



Game Changers Series: Episode 5 – Satellite IoT

Speaker: Alexandre Tisserant, CEO of Kinéis – 5 minutes

John Gilroy: Welcome to Constellations Game Changers, a limited series of short podcasts each focused on a pivotal new technology or trend for the satellite industry. Our guest today is Alexandre Tisserant CEO of a company called Kinéis and the topic we've chosen for Alexandre is satellite IoT. So Alexandre, I have three questions for you and my timer is set for 10 minutes. Are you ready?

Alexandre Tisserant: Yes, I am.

John Gilroy: Here we go. Could you give us your definition of satellite IoT and explain everything it encompasses?

Alexandre Tisserant: Sure. So satellite IoT is basically an IoT with satellites. So what do we mean by IoT is simply internet of things. So we're talking about small devices that are following, tracking some assets like animals, like boats, like wagons, like everything you want to monitor, including forests and trees to detect the fire. And so today we only have 15% of the surface of the globe that is covered by terrestrial networks. And so that means that 85% of the planet is not covered. And so if you want to track any asset in maritime or everything that is traveling around the world, you will be connectless. So this is where satellite is bringing very good technology. So satellite IoT is just allowing you to connect any device anywhere on the globe 100 % of the surface of the globe with IoT performances. And IoT performance is basically to have small devices quite cheap and that can last months and even years without being necessarily recharged. And this is one feature very interesting and very specific for IoT that it's very interesting for our customers.

John Gilroy: This series is called Game Changers. With that in mind, in what way is satellite IoT transforming the industry?

Alexandre Tisserant: Yeah, so like I said, we're focusing on devices that are very small, that are very energy efficient, that can last four years without being recharged, and that can connect everything everywhere on the surface of the planet. So it tells dramatic changes for certain industries.

Alexandre Tisserant: Let's take a few examples. We can talk about detecting wildfires. Today to detect wildfires, you have cameras, you have people looking at the trees, you have also satellite that are taking some images, but detecting that takes a little long. The shortest we can do is like one hour, and in one hour obviously you

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have a threat that is extending very deeply. With satellite IoT what you can do is to have sensors on the ground that can detect a small level of CO₂ changing and then emit an alert so that we can intervene and stop the fire. And we can do that in no more than 10 to 15 minutes, which is considerably a good improvement, and that can obviously save trees and also save some intervention means because you will need just one plane instead of three to extinguish the fire, for example.

Alexandre Tisserant: You can obviously track any goods. So in the logistic industries, you can track any asset from start to customer, from industry to customer without losing the signal, without losing where it is. And whether it's on the sea, whether on the train or at the warehouse, at the customer point, you can track everything. So this is considerably giving reliability on what you can do with tracking.

John Gilroy: Tell me, in your opinion, what does the future of satellite IoT look like?

Alexandre Tisserant: So there is different options for that. Today we have a few actors like ours that are positioning on this niche market. Tomorrow we have several new technologies that could come up to add on more functionalities to what we can do today. We have standards emerging in the industry of telecommunication that could come to IoT and to satellite IoT. This is something we are actively looking at after the first constellation we are launching this year. So there may be a new technology round that could come in the coming years and obviously have more capacity and go down in price for our customers.

John Gilroy: Thank you, Alexandre, for being our guest in this short episode. Constellations is partnering with Novaspace to bring you exclusive content leading up to the World Space Business Week. Hear more from Alexandre at the event and we hope you enjoyed this episode in the meantime.