

Satellite

Video broadcasting markets in India and China: conditions and opportunities for satellite operators

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Abstract. This article analyzes satellite video broadcasting in India and China as the largest countries in the Asia-Pacific region in terms of population and economic potential. It presents the results of the author's comparative analysis of the information contained on the website lyngsat.com concerning TV channels of the two states distributed via geostationary telecommunication satellites, the number and composition of multiplexes in which they are broadcast, satellite operators that handle their distribution, the geography and some technical aspects of broadcasting. It is concluded that with a larger total number of Indian satellite television channels compared to Chinese, the latter have a wider range of distribution, which reflects the distinctive features of state policies of the Republic of India and the PRC in the development of national television systems. This article was prepared for potential use by telecommunications satellite operators studying the possibilities of offering their services to broadcasters in the two states.

According to the World Intellectual Property Organization, the Asia-Pacific region accounts for at least half of the world's television audience based on the number of television sets in use by the households while China and India rank first and second in that respect¹. It seems expedient to start media market studies with these countries from the point of view of the prospects for promoting satellite operator services, because, on the one hand, China and India have the largest population, and, on the other hand, they are among the top world leaders in terms of gross domestic product.

¹ Current Market and Technology Trends in the Broadcasting Sector: prepared by IHS Technology / WIPO Standing Committee on Copyright and Related Rights. Thirtieth Session. Geneva, June 29 to July 3, 2015. Doc. No. SCCR/30/05. Available at: https://www.wipo.int/edocs/mdocs/copyright/en/sccr_30/sccr_30_5.docx (date of access: 23.04.2021)

Figure 1 presents information on the number of satellite TV channels in India and China (including Hong Kong and Macau), obtained by the author based on a synthesis of information contained on the website lyngsat.com.²

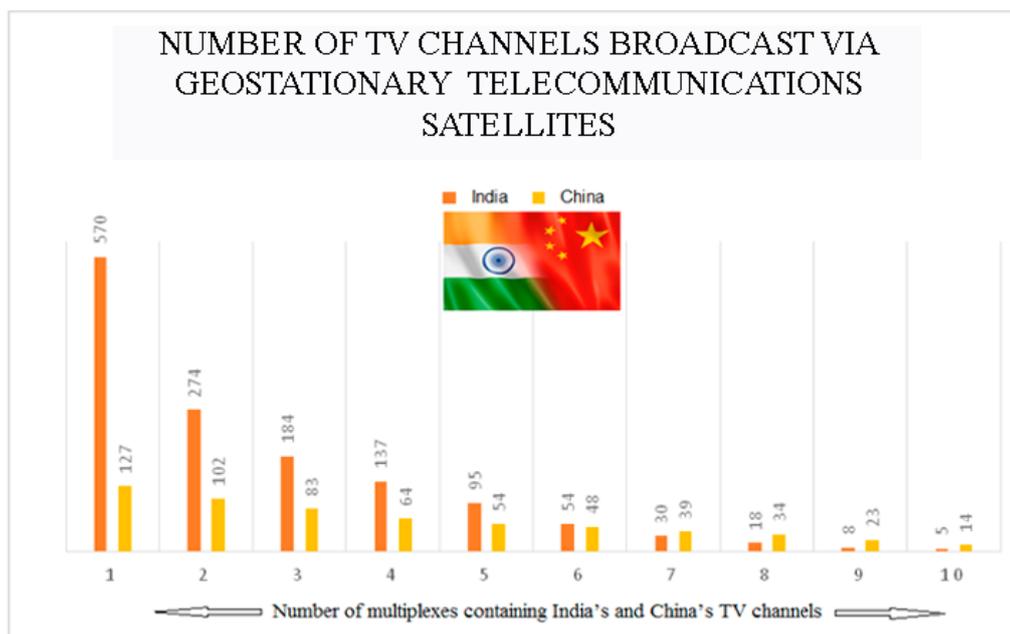


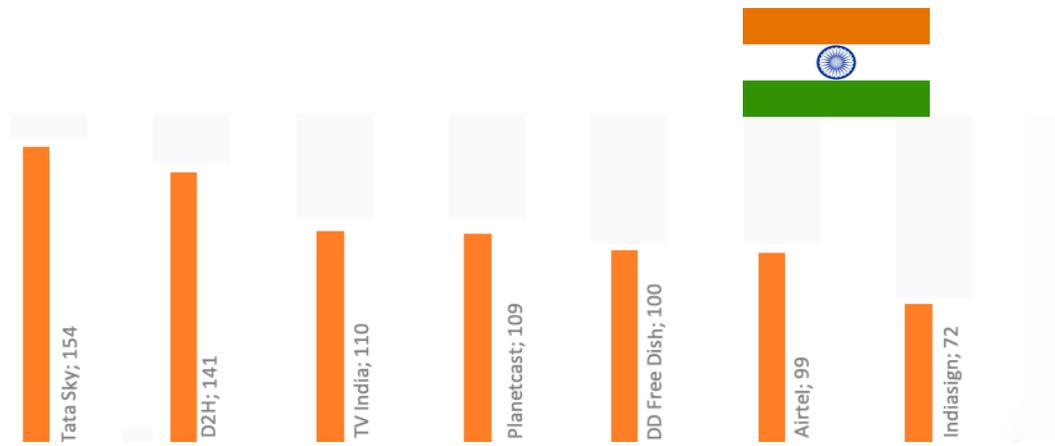
Fig. 1. Source: lyngsat.com

The information presented in the above chart shows that the number of TV channels in India distributed via geostationary telecommunications satellites is more than four times the volume of the corresponding content in China³. However, on average, Chinese satellite channels are spread more widely than Indian ones. Thus, the number of Chinese TV channels broadcast in seven or more multiplexes exceeds the number of such Indian TV channels. The total number of multiplexes, in which Indian television content is available, is about 100, while Chinese content is available in about 90 - that is, the difference between the countries is minimal.

² Here and henceforth, these two states are listed in the Russian alphabetical order

³ As of 2019, licenses for satellite broadcasting were granted by the Ministry of Information and Broadcasting of the Government of India to 839 national TV channels (Source: Annual Report 2019-20 of the Ministry of Information and Broadcasting of the Government of India. Available at: <https://mib.gov.in/sites/default/files/Annual%20Report%202019-20.pdf> (date of access: 23.04.2021))

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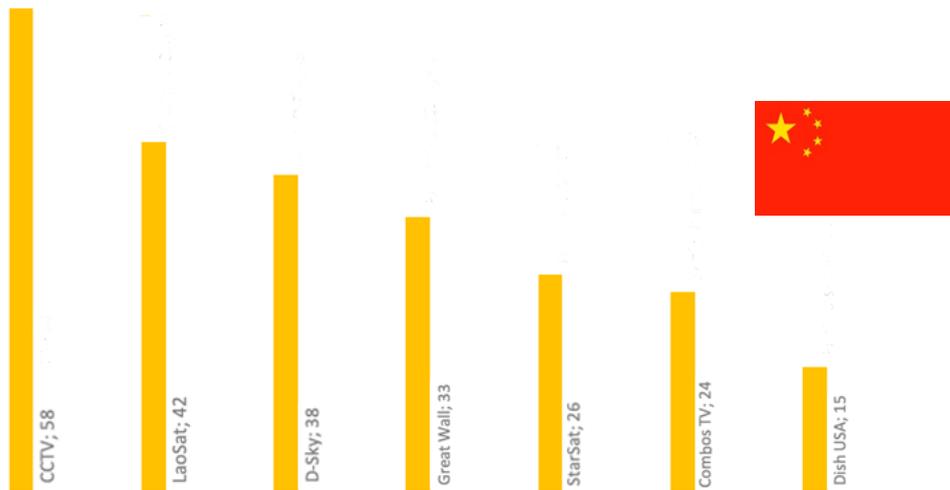


Fig. 2-1, 2-2. Source: lyngsat.com

The author believes that the contents of the multiplexes with the largest number of satellite TV channels in India and China shown in Figs. 2-1 and 2-2 reflect different approaches in these countries to distributing national content via satellite. India has generally domestic multiplexes broadcast mostly over its territory. Each of the seven multiplexes in Fig. 2-1 is composed in India. In China, a relatively small number of TV channels meant for foreign audiences, which include both China's nationals and foreign-speaking viewers, are incorporated in the maximum number of popular multiplexes. With this approach, the 'concentration' of Chinese content in multiplexes is lower than in the case of Indian TV channels. Out of the seven channels shown in Fig. 2-2, one is broadcast from Taiwan, and three from

the territories of other countries. The largest number of Chinese satellite channels available in multiplexes is 45, while for India it is only 19.

China even leaves India behind in terms of the number of operators whose satellites are used for broadcasting. In China they total 28, while in India 23.

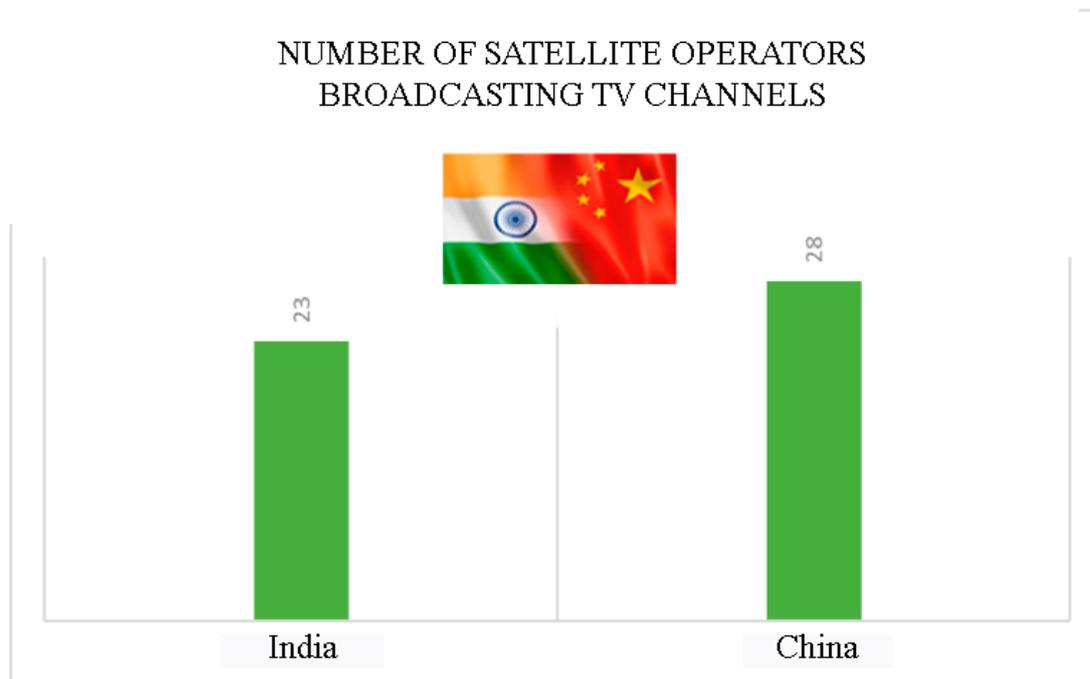
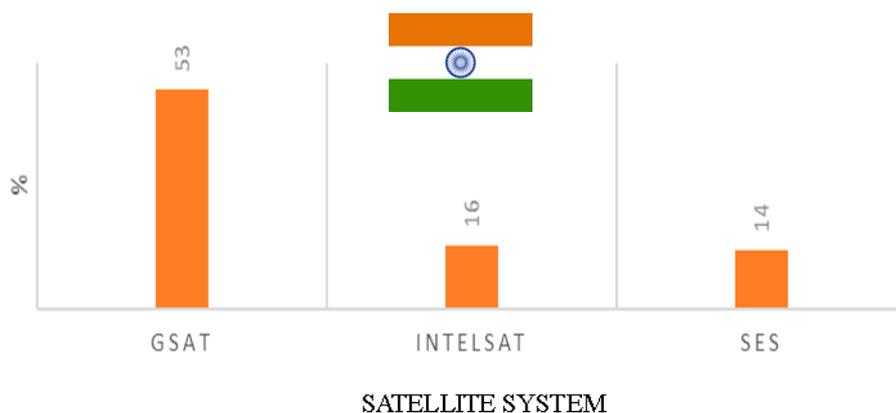


Fig. 3. Source: lyngsat.com.

Most Indian and Chinese channels are distributed by the largest national satellite operators, which are government-owned: GSAT and ChinaSat. GSAT satellites broadcast India's TV channels in Ku band over India and the adjacent countries in South Asia and South-East Asia, while C band is used for trans-regional distribution (across three or more regions simultaneously). ChinaSat satellites carry TV channels in China's territory in Ku band and use C band to cover the whole of Asia as well as three or more regions. Ranked second and third in terms of distributing video content are Intelsat and SES, two operators of the Big Three, with respect to India's programming, and SES and Telesat (Canada) with respect to China's channels. The share of the three largest operators is higher in broadcasting Indian TV than Chinese. This means that the TV content of the PRC is distributed more widely.

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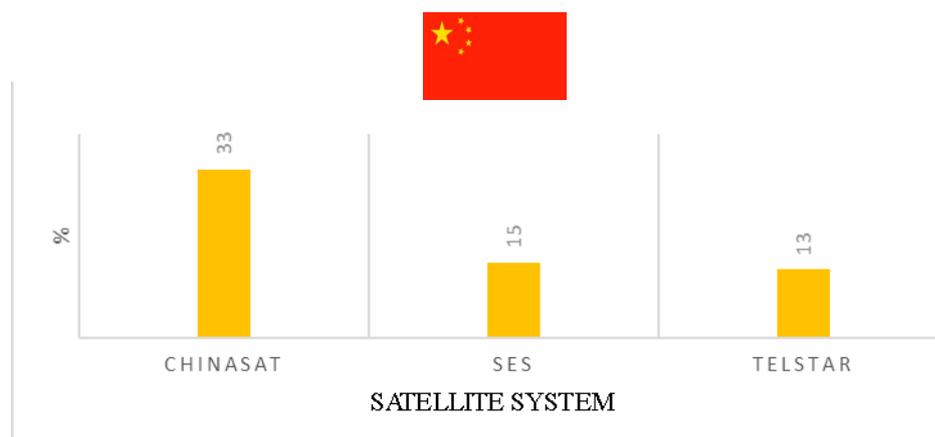


Fig. 4-1, 4-2. Source: lyngsat.com.

The conclusion that China's TV content is distributed across a wider geographic area compared to India's is confirmed by the charts in Figs. 5-1, 5-2. While India and the adjacent South Asian countries are covered by 60% of Indian satellite channels, the share of the PRC satellite channels broadcast only over China equals 26 %. The share of Chinese satellite channels distributed across the whole of Asia, South-East Asia and Europe is higher than that of Indian channels. In the US and Canada, both Indian and Chinese satellite channels each account for 3% of the total content. Compared to Chinese channels, Indian ones use more beams in C band with footprints extending over several regions.

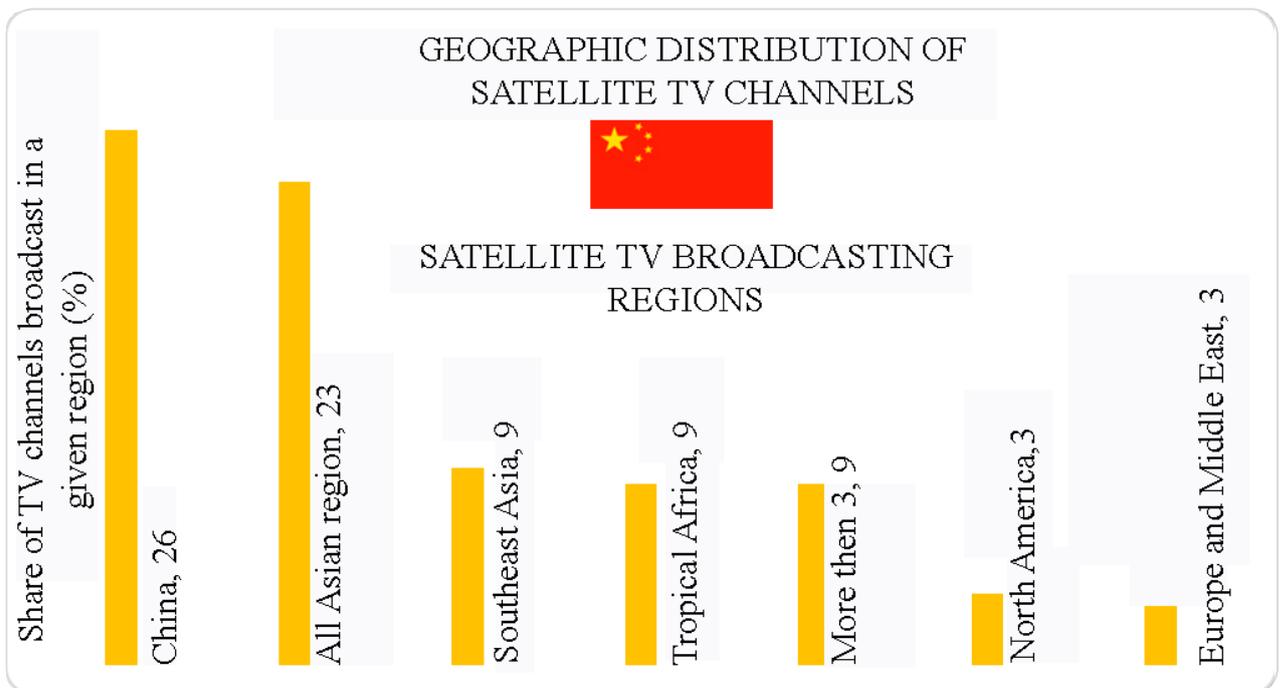
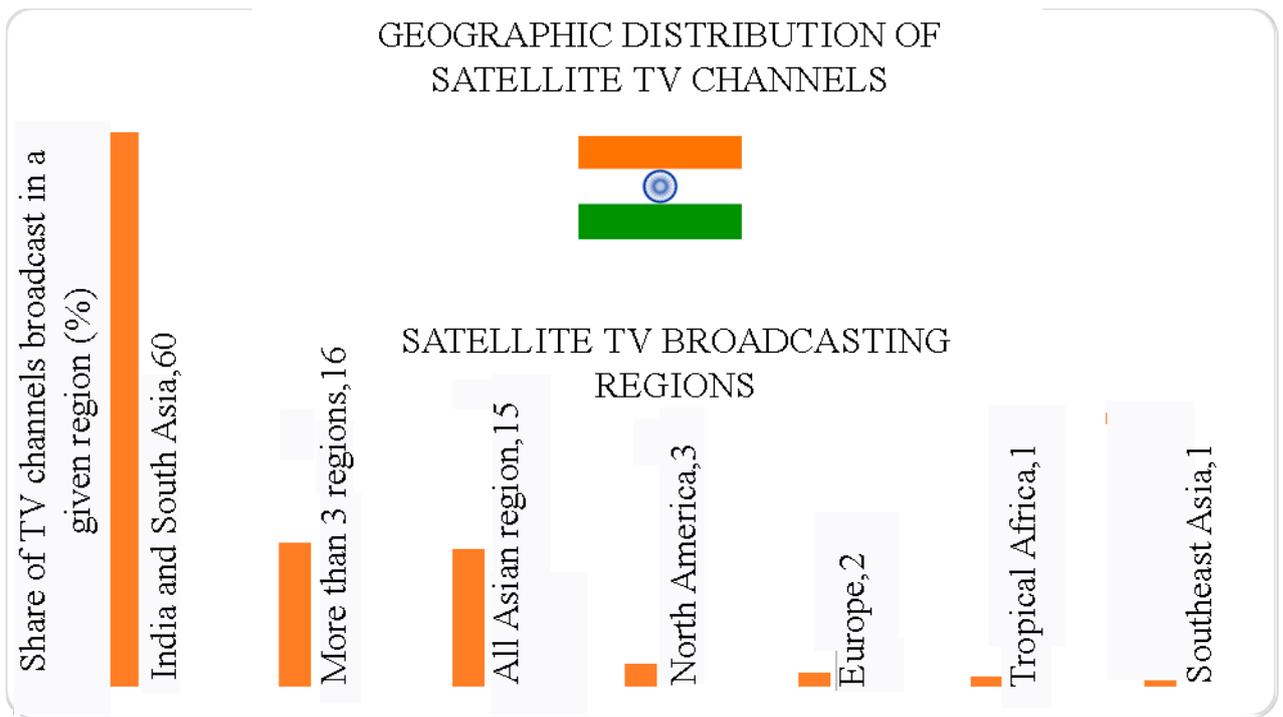


Fig. 5-1, 5-2. Source: lyngsat.com.

India's and China's TV channels are available in selected multiplexes meant for audiences in certain countries. Predominantly, these are Asian states, which are especially important from the viewpoint of bilateral relations. For the Indian TV continent such countries include Afghanistan, Bangladesh, Indonesia, Cambodia, Myanmar, Nepal, and Sri Lanka, while for China these are Bangladesh, Indonesia, Malaysia, Mongolia, Myanmar, the Republic of Korea, Nepal, Sri Lanka, and the Taipei territory. It is clear that Indian and Chinese broadcasters compete for influence on audiences in at least five countries.

In contrast to Chinese broadcasters, Indian TV channels tend to use more C-band satellite beams with the broadest possible coverage of the Asian and adjacent regions. At present, Ka band is used to broadcast several Chinese TV channels. Generally, Ku is the frequency band, in which satellite channels of both states continue to go on air most often.

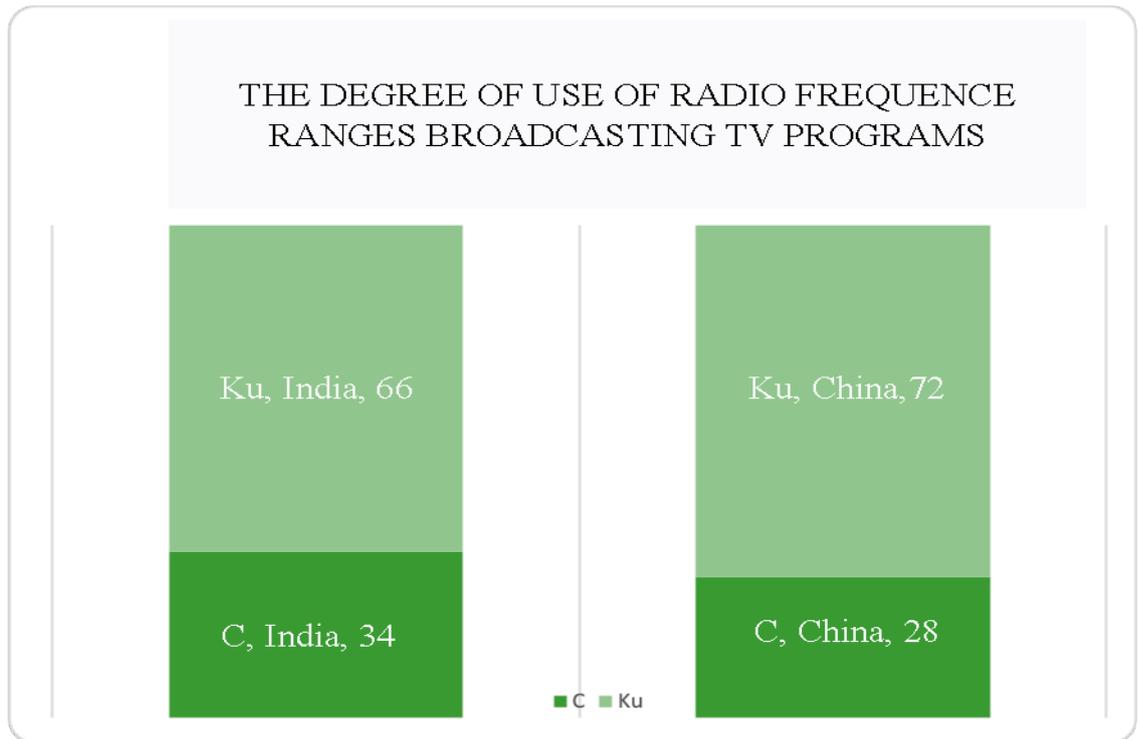


Fig. 6. Source: lyngsat.com.

Percentage of C and Ku bands used for video broadcasting (%)

The share of encoded Chinese satellite TV channels is higher than that of Indian ones. Probably, the reason is that more Chinese content is available in foreign commercial multiplexes. The use of HD quality on India's satellite channels is very low compared to Chinese programming.

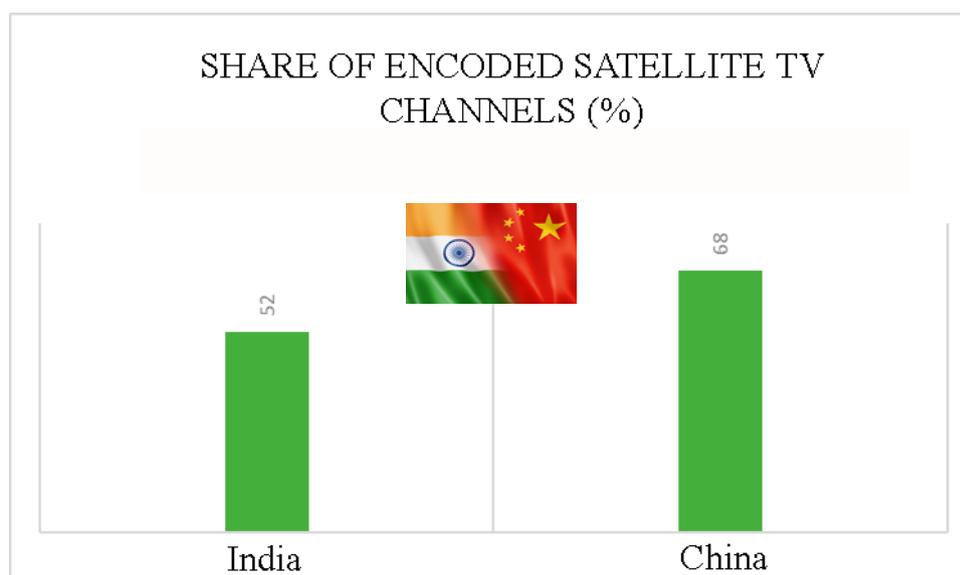


Fig. 7. Source: lyngsat.com.

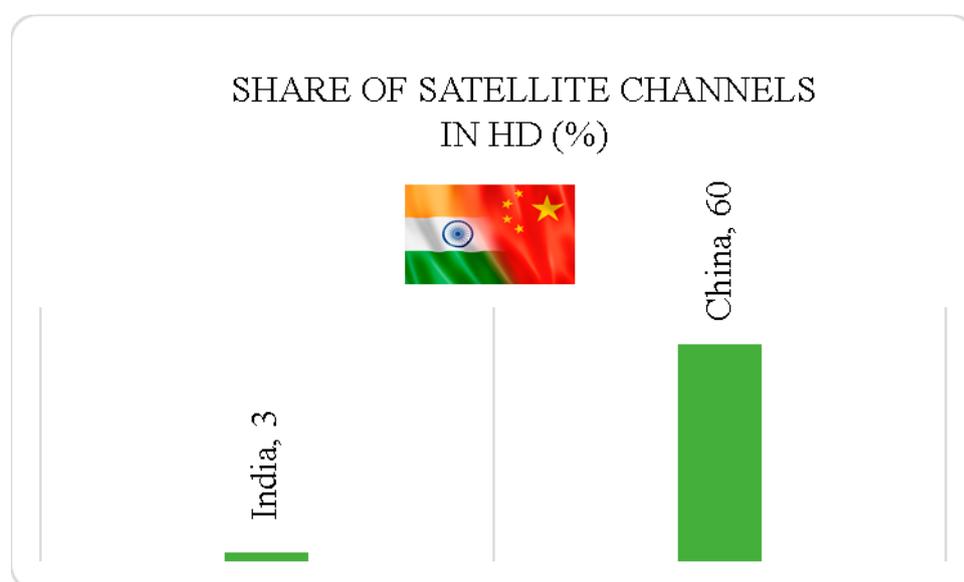


Fig. 8. Source: lyngsat.com.

In the author's opinion, the list of the most widely distributed Indian and Chinese satellite TV channels reflects distinctive features of both countries' policies in the field of television. For example, all of eight such Indian channels (Comedy Central India, GEM, Kalaignar TV, NDTV 24x7, Travelxp HD Europe, Zee News, Zee TV Russia, Zing Asia) are private confirming the trend that appeared after India partially canceled government monopoly over TV in the early 1990s as private broadcasters beat state company Doordarshan in the competition for satellite broadcasting⁴. Six out of the above-mentioned eight TV channels deal with entertainment proving that India promotes its interests in the global information

⁴ Энциклопедия мировой индустрии СМИ /отв. ред. Е.Л. Вартанова. М., 2006. с. 84-85 [Ehntsiklopediya mirovoi industrii SMI [The Mass Media World Industry Encyclopedia]. Vartanova E.L., ed. Moscow, 2006. pp. 84-85.

space to a great extent by popularizing its national culture. It is private media business that in most cases carries out the mission in question.

Ten TV channels of the PRC, which are broadcast in most of the multiplexes, are government programming, including six that may be referred to as sociopolitical. This confirms that the government plays an important role in using TV media in order to increase the PRC's influence on world politics and show in a peaceful and non-confrontational manner that the PRC has signs of becoming a great power⁵.

Based on the results of this brief review of the actual distribution of Indian and Chinese TV programming via geostationary satellites, we can note the following aspects that may be of interest to satellite operators. It is unlikely that the demand of broadcasters in India and China for satellite telecommunications services will grow noticeably because the satellite TV markets have slowed down. For example, the number of satellite TV channels did not actually grow after 2011.⁶ In China, one can hardly expect that demand will grow noticeably given the rather limited number of satellite TV channels and the decisive role of the state in the domestic mass media. Consequently, satellite operators compete mainly for the existing satellite TV channels by offering more advantageous conditions for broadcasting. Conditions for such competition are in place because both Indian and Chinese channels are broadcast using a large share of services provided by international satellite operators. Mostly, their broadcasting is targeted at regions of origin, that is South Asia and East Asia, respectively, as well as at their adjacent regions. For Chinese TV content, tropical Africa has become a major market. Few channels are broadcast to countries in other regions. They are covered in proportion to the number of compatriots staying there, while some channels go on air in foreign languages.

When offering satellite telecommunications services to Indian broadcasters, the private sector plays the leading role in distributing national TV content abroad. It is a positive factor because private business can be expected to be more flexible in responding to the conditions of operators' commercial proposals. In the Chinese satellite broadcasting sector, more demand for satellite operator services may be driven by the emergence of new multiplexes based on domestic content for viewing abroad by Chinese nationals and Chinese-speaking audiences.

⁵ Soft Power in China. Public Diplomacy through Communication/ed. by Jian Wang. N.Y., 2011. p. 57

⁶ Annual Report 2019-20 of the Ministry of Information and Broadcasting of the Government of India. Available at: <https://mib.gov.in/sites/default/files/Annual%20Report%202019-20.pdf> (date of access: 23.04.2021)