

BRAZIL'S SATELLITE PROJECT

Rosendo Fraga

Director of CARI's Foreign Relations and Armed Forces Committee

On Sunday February 28, India successfully put AMAZONIA-1 in orbit, the first ground surveillance satellite fully designed, manufactured and operated in Brazil. At the launch, 18 secondary satellites, three of them from India, were also put into orbit. The launch was carried out with a PSLVC51 polar vehicle from a platform at the Sriharikota base, in the southeastern state of Andhra Pradesh, according to the Asian nation's Space Research Organization. Prime Minister Narendra Modi celebrated from New Delhi, saying "congratulations to President Jair Bolsonaro and Brazilian scientists on this success. This is a historic moment in our space cooperation". The Indian Foreign Ministry highlighted that this sector is an "important area of collaboration". Some 752 kilometers away from the planet, the satellite will capture high-resolution images to contribute to its observation and monitoring programs, including the one aimed at monitoring deforestation in the Amazon. The India-Brazil agreement is a consequence of the deal signed almost 2 decades ago, in 2002, by these countries. However, Brazil is also an important contributor to the satellite field with China. The new satellites will complement their "mappings" with CBERS-4 and CBERS-4A, which have been used to autonomously monitor the territory without depending on foreign equipment. The CBERS are jointly developed by Brazil and China within the framework of a bilateral plan that has enabled them to create and launch 5 satellites, two of which are still operational. It is a cooperation program that allowed the National Institute for Space Research (INPE), a state-owned agency, to master remote surveillance technology with cameras and sensors. This previous experience gave Brazil the autonomy to design, produce, assemble and operate the AMAZONIA-1 in the country.

The collaboration of China and India in the Brazilian satellite project reminds of the participation of the three countries in the BRICS group that they make up together with Russia and South Africa. The largest country in South America has participated for more than a decade in the summits of heads of government of the quintet of emerging powers. The decision to join the group was adopted towards the end of Lula's second government and the satellite project has developed continuously since the aforementioned agreement with India signed in 2002, despite the ideological changes in the governments after the removal of

Dilma Rousseff. Brazil has just called for bids for the licenses to operate fifth generation (5G) mobile telephony technologies. The national telecommunications agency, Anatel, approved the general rules for the 5G spectrum auction, which the government of Jair Bolsonaro hopes can be carried out by the end of July this year. The regulatory body is the National Telecommunications Agency, which estimates that an investment of between 5,942 and 6,283 million dollars will be placed. 5G is a major advance, especially in terms of speed. It will allow browsing up to 10 Gbps (gigabytes per second), 10 times faster than the main fiber optic offerings on the market. The Brazilian regulator defined that the commercial operation should begin in one year from the signing of the contract, that is, in July 2022. It will be extended first to cities with more than 500,000 inhabitants, in a process that will conclude at the end of 2026, when the service is expected to reach cities with fewer than 30,000 inhabitants. However, the strategic and politically complex point is the participation of the Chinese company Huawei, to which the United States applied different measures of restriction and retaliation including the arrest in 2018 of its financial director -and daughter of the company owner - in Canada. Preventing this Chinese company from dominating the 5G technology market globally is a US priority that Biden will maintain.

Although Huawei is not a telephone operator, and would not participate in the auction, it is one of the largest providers of infrastructure for this technology, with the Swedish Ericsson and the Finnish Nokia as the other players in this area. The United States managed to align its allies from the Anglo-Saxon group (Canada, the United Kingdom, Australia and New Zealand) in the limitations to the Chinese company. The argument is that it is under the control of the Chinese intelligence services and is an instrument of them. Brazil is close to 220 million inhabitants and is the largest country in Latin America. Preventing Huawei from taking over the 5G market is highly relevant to the Biden administration's policy of stopping China's growing influence in the region.

While in Brazil progress is seen in the satellite project and the opening to 5G technology is a fact, the military presence is enhanced in the government. With almost half of the cabinet coming from the armed forces and Bolsonaro himself being a retired military man, the military role increases in support of the president and as an instrument of his government. In the last year, this progress was manifested in the appointment of General Walter Braga Netto as head of the Civil House (a position with functions similar to that of the chief of the cabinet in Argentina) at a time of great tension.

At this stage, the military objective was to prevent the President's advance on justice and congress, which was then promoted by his most extreme supporters and which the President came to support in his street demonstrations. With the pandemic all over, in the second half of 2020, a General in paratrooper duties, Eduardo Pazuello, was appointed Minister of Health. He took over the ministry at the worst moment of the pandemic with an active military team that was expanded. At the beginning of the year, another General on duty, the Secretary General of the Presidency, Jorge Oliveira, was the key man who negotiated with traditional politics -the structure of the "centrão"- allowing two politicians related to Bolsonaro to remain as presidents of the Upper and Lower Houses (Pacheco and Lira), which prevents the advance of the impeachment against the president. In February, Bolsonaro appointed General Joaquim Silva e Luna as the new president of Petrobras, the Brazilian state oil company. The markets did not welcome the appointment very much. The state electricity company (Electrobras) and the post company (Correio) are also run by the military and are about to be privatized. The Secretary for Strategic Affairs, retired Admiral Flávio Rocha, will be appointed as head of the government's special communication secretariat, the body responsible for communication with the press and the distribution of state advertising.

According to the court of auditors, there are 6,100 soldiers in civilian duties today, but it is not a new fact. In 2017, there were already 3,000 in Dilma Rousseff's government. It should be noted that both the satellite project and the communications area are under military control. The left argues that the military obey the President and are his most important political support, but the center-wing recognizes its stabilizing role by having prevented the radicalization of the president, who at one point was heading to clash with Congress and the Supreme Court. In the business field, today the criticism of Bolsonaro predominates, accusing him of moving away from the initial orthodox economic policy.

In conclusion: Brazil's AMAZONIA-1 satellite launch from India and in cooperation with it marks an important milestone for Brazil's autonomy. In the phases prior to said launch, cooperation with China on the CBERS-4 and CBERS-4A satellites was decisive for the development of the Brazilian satellite project. The call for bids for 5G technology in Brazil is an important matter for the United States, which will try to prevent the penetration of 5G technology by the Chinese company Huawei in the largest country in Latin America. Finally, these technological areas are in the country under military control. According to the left, the military obeys the President without restrictions, as per the center,

they moderate him and the markets fear that he is moving away from the initial economic orthodoxy.