



All photos courtesy of Gazprom Space Systems.



Current and future plans

Gazprom Space Systems is in the process of augmenting its fleet and delivering more services to its customers. In part two of SEA's interview with the company, Igor Kot, Deputy Director General of GSS explains how the new satellites will be financed and the challenges that face the Russian satellite industry at present.

Question: Gazprom Space Systems has recently secured funding in a deal with French, US and Russian financial institutions. Can you tell us what the funding will be used for and has it been a challenge to secure this kind of funding?

Igor Kot: We consider the start of our large-scale investment programme and creating the Yamal-401 and Yamal-402 satellites to be our main achievement of 2010.

We have finalised all the procedures to get the necessary approvals for all the transactions on this project. This refers to the delivery contracts for satellite manufacturing and launch as well as the opening of credit facilities to finance the project in full.

To finance the project, GSS has secured several credits of different currencies amounting to more than US\$700m. The credits were granted by BNP Paribas, Citibank, Credit Agricole Corporate & Investment Bank and Gazprombank. A euro-denominated loan was backed by COFACE.

The Yamal-400 project provides for the manufacture and launch in 2012-2013 of two Yamal-401 and Yamal-402 satellites, carrying a total of 99 transponders (or 154 equivalent transponders of 36 MHz each) in C- and

Ku-band, building the satellite Mission Control Centre, backup control centre, TT&C, Network Operation Centre and also developing GSS' telecommunication ground infrastructure.

Certainly arranging the finance of such a big project is a real challenge especially if we speak about attracting non-governmental funds against the backdrop of the economic slowdown. But our experience, the invaluable support of Gazprom – our mother company, high design specifications of the satellites and prospective market features of the project allowed us to achieve it.

In addition, if we take into account that we already have one more satellite Yamal-300K under construction in 2011, we will have the peak of capex - more than \$300 million.

Question: Is the Russian region still suffering from a lack of capacity? What is the effect of this shortage?

Igor Kot: Yes, the Russian market has been suffering from the lack of satellite capacity for more than three years. The current constellations of the Russian satellite operators (RSCC and GSS) are fully loaded and inter-

national satellite operators also are not able to offer any sizeable capacity to the Russian market. It holds back the business development of satellite service providers. Against the background of general growth of the Russian demand in communications, TV and broadband access services, this situation - if it continues for some more time - can force telecommunications companies to more active use of alternative non-satellite solutions even through they are not always effective. But we do hope that plans announced by Russian satellite operators and large-scale constellation development programmes are implemented in time to reassure and make the Russian satellite telecommunications companies more optimistic.

Question: Both GSS and Russian satellite operator RSCC will launch several satellites into orbit between 2011-2013. How will the situation in the Russian market be changed after that?

Igor Kot: Implementation of the development programmes of the two Russian satellite operators will solve the problem of deficiency by 2014-2015.

It is unlikely that the fast growth of ca-



capacity from Russian operators will lead to an overcapacity problem in Russia. Firstly because, according to the statistics from the Russian telecommunications market (and satellite one in particular), the region has been growing even faster than the world market average. Secondly, appearance of the high quality capacity over Russia will accelerate the growth of the client base as modern telecommunications services become affordable to the wide range of users. And finally, we should remember that the Russian satellite operators have ambitious plans to develop a more capacious international market.

Currently, about one third of GSS revenue comes from providing satellite capacity beyond Russia. In addition, a considerable part of the new satellites' capacity is dedicated to the international market. For example Yamal-402 along with Russian beams will have beams covering Europe, Middle East, and Africa.

Question: The new Yamal constellation will enable GSS to provide broadcasting services but will also offer other capabilities. Can you tell us about the other business you will build up with the Yamal satellites? What are the demand drivers in the region?

Igor Kot: The new Yamals will offer more powerful shaped beams in Ku-band that are better optimised to provide TV broadcast services (including HD, DTH and 3D TV).

In addition, the new capacity will allow us to significantly increase the share of the consumer sector contracts for the satellite services providers, that now deal mainly with the corporate sector.

We also think the cellular backhaul business will be developing further. We have



Igor Kot, Deputy Director General.

some clients successfully running this type of business based on our current satellite capacity in Russia, CIS and abroad. By the way, recently in Nepal, a well-known local mobile operator and Internet provider Ncell, that has implemented its projects based on Yamal-202 capacity for about five years, has launched high-speed 3G mobile Internet services in the Mount Everest area arranging the backbone channel via this satellite. Now the world's highest-altitude VSAT station placed at the altitude of 5,200 metres supports faster and more affordable telecommunication services to the local people,

trekkers, and climbers alike. It is not so much a big deal in terms of the pure business, but we are, as satellite communications enthusiasts, always very happy to demonstrate their capability especially in severe environments.

Question: How do you intend to develop your company business in the future?

Igor Kot: Today, we have three satellites under construction: Yamal-300K (90 degrees. E) Yamal-402 (55 degrees. E) and Yamal-401 (90 degrees. E) to be launched one by one over the next three years. We are developing the correspondent ground infrastructure for our state-of-the art telecommunications centre aimed at operating with our new satellites. This project is on fast –forward.

Our next step will be to manufacture and launch one more satellite Yamal-601 dedicated to replace our Yamal-202 satellite operating at 49 degrees. E in 2014. Its lifetime expires in 2015. The coverage of Yamal-601 will repeat the Yamal-202 coverage to provide business continuity for our existing clients. Thanks to its higher power parameters and additional transponders, Yamal-601 will be the base for business development of our clients in the future.

GSS has rights for two more orbital slots – 81.75 degrees. E and 163.5 degrees. E. So we have all the necessary plans in place to develop our constellation further and extend our geographical presence. ■