Interview with CEO (30)

Pascale Sourisse

Chairman & CEO, Alcatel Space



Biography

Pascale Sourisse is, since 2002, the Chairman and CEO of Alcatel Space, subsidiary of Alcatel Group providing satellite based solutions including systems, satellites and ground networks for civil and military applications in telecommunications, navigation, observation, meteolorogy and science. She is also the president and CEO of Alcatel Spacecom, subsidiary of Alcatel in satellite operation and services. She joined Alcatel Space in 1995 as Director, strategy and planning. Two years later, she was named President & CEO of Skybridge LP to develop and operate a global broadband satellite based network. Prior to joining Alcatel Space, she spent four years at the French Ministry of Industry and Foreign Trade at the head of Consumer Electronics and AV Communication Division. Graduate of Ecole Polytechnique and Ecole Nationale Superieure des Telecommunications, respectively in 1984 and 1986, she held management positions at France Telecom and other organizations. Pascale Sourisse is the President of Eurospace, Chevalier of Legion of Honour and National Order of Merit.

Thank you for appearing in "Interview with CEO" twice, as the different position. First of all, how do you feel that your former career of communication service provider Skybridge helped your present job of the head of satellite manufacturer in providing the best products desired by the operators?

Sourisse: Skybridge was focusing on making available broadband communications, like high-speed access to the Internet, anywhere in the world. Skybridge was not supposed to be itself a service provider. It was positioned as the operator of a satellite based infrastructure and wholesaler of broadband access to service providers in charge of marketing the service to end-users.

The position I had at Skybridge gave me the opportunity to develop relations with many entities, telecom careers, ISPs, satellite operators, suppliers, regulatory bodies, etc. It also gave me the opportunity to analyze in detail the market of broadband services, the expectation of both service providers and end-users and how to have competitive satellite services offers.

All the experiences acquired is of course very useful in my current position of CEO of Alcatel Space.

--- What was the biggest challenge at your position that you experienced in the past few years in the worst market situation ?

Sourisse: When I took my new position in the end of 2001, the market was already shaken by the huge telecom crisis of the beginning of the decade. The market situation worsened in 2002. It was necessary to very quickly take measure to adapt the company size and resources to the workload, the objective being to maintain the competitiveness of our operations even in adverse market conditions.

--- How is your insight for the communications satellite market situation in the next few years?

Sourisse: Today, satellite allows each of us to: communicate and watch TV, navigate and locate, observe and manage our environment, forecast the weather, explore the universe.... It represents a market of almost 26 million for a diversity of customers: institutional customers, telecommunication satellite operators, integrators, satellite

solution based service providers...

The commercial market is essentially for telecommunications solutions. End-users are looking for service convergence, telecommunications networks have to be evolved from traditional separate structures delivering dedicated services to a unified user-centric service delivery network, making use of different technologies for what they do best.



In regard to the market evolution and growth drivers, point-to-multi-point applications remain preponderant. Satellite is the ideal delivery means for broadcast/multicast. DTH(more than 100 million DTH & SMATV subscribers), cable head-ends feeding(satellites feed almost 100% of the world video cable head-ends).

Broadcast evolution in the Western countries is towards HDTV, interactive TV, personalized content. This will drive up demand for new transponders. Direct-to-home television could be launched in countries such as China and India.

New applications such as digital audio broadcasting (XM, Sirius, WorldSpace...), digital multimedia broadcasting (MBSat) have emerged.

The worldwide commercial market is cyclical...

Satellite solutions have an increasing role to play in this environment, based on their intrinsic characteristics: long range, cost of transmission independent of user density, quick deployment with existing satellites, ideal for broadcast. The market includes both satellites and ground solutions.

But on a growing trend today, geostationary satellite orders are variable year-on-year due to long project lead times. But this has limited impact on subsequent industrial activity, due to long project duration(2 to 3 years). Further, more open commercial

market (former ties between satellite operators and manufacturers disappear) and emergence of national industrial actors looking for technology (Russia, China, India...) will be seen.

--- What new technology can or should satellite manufacturers provide for the operators to help them to clear obstacles to go into the satellite broadband business?

Sourisse: We do not see ourselves only as "satellite manufacturer", but as satellite system solution provider, with the objective of providing comprehensive, cost efficient solutions to service providers interested to offer 2 way broadband satellite solutions to ("DSL-in-the-sky") to complement their terrestrial DSL broadband offering, or DTH operators, willing to bundle a broadband offering with their existing satellite TV services.

Alcatel Space strongly believes that the development of innovative and cost efficient ground segment solutions, in addition to new multispot satellites, is key to provide to the operators the solutions they need.

The broadband satellite solutions available today will be substantially improved in the short term. Alcatel Space is actively developing enhanced DVB-RCS solutions according to an aggressive roadmap. Solutions include adaptive modulation, enhanced coding, and multiple access will allow to serve up to three times more users with one transponder and will be on the field by the end of next year.

The price of the service should then go down to \$50 per month per user. This figure will decrease to \$30/month/user in 2007 with enhanced space segment technology.

"DSL in the sky" management platform will also enable Telcos to integrate satellite broadband solutions into their terrestrial DSL network, with substantial savings in operating costs expected.

An other important barrier to the large scale deployment of satellite broadband solutions is the cost of the CPE (consumer premises equipment). In this field also, substantial progress has been accomplished in partnership with terminal suppliers. Studies on design are completed and manufacturers are now prepared to commit to prices below \$300 for an open standard DVB-RCS solution, as soon as service providers are willing to commit to order reasonable volumes of terminals.

-- Alcatel, as the leading electronics total system supplier, can provide total solution or total information / communication system for the customer which U.S. satellite manufacturers can never do. How is Alcatel going to utilize this great advantage in expanding your business under the circumstance of smaller satellite communication business?

Sourisse: Alcatel Space, as part of the Alcatel Group, is poised to understand the key success factors for the evolving satellite applications and offer the corresponding technologies that create business value such as satellites with improved transmission efficiency, increased capacity and flexibility, low cost ground equipment, hybrid location and telecommunication solution and hybrid broadcast and telecommunications solution.

The development of new satellite based services create opportunities in terms of related space systems. More and more customers request end to end systems. R&D enables to propose innovative satellite services such as one-stop shop offer including space systems and related services.

--- The merger and reorganization of Alcatel and Finmeccanica space business was announced recently. What is the biggest strategy of this consolidation plan to survive In the world market?

Sourisse: As Serge Tchuruk, Alcatel chairman and CEO, said during the announcement: "This is a major step in the development of the European space industry. Alcatel Alenia Space will become the European leader for satellite solutions with balanced activities between commercial and institutional markets. The enhanced position of Alcatel Alenia Space in institutional market will also enable Alcatel to expand its global leadership position in broadband access technologies."

— Alcatel has been the almost sole company in Europe that maintained tight relation with Japanese space industry. How important is the collaboration with Japanese firm in the future Alcatel Space business? How important is Japan as the possible customer for the satellite?

Sourisse: We see Asia as a very promising market. We have had contracts in a number of countries, such as Japan, China, Malaysia and Thailand. So, we have a strong

presence in the region. We are partners with MELCO on the Japanese navigation program MTsat. MELCO is a major equipment supplier to Alcatel.

The relation with Japanese space industry started from early 90's ($\ensuremath{\mathsf{TELECOM2}}$

program). Alcatel developed long term relationship with Japanese space key players,

MELCO and also TOSHIBA which finally merged with NEC to create NT-Space.

Cooperation partnership was finalized between MELCO and Alcatel for telecommunication satellite, and more recently, for aeronautical communication solutions to promote solution developed for MTSAT program. This is the two-way relationship under which we have long term agreement for MELCO to provide Alcatel

solar panels for SPACEBUS platforms.

Thanks to Japanese customer satisfaction to Alcatel ground equipment and payload level (Alcatel has been selected for all aeronautical payloads procured by JCAB for

MTSAT programs).

Alcatel has the objective to be selected as a prime contractor to provide telecommunication satellite on Japanese market. Alcatel welcomes Japanese space

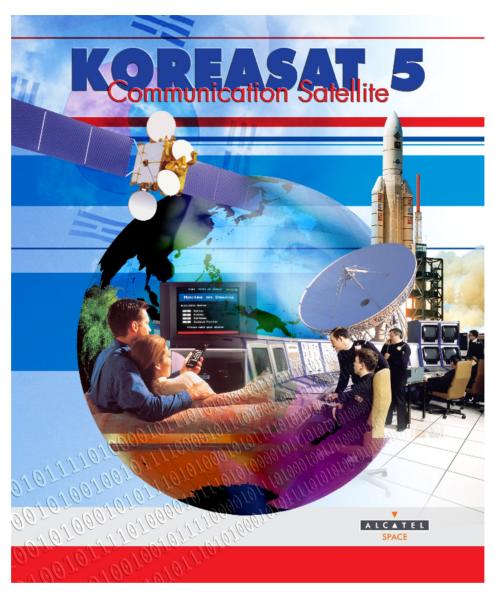
providers contribution for the benefit of the customer.

--- Lastly, may I ask how do you enjoy personal life away from work?

Sourisse: I certainly have a very busy life, but I like it. And I have always made sure I would keep balance between my personal life and my time at work.

--- Thank you very much.

(Interviewer: Takao Ueda, AIAA-JFSC)



KOREASAT5, the latest satellite communications solution by Alcatel Space