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INDIA'S SPACE DIPLOMACY: THE SOUTH ASIA SATELLITE

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Having mastered the art and science of making satellites and putting them into orbit, it was time to show the world that India can take a lead in regional cooperation. The initiative to have an exclusive communications satellite for the countries of South Asian Association for Regional Cooperation (SAARC) was envisioned in 2014 when the present government under the leadership of Prime Minister Narendra Modi embarked on a policy of engagement with neighbours, also referred to as the 'neighbourhood first policy'.¹ In June 2014, Indian Space Research Organisation (ISRO) was tasked to develop a SAARC satellite with full range of applications and services, which could be gifted to India's neighbours. This was seen as an effort towards development of SAARC countries with India playing a lead role.²

The vision took shape on May 05, 2017 with the launch of GSLV-F09 rocket from ISRO's launch facility at Sriharikota at 1657 hrs IST. The

rocket carried the satellite GSAT-9 which was successfully put into a Geosynchronous Transfer Orbit (GTO) for use by seven South Asian Countries. The satellite was built within 18 months of receiving acceptance of SAARC member nations. Though the satellite was initially called the SAARC satellite, it was renamed as South Asia Satellite (SAS) after Pakistan withdrew from the proposal and India could not reach an agreement with Afghanistan to be a part of the project.³ Presently, the countries that would benefit from the satellite are Nepal, Bhutan, Maldives, Bangladesh and Sri Lanka.

The GSAT-9 is a Geostationary communications satellite having 12 transponders in Ku-band and a coverage area over the South Asian region. One transponder is allocated to each of the participating countries. The satellite is expected to have a mission life of about 12 years. The satellite was launched onboard the GSLV-F09 which is India's

geosynchronous satellite launch vehicle. The GSLV-F09 is the fourth consecutive flight of a GSLV rocket with the indigenous Cryogenic Upper Stage (CUS) engine. GSLV can put 2 to 2.5 ton class of satellites into orbit.⁴ The successful launch is also an indication of success of the indigenous Cryogenic engines being developed by ISRO.

The satellite was built at a cost of Rs. 235 Crores and the total cost of the project is around Rs. 450 Crores which has been totally funded by the Indian Govt. This is very economical as compared to the benefits which will accrue to the participating countries, which is estimated to be around Rs. 10,000 crores during the satellite's 12 year mission life.⁵ The only cost which would be incurred by the participating countries is towards setting up of infrastructure on ground, for which India has offered to collaborate.

The benefits of having a regional satellite are enormous. Besides giving a boost to cooperation amongst participating countries, it would provide satellite communications at much cheaper costs as compared to hiring transponders on satellites of other countries. Though the data from the satellite is freely accessible, the member countries will have to build their own ground infrastructure to tap this data and provide internal networks. The other benefits include the capability to provide secure hotlines between the member nations, IT connectivity, broadcasting applications (TV),

tele-education, tele-medicine, disaster management support and humanitarian remedies. Bhutan and Maldives would be the biggest beneficiaries as they are presently devoid of any space assets. Sri Lanka, Pakistan and Afghanistan already have satellites on their inventory and Bangladesh will soon be getting their first satellite in orbit. There is a clamour for having satellites in orbit by every country and the problem of clutter in space due to limited availability of orbital slots, especially in the geostationary orbit, will only get worse. Having a common satellite and sharing of resources like the South Asia Satellite is an example that could be followed by other space faring nations in future.

Exclusion of Pakistan and Afghanistan from the benefits of the programme may have taken the sheen off the event. However, it is an opportunity missed for Pakistan. Though they have satellite communication facilities, Pakistan could have collaborated for satellite fabrication, and launch systems technology, an area where they seem to lack capability. Pakistan is known to have withdrawn due to differences in joint development, cost sharing and security concerns⁶. Afghanistan could be onboard sooner or later.

The strategic significance of the South Asia Satellite is enormous, as it has signalled a deeper integration of India with its neighbours. The push towards regional cooperation of SAARC

countries will be seen as an effort towards development of the South Asia region, with India being seen as a big brother. India is the only space faring country amongst the SAARC nations with fully developed satellite fabrication, launch and monitoring capability. Sharing the benefits accrued from the satellite will go a long way in bridging the gap between the countries of the region. What India has offered is not just its technological prowess, but also a shared future, as a developed South Asia is essential for India to emerge as a leading economy of the world. While putting a South Asia Satellite in orbit is just the beginning, sharing the services of Navigation Indian Constellation (NAVIC) could be the next step. Proactive diplomacy through space will also help in countering the growing influence of China in the neighbourhood.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹ Rajesh Ramachandran, 'Narendra Modi's push for strong relations with neighbours', July03, 2014, <http://economictimes.indiatimes.com/news/politics-and-nation/narendra-modis-push-for-strong-relations-with-neighbours/articleshow/37672918.cms?intenttarget=no>, accessed on May 07, 2017.

² BS Reporter, 'India's satellite 'gift' for SAARC to be up in Dec 2016', March 13, 2015, http://www.business-standard.com/article/current-affairs/india-s-satellite-gift-for-saarc-region-to-be-up-in-dec-2016-115031300937_1.html, accessed on May 08,2017.

³ 'India aces space diplomacy test with Modi's satellite gift to South Asia; 14 things to know', [Economictimes.com](http://economictimes.indiatimes.com/news/science/india), May 05, 2017, accessed on May 07, 2017.

⁴ 'India aces space diplomacy test with Modi's satellite gift to South Asia; 14 things to know', www.capsindia.org/articleshow/58534107.cms, accessed on May 07, 2017.

⁴ ISRO, Indian Spacecraft, <http://www.isro.gov.in/spacecraft/list-of-communication-satellites>, accessed on May 08, 2017.

⁵ Ibid, n-3.

⁶ Prabash K Dutta, 'South Asia Satellite GSAT-9: How Pakistan orbited out of SAARC space', May 05 2017, <http://indiatoday.intoday.in/story/south-asian-satellite-gsat-9-isro-pakistan-saarc/1/946325.html>, accessed on May 08,2017.