRO scientists. It is also necessary to ensure there is no geo-spatial information cartel of ex-ISRO functionaries.

At the same time, an institution like ISRO should not be broken up and allowed to get swallowed by corporates that are eyeing it's considerable manpower, assets and intellectual property.

Already we have a scenario where Indian National Space Promotion and Authorization Center (IN-SPACe) has been set up to act as an autonomous body, under Department of Space (DoS), as a single window nodal agency for enabling and regulating space activities and usage of ISRO facilities by NGPEs.

- Importantly, IN-SPACe will work out a suitable mechanism to offer sharing of technology, expertise and facilities on free of cost wherever feasible or at reasonable cost basis to promote NGPEs.
- IN-SPACe will act as an autonomous body, under DOS, as a single window nodal agency for enabling and regulating space activities and usage of ISRO facilities by NGPEs.
- IN-SPACe will also permit establishment of facilities, within ISRO premises, based on safety norms and feasibility assessment.
- The marketing, sharing and dissemination of remote sensing data shall be governed by Remote sensing policy. Each application requiring examination as per new policy will be examined and permitted by IN-SPACE factoring legal and security aspects.
- The decision of IN-SPACe shall be final and binding on all stakeholders including ISRO. NGPEs will not be required to seek separate permission from ISRO.

# Who Shrunk ISRO | Newsroom24x7

It is too well known that many satellites were launched by ISRO with 2 to 5 years lag in setting up of ground segments. The aborted GISAT-1 launch exposed the disconnect with user departments. The lid is now off as the termination of funding and projects by user departments and security agencies a couple of months ago has put a question mark on the continuity in service of about of 6000 engineers beyond March 2022. According to available information, these enginners, working on adhoc basis, have got a temporary lease of life due to funding available from Government of India's consolidated fund. In the meanwhile all ISRO launches have been put on the backburner and there is a strong likelihood that under the prevailing cicumstances, senior engineers and scienstists would be left with no option but to seek voluntary retirement.

#### Newsroom24x7 Network

ISRO's present leadership crisis perhaps could have been avoided had former ISRO chief Kiran Kumar not refused an extension. Now Sivan being given an extension appears to be an internal maneuvering to keep certain distinguished scientists from getting into the leadership race and an attempt to perpetuate mediocrity.

Lalit Shastri, Editor-in-Chief Newsroom24x7, exposed the leadership crisis in ISRO and warned against maneuvers to drive out distinguished scientists from the leadership race in this prestigious organisation during a free and frank talk on the Newsroom24 Youtube Channel on Sunday 21 February 2021. We are publishing the video transcript.

Prime Minister Narendra Modi on Saturday 20th February 2021 said: "Many of the restrictions vis-a -vis geospatial data have been lifted. Liberalisation of geospatial data will benefit technology and the startup sector and give the youth the flexibility to work from anywhere, the Prime Minister underscored. He was addressing the NITI Ayog Governing Body.

Union Minister for Atomic Energy and Space, Dr.Jitendra Singh had earlier told Parliament on 10th February that 26 Companies/startups have approached ISRO for technical guidance and facility sharing for their space activity. On the issue of whether Indian telecom service providers or manufacturers have started using the home built GPS system, Singh told Parliament that Major mobile chipset manufacturers (Qualcomm, Mediatek) have released NavIC enabled mobile processors that were a mandatory requirement. The point to be noted is that it is only now that the Government of India has informed Parliament that NavIC capability have been released in the Indian market. This has been followed up by the Prime Minister announcing that the long awaited Geospatial data related restrictions also have now been lifted.

The ISRO Annual Report 2019-20 says on page 49, "the entire ground segment and its components have been established and the segment is operational". Even in terms of the user segment, the ISRO report said that with the satellite constellation established, the NavIC is now fully available for position navigation.

Regarding NavIC capability, question arises, why this delay in fully utilising the Space Segment which consists of eight satellites-three in geostationary orbit and five in inclined geosynchronous orbit. These satellites have been launched over a span of many years and they have a limited life-span. The issue is why the full potential of these satellites has not been utilised from the day they were put in orbit. The problem vis-avis the communication satellites gets compounded further by the fact that ISRO has not met a large part of its commitments to the Government of India's user departments.

A lot of the delay when it comes to meeting the goals and objectives of India's space programme are directly linked to the ISRO leadership.

According to ISRO insiders, Dr K Sivan, the ISRO Chairman, who has recently got a prolonged extension in service, has never built any flight hardware. He was involved in Mission software simulation for routine prediction of launch trajectory. He has no patent to his credit. He hardly has any publication. He was also not involved in any project management job except once as Project Director of GSAT F06 that too ended in the worst failure in ISRO's history. GSAT F06 exploded just above SHAR on 24th December 2010. Along with it was lost precious communication satellite GSLV F06 carrying GSAT 5P (24 Ku band and 12 extended C band transponder) as replacement of aging INSAT 3E. No inquiry was conducted into this disaster and consequently responsibility also was not fixed.

Those in knowledgeable circles are also pointing their finger at what they call the Devas-ISRO mafia that weakened the standing of the then ISRO Chairman Dr. K Radhakrishnan as a result of what they describe as deliberate sabotage and destruction of GSLV in 2010 thereby forcing Radhakrishnan to listen to the Devas men and the recommendation of the one-man committee under BN Suresh, who is known in ISRO circles as Sivan's Godfather, who gave a report on DEVAS deal and based on this report, the deal was nullified on 24th Jan 2012, paving the way for DEVAS to file for compensation. It is entirely a different matter that the Government of India has now taken steps to close the Devas compensation chapter by seeking to nullify the company's registration. On Devas issue, what needs to be underscored is that everyone, including Kasturirangan had favoured Devas.

The Chandrayaan 2 fiasco is another big failure staring the present ISRO chairman in the face.

Matters did not end at this, everyone in ISRO is raging over what insiders are describing as backdoor recruitment of K Sivan's son as Engineer/Scientist "SC" in Liquid Propulsion Systems Centre of ISRO in a hurried manner just before Sivan got a one year extension of service beyond January 14, 2021.

Sivan is also in the midst of a major controversy these days for inviting Pixxel, a company formed by two young Indian engineers and registered in the US to launch their satellite through ISRO's PSLV-C51. Within days of Pixxel entering into a formal collaboration with NewSpace India Limited, ISRO announced that Pixxel's first satellite Anand will be launched through PSLV-C51 tentatively scheduled for take off on February 28th 2021. On the pretext of carrying forward the Government of India policy to encourage startups and the Atmnirbhar Bharat programme, ISRO, through NewSpace India Limited, entered into a deal with Pixxel, an American company, that was about to launch its satellite through the Russian Soyuz and invited them to use PSLV at a much subsidised rate. This was even objected to by the Member Finance, Department of Space, since Pixxel was a foreign company. At this stage, attempts are being made to bring Pixxel on board PSLV again through the backdoor by entertaining "Syzygy Space Technologies Pvt Ltd", a company registered in Bangalore as a subsidiary of some "Foreign Company" by the founders of Pixxel – without this company having any track record as a "start-up" at least in the form of a proper facility to build a satellite in India.

ISRO's present leadership crisis perhaps could have been avoided had former ISRO chief Kiran Kumar not refused an extension. Now Sivan being given an extension appears to be an internal maneuvering to keep certain distinguished scientists from getting into the leadership race and an attempt to perpetuate mediocrity.



#### Newsroom24x7 Network



After a section of the media has come out with reports alleging irregularity in the appointment of Siddharth S, the son K Sivan, Secretary Department of Space and Chairman ISRO, as scientist/engineer 'SC' in ISRO's Liquid Propulsion Systems Centre (LPSC), Valiamala, LPSC has issued a press statement reiterating that all the posts recruited in LPSC are strictly as per established procedures and norms laid out by the Department.

Click for LPSC press release

The LPSC press release is silent on the allegation of nepotism and favouritism with regard to the selection of the ISRO chairman's son as scientist/engineer 'SC'.

Click for Newsroom24x7 report

Since a complaint has been lodged in this regard with the Central Vigilance Commission, it would be appropriate to wait for the outcome of investigation by CVC in this matter.

#### Lalit Shastri





K Sivan, Chairman ISRO

There has been gross irregularity in recruiting Secretary DoS & Chairman ISRO Dr K Sivan's son in Liquid Propulsion Systems Centre (LPSC) of ISRO, Department of Space, and this has been done throwing established procedures and norms to the wind.

# Recruitment scam puts ISRO leadership in dock

The Liquid Propulsion Systems Centre (LPSC), ISRO, Department of Space, Valiamala, Thiruvanthapuram, had issued Advertisement no. LPSC/01/2020 for Post no 738 of Scientist Engineer 'SC' { Level 10 (Pay Matrix: ₹56,100 – ₹1,77,500)} at LPSC units located at Valimala Thiruvanthapuram and at Bengaluru.

For post 738, the qualification required as per the advertisement was "B.E/B.Tech or equivalent in Electronics & Communication Engineering + M.E/M.Tech or equivalent in VLSI & Embedded Systems". Interested candidates were asked to visit the website <a href="http://www.lpsc.gov.in">http://www.lpsc.gov.in</a> for detailed information and filling-up on-line application form. The on-line recruitment portal was available from 1400 hrs on 27 October 2020 to 1400 hrs on 9 November 2020.

Siddharth S, the son of Dr. K Sivan, Secretary Department of Space and Chairman ISRO, has been selected for this post. His rank is 2nd in the merit list of the selected candidates.

Among those selected, the first in the order of merit is Lakshmi Prasad and in the 3rd position is Padmaprabha VR.

As per available information, there is no requirement of M Tech VLSI in LPSC and no one has been recruited so far in LPSC with this qualification (Very large-scale integration or **VLSI** is the process of creating an integrated circuit).

The qualification mentioned in the **ISRO advertisement perfectly matched with that of Siddharth S.** This glves rise to the apprehension that the advertisement was tailor-made for a particular candidate.

It is learnt, the LPSC Director was in absolute hurry to fill the post as the retirement of Dr Sivan, the candidate's father, was due on 14 January 2021 and at that point of time, it was also being anticipated that the Director LPSC could be transferred to Vikram Sarabhai Space Centre (VSSC).

Question arises why this recruitment was not taken up in the general recruitment through ISRO Central Recruitment Board (ICRB), which follows the process of screening, written test and interview.

Accusations are flying as in the present case, only interview was held.

# Recruitment scam puts ISRO leadership in dock

It is also being pointed out that Director LPSC, Dr. V Narayanan is from the same community and also hails from the same village as Dr. Sivan. Under the circumstances, *it is not just a matter of conflict of interest in recruitment, but a case of favouritism and conspiracy to benefit the Secretary DoS-cum- Chairman ISRO and his son.* 

The matter calls for thorough investigation for the sake of probity and accountability in an organisation like ISRO that spearheads India's Space Programme.

A complaint in this matter has been lodged with the PMO as well as Central Vigilance Commission.

# Is there a sinister plot to knock out merit in ISRO



#### **Lalit Shastri**

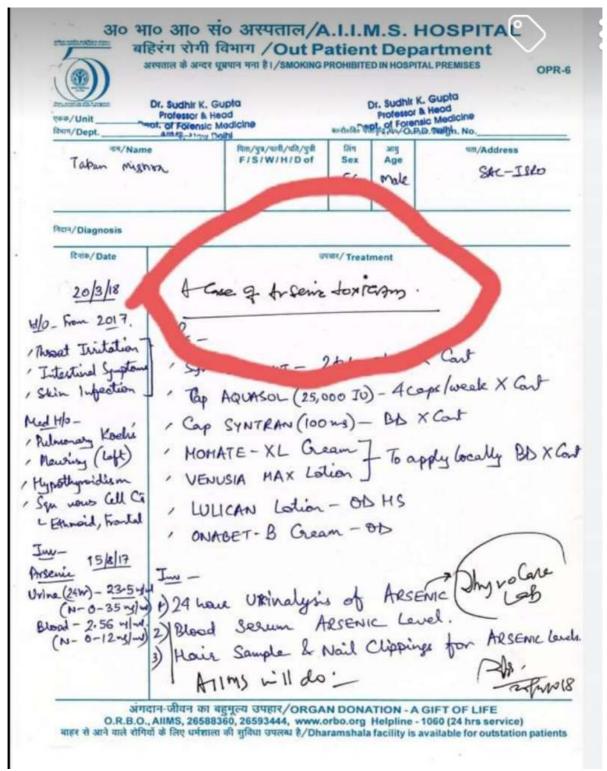


Of late ISRO is abuzz with a lot of rumours regarding the impending extension of the present Chairman and the succession plan in case the Union Government decides on a change of guard. If one goes by media reports, there appears to be a sinister plan to sabotage both merit and seniority by killing two birds with one stone.

As it is, ISRO is reeling under massive budget cuts with major missions on hold, transfer of all government assets to the newly formed NSIL leading to a dwindling revenue receipts of the Department of Space (DoS), along with dwindling morale, every attempt is being made to scuttle seniority and merit. First, the senior most scientist, Tapan Misra was denied apex scale. Then the next senior most. Somnath was not accommodated in the Space Commission. The third senior most Kunnhikrishnan, who neither has seniority nor any great accomplishment, was given apex scale and moved to the Space Commission. Now an attempt is being made to get Dr Sivan, Secretary DoS and Chairman ISRO, an extension and to bring Kunhikrishnan to Indian National Space Promotion and Authorisation Centre (INSPACe) and later make him the Chairman. This will lead to large scale demoralisation and exit of senior scientists from ISRO and the government will only have itself to blame if it falls into the trap of what one could even call the scientists' mafia that appears to have a diabolic hold on the country's space programme and the departments and centres that run it.

It is for the Government to take its call

#### Newsroom24x7 Network



Tapan Misra, the distinguished scientist, who could have been the ISRO chief had it not been for the double extension granted to K. Sivan, has opened the pandora's box by revealing how he was poisoned – not once but twice – by some mysterious men obviously wanting to eliminate him and thwart the progress of India's space programme.

The distinguished scientist has also put the spotlight on the mysterious circumstances in which a couple of top scientists have died in the past. Misra wants the guilty to be identified and punished.

Within days of raising the issue of the "mysterious" men, who wanted to finish him, the top ISRO scientist has underscored through his latest post on facebook that his revelation will sensitise the society. The best way to save India's bright minds is to put up constant vigil for "these characters and their machinations", he has observed.

We are reproducing Misra's facebook post:

"When you barely manage to return from the toll gate leading to the abode of Yamaraja, not once but twice, all those positions, ornamentation, awards etc., all those barometers of social and professional achievements, hold little meaning. My motivation was to open out harsh truths, which we tend to push under carpet, which we relegate to cemetery of silence, lest our vanity and pride crumble. I hope this revelation will sensitise the society, polity and most abused community of intellectuals, so that we prevent similar misfortunes to descend on unsuspecting bright minds, who left the temptations of lucres of distant shores to contribute their mites for betterment of our country. These mysterious men are like mythical Maya mrigas, difficult to identify from the feigned demeanor. They are very capable of unleashing troll armies, plant mischievous press reports and spread insinuations. I have understood that they have tremendous resources, both men and money, at their disposals. The best way to save our bright minds is to put up constant vigil for these characters and their machinations."

Also read The long kept secret



**Lalit Shastri** 



Over the years and in public interest, Newsroom24x7 has been following closely the working and performance of the Space Headquarters that they prefer to call ISRO, and also different Centres linked with India's Space Programme and working under Department of Space.

# Leadership deficit in ISRO and Modi Government's initiative to go for Space Sector reforms

The present dispensation virtually scuttled the privatisation move and issued just an expression of interest in 2019. It has also closed the small satellite program and virtually killed most of the societal applications. In this backdrop, the present ISRO leadership is falsely trying to take the credit for the reform process set in motion by the Cabinet presided by Prime Minister Modi on Wednesday.

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The decision by Prime Minister Narendra Modi to reform the Space sector and make it vibrant and dynamic through private sector participation and the Cabinet approval given in this regard on Wednesday appears to have been necessitated by:

- falling standards of leadership when it came to steering India's space programme coupled with intolerance of bright colleagues
- poorer mission quality (like poor image quality and mispointing of many flagship remote sensing satellites)
- mission failures like Chandrayan 2 lander and GSAT 6A
- NAVIC atomic clock failure
- Public spectacle of attempt to stall India's first HTS GSAT 11, which ultimately had to be launched but with escalated cost
- Loss in focus in application of remote sensing data and stalling the easy availability of Remote Sensing data to multiple users
- · Lack of action in Gaganyaan programme.

The former ISRO chief had constituted a committee to form a consortium with the private sector to give off an already mature launch vehicle, the PSLV to the private industry. This was approved by the Space Commission and the Prime Minister had announced on the floor of the Parliament that the first Private Sector PSLV from the industry will fly in 2020. The consortium was to finally take over the production of this launch vehicle and market surplus capacity globally.

PSLV manufacture was to be in the industries' premises except final integration at Sriharikota. For satellites, the IRNSS (independent regional navigation satellite system) integration is within ISRO with manpower supplied by the industry and trained by ISRO.

# Leadership deficit in ISRO and Modi Government's initiative to go for Space Sector reforms

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As a general view of Government's fresh initiative vis-a-vis the Space Sector, it is felt that major drawbacks including dearth of ideas under the "present ISRO leadership" and its failure to make much headway in terms of initiative and employment generation are motivating factors. Also it is felt that ISRO got cloistered into only southern India, leaving a vast stretch of India alien to our space endeavour.

With the reforms now set in motion, a senior ISRO scientist remarked: "under the new order, we can safely envisage a future of space industry much beyond what ISRO could achieve in the immediate past".

Secretary Department of Space K Sivan, who just like his predecessors also calls himself Chairman, ISRO without an appointment letter from the Government to establish this credential, on Thursday 25 June repeated what had already been announced by Minister of State for Atomic Energy & Space. Sivan went live to "announce" that the Indian National Space Promotion and Authorisation Center (IN-SPACe) is being established under Department of Space as a separate vertical for permitting and regulating the activities of private industry in space sector.

IN-SPACe will act as a national nodal agency to hand-hold and promote private endeavours in space sector and for this ISRO will share its technical expertise as well as facilities, Sivan said adding IN-SPACe will have its own independent Directorates for Technical, Legal, Safety & Security, Monitoring as well as Activities Promotion for assessing the private industry requirements and further coordinating the activities.

The Secretary DoS summed up the spirit of reforms set in motion by the Government by underscoring "an open and inclusive space sector will result in accelerated growth, job creation as well as innovations and will enable Indian Space Industry to be a significant player in global space economy".

#### **Lalit Shastri**



Who created the myth called ISRO and the associated post of Chairman ISRO and why? This is a big question that the Department of Space (DoS) will have to answer in national and larger public interest.

**Newsroom24x7** has done extensive research and as per available information no Government of India order exists for the establishment of Indian Space Research Organisation (ISRO).

The Government of India web directory points to Science and Technology and on clicking that head one is taken not to the Department of Space but to the ISRO website

The **ISRO website** refers to the contribution of **Dr Vikram Sarabhai**, the founding father of the space programme in India. The introduction to the space programme and its **"Genesis"** suddenly jumps to **ISRO**, without informing details about its formation. The write up only points to how "ISRO was clear that it need not wait for its own satellites to begin application development, while foreign satellites could be used in the initial stages...."

It is relevant to state that the Indian National Committee for Space Research (INCOSPAR) was set up by Dr. Vikram Sarabhai in 1962 to carry forward the Indian Space Programme. This Committee was set up by the Atomic Energy Commission (AEC) under the Department of Atomic Energy. Dr. Homi Bhabha, was instrumental in creation of this committee.

# The myth called ISRO and the fictitious post of ISRO Chairman

ISRO website, on its page titled "Department of Space and ISRO HQ" states: "Indian Space Research Organisation (ISRO) was established in August 1969. The Government of India constituted the Space Commission and established the Department of Space (DOS) in June 1972 and brought ISRO under DOS in September 1972." It also says that the Secretariat of DOS and ISRO Headquarters are located at Antariksh Bhavan in Bangalore.

At another place, the wiki page on Department of Space says "In 1969, (INCOSPAR) was reconstituted as an advisory body under the Indian National Science Academy and the Indian Space Research Organisation was established.

The Prime Minister of India holds the portfolio of Department of Space (DoS) and under this department is the Space Commission.

Notwithstanding the pointer (by ISRO website) that ISRO was established in 1969, Newsroom24x7 has gathered that there is no speaking order by the government of India regarding the setting up of ISRO as an organisation. Question also arises, how could INCOSPAR, a Committee set up by AEC, be converted into an organisation under a separate department without a GoI order or the approval the Union Finance Ministry.

It is also intriguing as no reason has been cited and put in the public domain by ISRO to inform the people of India, why ISRO did not celebrate the Golden Jubilee of its formation in 2019.

# The myth called ISRO and the fictitious post of ISRO Chairman

#### No. 36/01/2018-EO(SM-I)

Government of India
Secretariat of the
Appointments Committee of the Cabinet
Ministry of Personnel, Public Grievances and Pensions
Department of Personnel and Training

New Delhi, the 10th January, 2018

Tripathi)

The Appointments Committee of the Cabinet has approved the proposal, based on the recommendation of the SCSC, for appointment of Dr. Sivan K, Director, Vikram Sarabhai Space Centre (VSSC) as Secretary, Department of Space and Chairman, Space Commission vice Dr. A.S. Kiran Kumar, with a tenure of three years, from the date of assumption of charge of the post, or until further orders, whichever is earlier.

Secretary /
Appointments Committee of the Cabinet
& Establishment Officer

To:-

- Cabinet Secretary.
- Principal Secretary to PM.
- 3. Additional Principal Secretary to PM.
- 4. Secretary to President of India.
- 5. Secretary to Vice President of India.
- Secretary General, Rajya Sabha Secretariat.
- Secretary General, Lok Sabha Secretariat.
- Secretary, Department of Personnel & Training.
- Secretary (Coordination & PG), Cabinet Secretariat.
- 10. All Secretaries to the Government of India (As per standard list).
- 11. PS to Home Minister.
- 12. PS to all Union Ministers.
- 13. PS to MOS (PP).
- 14. Chief Secretaries of all States.
- 15. Officer concerned.
- Cabinet Secretariat (Ms. V. Vidyavathi, Joint Secretary) w.r.t. its Dy. No. 1/24/2017-CS(A)(pt.) dated 10.01.2018.
- 17. DG (M&C), PIB.
- Editor, Civil Services News and Deputy Secretary, D/o Administrative Reforms and Public Grievances.
- 19. PSO to Secretary (P)/PPS to EO/EO(CM)/Guard File

20. NIC, DoPT.

Secretary / / Appointments Committee of the Cabinet & Establishment Officer

No. 36/01/2015-EO(SM.I) Government of India Secretariat of the Appointments Committee of the Cabinet Ministry of Personnel, Public Grievances and Pensions Department of Personnel and Training New Delhi, the 12th January, 2015. The Appointments Committee of the Cabinet has approved the appointment of Shri A.S.Kiran Kumar, Director, Space Application Centre, as Secretary, Department of Space and Chairman, Space Commission, on reemployment on contract basis, for a tenure of three years from the date of assumption of charge of the post. (B.P. Sharma) Secretary Appointments Committee of the Cabinet To :- Cabinet Secretary (Shri Ajit Seth). 2. Principal Secretary to PM (Shri Nripendra Misra). 3. Additional Principal Secretary to PM (Shri P.K. Mishra) 4. Secretary, Department of Personnel & Training (Shri Sanjay Kothari) Secretary (Coordination & PG), Cabinet Secretariat. Secretary, Ministry of Urban Development. Secretary, Department of Space. Shri A.S.Kiran Kumar. Secretary to President of India Secretary to Vice President of India. Secretary General, Lok Sabha Secretariat Secretary General, Rajya Sabha Secretariat. 13. PS to Home Minister. 14. PS to MOS (PP). 15. PS to MOS (Space) 16. Cabinet Secretariat (Ms. Nivedita Shukla Verma, Joint Secretary) w.r.t. its letter No. No.1/7/2014-CS(A) dated 12.01.2015 Addl. DG (M&C) (Shri Kuldeep Singh Dhatwalia), PIB. 18 Editor, Civil Services News and Deputy Secretary, D/o Administrative Reforms and Public Grievances. 19. All Secretaries to the Govt. of India (As per standard list). 20. Sr. PPS to Secretary (P)/PS to EO/EO(CM)/Guard File R&I for onward transmission to Sr. Technical Director, NIC, DoPT. Secretary Appointments Committee of the Cabinet

K Sivan's appointment order

A S Kiran Kumar's appointment order

Also, successive Government of India orders for the appointment of Secretary Department of Space and Chairman Space Commission do not mention or refer to the appointment of Chairman ISRO. In fact till date there is not a single GoI order for appointing any person for the post of Chairman, ISRO. There is also no standing order to establish that the Secretary DoS is the ex-officio Chairman, ISRO. As an automatic corollary to this, one could even conclude that both ISRO and post of Chairman, ISRO are myths and do not have a legal or mandatory status.

# The myth called ISRO and the fictitious post of ISRO Chairman

It needs to be emphasised that all DOS Centres were created and their manpower allocation has been done by GOI office orders, after due ratification by Ministry of Finance.

All Directors of DOS centres report to Secretary, DOS. Hence, as per GOI norms, they are to be selected by a search committee from a set of applicants both from inside and outside DOS. As per GOI norms, these selections are to be ratified by Appointments Committee of the Cabinet (ACC).

Therefore, prima facie, it appears that the vested interests have created the myth of ISRO and Chairman ISRO to subvert the GOI requirement of ACC approval for appointment of Directors of DOS Centres like Vikram Sarabhai Space Centre (VSSC), Space Applications Centre (SAC), U R Rao Satellite Centre (URSC), National Remote Sensing Centre (NRSC), and Satish Dhawan Space Centre (SDSC).

The mythical ISRO Chairman is expected to be reporting to Secretary DOS and hence ISRO Chairman's appointment should be approved by the ACC. By another myth, Secretary DOS holds concurrent position of Chairman, ISRO and hence requirement of selection of Chairman, ISRO is assumed to be met.

Another lie that has been spread is that the Centre Directors report to Chairman, ISRO and they meet under the aegis of ISRO Council, a body without any locus standii. Hence, as they (Centre Directors) are kept two levels below Secretary DOS, their appointments are not to be ratified by ACC. In the process, they are at the mercy of a "fictitious ISRO Chairman".

This irregularity was allowed to be proliferated since Satish Dhawan's tenure as Secretary DoS. Hence, all appointments of DOS Centre Directors are illegal as they flout GOI norms. In fact transfer between centres is also illegal as they also need to be ratified by GOI.

Because of this apparent falsehood, there is rampant flouting of GOI norms.

Under the prevailing circumstances, the first step towards correcting the malaise that has crept into DOS should be to ensure strict enforcement of GOI norms and bring transparency and meritocracy back to DOS to rejuvenate India's space programme.

The myth called ISRO and the fictitious post of ISRO Chairman

Newsroom24x7 has asked DoS to provide complete details regarding the establishment of ISRO and appointments of successive Chairmen of ISRO to clear all confusion regarding ISRO.



Lalit Shastri

The seniority of two distinguished ISRO scientists has been bypassed to appoint P. Kunhikrishnan as a Member of the Space Commission.

Kunnikrishnan is Director UR Rao Satellite center. Chandrayaan-2 was made there.

Kunhikrishnan's appointment order was issued this past Wednesday in a hush-hush manner. Since ISRO chairman K Sivan is on extension and on the verge of retirement, all focus now is on who would be the next ISRO chief. In the normal course, the ISRO chairman should be selected from a panel of the senior-most distinguished scientists within the organisation.

Till now, two distinguished scientists Tapan Misra, Advisor to the ISRO Chairman and S Somnath, Director Vikram Sarabhai Space Centre (VSSC), who have a brilliant track record, were in the reckoning for the top ISRO post. Kunhikrishnan is junior to both of them.

In the second fortnight of December 2019, Somnath was even promoted to the Apex Scale equivalent to the post of Secretary in Government of India duly sanctioned by the Government. Obviously therefore the selection process for the top ISRO post anytime this year would have revolved around Tapan Misra and S Somnath. Now this would not be the case as Kunhikrishnan has been elevated as Member Space Commission.

Those in knowledgeable circles are viewing this development as a coup and a backdoor entry for a relatively junior distinguished scientist, who could not been promoted to the apex scale as only one Apex Scale equivalent to the post of Secretary, besides the post of Chairman ISRO, has been been sanctioned by Government of India. It is being pointed out by sources that another scientist has been elevated as Member of Space Commission only to bring him within the realm of consideration for the top ISRO post which will soon fall vacant.

Eyebrows are being raised and it is being asked in knowledgeable circles whether or not the Prime Minister, who holds the portfolio of the Department of Space has been briefed properly in this matter.

# Leaf from the past

The Government has committed a blunder in not extending Kiran Kumar's tenure and doing a wider search for a successor. The excessive hurry in this matter, it appears, was to keep a major contender out of reckoning and to promote a rank junior so that he could be within sniffing distance of the Chairman's post when it falls vacant the next time. The government would do well to split the post of Secretary Department of Space and Chairman ISRO between a bureaucrat and a scientist to prevent concentration and misuse of power.

Lalit Shastri, Decline of ISRO, August 3, 2018 (Newsroom24x7.com)

The game is being played by bringing P Kunhikrishnan, a launch vehicle man, to the UR Rao Satellite Centre (URSC) and then by elevating him to the Apex scale, it will be shown that he is senior to others whereas the fact is to the contrary. The exposure to Launch vehicles is to pad up his CV. This has made the role of the Senior Staff Review Committee, comprising of retired scientists, suspect. Most of the retired scientists lean heavily on the incumbent Chairman for their perks, travel, honorariums, awards and security at the expense of the tax payers. No wonder such advisory bodies are not independent but mere rubber stamps. It is hoped that the Government will sit up and take note before incalculable harm is done to ISRO. In fact all the Scientists who have been shunted out to innocuous paper pushing posts from the Satellite Center are senior to the new Director. They include the first lady Project Director for satellites.

Lalit Shastri, Decline of ISRO, August 3, 2018 (Newsroom24x7.com)

Dr Sivan had crossed 60 years of age and was on an extension. By granting a non-sanctioned apex scale, a myth is sought to be perpetuated that he was already in the Secretary's scale and that it was not a promotion. The same myth was perpetuated for his two predecessors.....

What prevents this august organisation (ISRO) from seeking a Cabinet sanction for say a number of Apex scale posts and promoting all their Center Directors to that scale and then making a fair and equal selection? Accelerated pushes are taken care of in the Merit Promotion Scheme in place which rewards outstanding contributions through a process of peer reviews. To manipulate it at the top reeks of favoritism, nepotism and a subversion of laid down procedures. This is what Newsroom24x7 has been highlighting rather than belittling ISRO's achievements. If the community is so sensitive to criticism, it should have the capacity to introspect when mistakes are done and order mid-course corrections.

Lalit Shastri, What prevents ISRO to seek Cabinet approval for more Apex scale posts, (Newsroom24x7.com, August 6, 2018)

**Postscript**: Kunhikrishnan has had a career in quality inspection – an important but routine job. Next he was moved to assembly and operation of PSLV, already a proven vehicle, also more of a routine job. Normally, a suitable incumbent holding the Chairman's position should be an inspiring figure, with a track record of original and internationally acclaimed contribution, like indigenous SAR technology development. From Radhakrishnan onwards, during successive selection for the post of ISRO Chairman, the original contribution criteria was ignored and emphasis was on routine operational experience with hardly any inspiring careers to back up the final choice. This led to degradation in ISRO culture, leading to many failures, sub-optimal performance of satellites and increase in internal politics.

# Antrix-Devas Scam & What Ails ISRO