

Azerbaijan's Blueprint for a Domestic Space Industry Includes Global Competition for Optical Satellite

By [Peter B. de Selding](#) | Sep. 25, 2014



The Azerbaijani government is moving forward on a second Azerspace telecommunications satellite. Its first telecommunications satellite, Azerspace-1 (above), launched in February 2013. Credit: Orbital Sciences Corp. artist's concept

PARIS — The government of Azerbaijan, using a playbook being adopted by numerous developing countries getting into the space business, expects to organize a global competition to build a high-resolution optical Earth observation satellite whose development will be managed by the newly formed Azercosmos space agency.

The Azerbaijani government is also moving forward on a second Azerspace telecommunications satellite, with bid requests likely to be issued before the end of the year, the Azerbaijani Ministry of Communications and High Technologies announced Sept. 25.

Azercosmos, created by government decree in 2010, [launched its first telecommunications satellite, Azerspace-1, in February 2013](#). Carrying 12 Ku-band transponders and 24 C-band transponders, Azerspace-1 operates from 46 degrees east. Azercosmos is now preparing for an Azerspace-2 satellite to provide in-orbit backup for Azerspace-1 and to establish Azerbaijan as a regional satellite power, said Wesley Wong, Azerspace's chief technical officer.

Addressing the World Satellite Business Week conference here organized by Euroconsult the week of Sept. 8, Wong said Azerspace-2 may have a larger Ku-band payload than its predecessor, and may also carry Ka-band for domestic and regional broadband access.

As is the case in Brazil, Qatar and other emerging nations now entering the satellite operations field, Azercosmos will oversee both the telecommunications satellite and the Earth observation project, Wong said.

“The government wants Azercosmos to build a space industry in Azerbaijan,” Wong said, with the ultimate goal being a domestic satellite manufacturing industry.

Wong said Azercosmos is looking to build its business “on commercial foundations.”

“Even now we have more capacity booked to commercial customers on Azerspace-1 than is used by the government, including customers from Georgia, Ukraine, Turkey and Central Asia.”

Azerspace-1 follows an agreement between Azercosmos and Measat of Malaysia on joint development of the 46-degree slot, which was a Measat asset made available to Azercosmos in return for capacity on the satellite. Azerspace-1 was built by Orbital Sciences Corp. of Dulles, Virginia, and launched by Europe’s Arianspace following loans and financial guarantees offered by the U.S. and French export-credit agencies. It was 40 percent booked even before launch.

Azerspace-1 now carries 13 radio stations and 128 television channels, mostly free to air, in addition to its services to the government.

Wong said Azercosmos is still looking for an orbital slot for Azerspace-2. The lack of available orbital positions, meaning those obtained through governments that have made reservations that put them at the top of the priority list at the United Nations’ International Telecommunication Union, has stymied many emerging-market nations trying to become satellite operators.

Wong said Azercosmos is nonetheless “quite close” to completing coordination of an orbital slot and associated broadcast frequencies. “We want the second satellite under contract by the end of 2014 or early 2015.”

The current Azerspace-1 operates four degrees from Turkey’s Turksat operator, which has developed the 42 degrees east orbital position and advertised its intentions to remain a regional power in satellite bandwidth leases.

For the Earth observation satellite, Wong said, Azercosmos also expects to have a request for proposals sent to bidders by the end of the year, with bids due early in 2015.

Airbus Defence and Space of Europe, which commercializes Earth observation data from the company’s own Spot 6 and Spot 7 medium-resolution satellites and the high-resolution Pleiades spacecraft, is negotiating with Azercosmos on a partnership that would permit Azercosmos to use Airbus’ existing constellation.

“They would have access to our constellation and we would provide the ground segment for them,” said Evert Dudok, head of Airbus’ Communications, Intelligence and Security division, which includes the Earth observation services business. Evert was briefing journalists during the conference. He said the arrangement with Azerbaijan does not necessarily mean Airbus’ satellite manufacturing division will build the Azerbaijani optical satellite.