

Photo courtesy of Arianespace (VA251)



Maintaining performance during difficult times

Arianespace has maintained impressive performance under the pandemic, managing several distinctive launches, and being trusted with the continuation of the OneWeb contract. Vivian Quenet, Managing Director, Asia-Pacific, Arianespace, outlines how they have maintained a competitive edge under such unprecedented circumstances.

Question: Arianespace has just celebrated an outstanding 40-year anniversary. How have you managed to sustain such a distinguished standard over four decades?

Vivian Quenet: Arianespace has been here since 1980, during which time we have been responsible for 740 satellites for 100 different commercial and institutional customers across missions spanning Earth observation, geostationary communications, and space science.

The reason we have been around so long is because we have been evolving at every point to best address emergent and pending needs of the

market and academia. At present we are involved with GTO, constellations, LEO and now since September our rideshare service which consists of many smallsats, CubeSats and nanosatellites launched and orbited all at once.

Customers with smaller platforms like this cannot hope to budget a business model around bespoke flights, but rideshare models are another story. That's another way that we are innovating to meet the needs of the changing NewSpace market.

An insurance firm can repay the loss of a satellite, but it is beyond them to compensate you for the salaries of the

experts that worked across its five-year development. Success is absolutely vital to us in such a high stakes industry.

We're launching a wide range of vehicles essentially every month for people all over the world, which is a fantastic degree of availability sold as part of attractive packages at competitive prices.

To summarise, we have been here for 40 years because we are growing with the market that we serve, and we prioritize reliability, availability, and competitiveness. That's the secret to customer loyalty.

You can bet we will be here for the next 40 years too because we have never stopped evolving. With Ariane 6 and Vega C, we will continue to introduce innovative new services from LEO to Lunar.

Question: Could you recap Arianespace's 2020 launches for us? Are there any you're particularly proud of?

Vivian Quenet: Of course, we haven't launched as many flights as we wanted. 2020 has proved challenging for everybody. But we have exceeded our expectations.

We have launched three Ariane 5, two Soyuz and one SSMS on Vega. It's difficult to say which I'm most proud of. Two of these have been deployed on behalf of Asian customers, the region I serve, and my pride for everyone who

Satellite Capacity

Global Coverage

55E Perfect for

Yamal-402 High Performance

AFRICA BACKHAUL **EUROPE**

Suitable for **MIDDLE EAST**

KU EIRP 53dbW TRUNKING **C** BAND M2M
up to 300 Mbps

ASIA **Yamal-401**

Yamal-601 BROADBAND IOT
SNG

49E VSAT TV BROADCASTING

SOUTHEAST ASIA INFLIGHT CONNECTIVITY

Gazprom Space Systems

24/7 customer support Partner Teleports Over the World

183E NORTH of PACIFIC OCEAN **Yamal-202**

Yamal-300K MARITIME **163.5E**

www.gazprom-spacesystems.ru





Vivian Quenet, Managing Director, Asia-Pacific, Arianespace

The maintenance and deorbiting of satellites must become a commonplace practice for the satellite industry to progress sustainably into the middle of the 21st century, and we are proud to play a part in supporting that work.

Question: How seriously has the company approached the extensive viral safety precautions necessary for high-profile space launch?

Vivian Quenet: It has been a very complex period. The French government declared their lockdown in early March 2020. We had our VV16 flight planned just a few weeks from that announcement.

Of course, we did not want to take any risk whatsoever with our staff and customers, neither did we want to compromise our business, so we found ways to innovate to address both.

As Plato said, necessity is the

mother of invention. We equipped our engineers with smart connected glasses with encrypted networks, who could serve as the eyes for our customers thousands of miles away, unable to travel to our facilities and launch sites.

With quick thinking and agility, we were able to re-arrange the way our company operates to suit the chaos of the pandemic, and we are very glad that all the efforts made to do our jobs safely were effective.

Question: How has the company approached the Asia-Pacific market in the last year?

Vivian Quenet: Our business has inevitably been affected. I would like to say mainly this disruption has been specific to geostationary. Many of those projects went on hold, but on a positive note, nothing has been cancelled. The

has helped me deliver those missions cannot be understated, but we also worked with OneWeb in the case of a set of very complex operations. I should also mention our achievement of launching of 53 satellites on a single rideshare mission, which involved 21 customers.

There is so much to be proud of at Arianespace in 2020, and on reflection, I do not think I can choose just one for a favourite.

Question: Could you tell us about your recent triple launch success with flight VA253, carrying satellites for Intelsat, Northrop Grumman's SpaceLogistics, and B-SAT?

Vivian Quenet: This was a particularly special launch. For one thing, this was the first time we had three geostationary satellites orbited simultaneously, with of course one of them being the historic MEV-2. Another was a B-SAT model to be used for the 2021 Tokyo Olympic games in 8K definition over a satellite connection.

The MEV-2 from Northrop Grumman subsidiary SpaceLogistics is essentially a venture attempting to validate a new type of business in space. The mission aimed to dock with an actively operating satellite, and service it while maintaining attitude.

In-orbit-Servicing (IoS) is set to become a big business and a critical tool for combatting space debris. It will be yet another market we are glad to serve in the growing NewSpace economy.



Photo courtesy of Arianespace (VA253)

Photo courtesy of Arianespace (V16)



pandemic had a big effect on business confidence, but not significant enough to represent anything more than temporary obstacles.

In terms of NGSO, we have seen healthy progress. We have seen delays of course, but it has all been workable. In many cases, these are government projects, which have been budgeted before the pandemic, so there aren't any financing steps on the horizon to worry about.

All in all, it has been a better market than expected, and we look forward to a strong comeback in the post-COVID climate.

Question: Are there any particular tech trends such as craft re-usability or orbital sustainability that Arianespace has taken a particular interest in across the launch market?

Vivian Quenet: Arianespace had very strong feelings about orbital sustainability. As you know, we will be operating the Ariane 6 and Vega C soon. LOS which stands for "loi sur les operation spatiales" or French Space

law is very restrictive in terms of debris. Ariane-6 and Vega-C will fully comply to this law.

We are posed a lot of questions around reusability, and while desperately important, it must be understood in an economic sense. Our customers care about reliability and price foremost because that's what keeps their businesses afloat. No one in this industry has written off a launcher based on their inability to reuse launch assets. It's something we are proud to invest in, but we have to ensure its realism foremost.

Question: Could you outline what Arianespace has planned going forwards, and share your expectations for the year and beyond?

Vivian Quenet: This year, we're going to be the ones restarting the OneWeb launches. As has been the talk of the industry, we've re-signed for sixteen new launches for them, which will take a huge amount of our time next year. Of course, we have many other goals

in the fire. In terms of Asia, I expect a huge rebound on the GEO market, since all those postponed projects are going to be eager to get back into the game with the rollout of the vaccine. Investors are already back after all so that confidence can only grow.

The way people have adapted to the pandemic has proven and legitimised use of data and remote work, which is a culture which will not go away once the world is immunised and will be certainly capitalised on in the world before us.

Not only is the industry resilient enough to bounce back, but the demand for satellite connectivity has ultimately grown to a new standard during 2020.

It has been very challenging, but I think that's all the more reason the inevitable rebound will be a powerful one. Across our launch vehicles, Arianespace has all the tools to address any type of customer in any kind of mission, so we are eager to help set the standard for the world's return to form. ■