

# Yamal-300K' Eastern Campaign

by Gazprom Space Systems

Two and a half years ago the Russian satellite operator Gazprom Space Systems replenished its orbital constellation with a new satellite Yamal-300K.

The satellite was launched from Baikonur cosmodrome and put into the 90°E slot on the geostationary orbit. After the successful launch of Yamal-401 satellite into the same orbital slot, and moving all the customers from Yamal-300K to the new satellite, Yamal-300K started planned relocation into the other orbital slot 183°E. This position is located over the Pacific Ocean, and enables coverage of the Russian Far East, Korea, Japan and other South East Asian territories; and as far as Alaska. These regions have good market prospects and, because of this, Gazprom Space Systems made a decision to extend its business eastwards and arranged this "Eastern Campaign".

The satellite in its new designation is interesting for the Russian as well as international customers. Gazprom Space Systems experienced it already at the stage of preliminary sales. One of the Yamal-300K beams perfectly covers the Russian Far East and attracts the attention of, for example, Russian mobile operators concerned about creation of backhaul infrastructure for their cellular networks in the region.

The steerable beam of the satellite is ready to serve any region of the South East Asia, Australia, New Zealand and the waterlocked states of the Pacific Ocean. However, the most attractive coverage, in our opinion, is provided by the wide shaped beam of Yamal-300K that covers the north of the Pacific Ocean with its intensive aeronautic and maritime traffic and big transport hubs on the coast.

Recently, Gazprom Space Systems essentially renewed and extended its satellite assets. Launch of the three high power satellites resulted in the 3.5 time growth of the satellite capacity amount in 2015 in comparison with 2012. Nowadays satellite flit of the company is rather young (the average satellite age is less than three years).

The company markets 30% of Yamal satellites capacity outside Russia. In particular, one of the new satellites Yamal-402 55°E has achieved prominence on the markets of Africa and the Middle East, and Yamal-202 49°E has already been successfully working for Asian markets for more than ten years.

In Russia, Gazprom Space Systems is not only a satellite operator but also a service provider and system integrator. The key element of the

company's ground infrastructure is the Telecommunication Center in Stchelkovo near Moscow, from where the satellite constellation is controlled, and where the main ground assets to provide services are concentrated (hubs, up-links, NOC and so on). From this place the company also controls wide scale satellite communication earth stations network placed in the Russian regions.

Concerning further business development, along with the plans to create new own satellites, Gazprom Space Systems also searches for new business models. The company relies on cooperation with the other satellite operators to build and use orbital assets. Joint efforts with other operators helps to resolve increasingly frequent collisions connected with overcrowding of the GEO.

Cooperation allows us to share the risks of financing capital-intensive satellite projects. The idea to create joint satellites, or hosted payloads, has become ever more popular. During those periods when our large investments are impeded, similar solutions provide operators with the opportunity to gain business traction.

While similar business ideas are waiting for their implementation, the business project "Yamal-300K' Eastern Campaign" has already started. ●