

WHY AVANTI



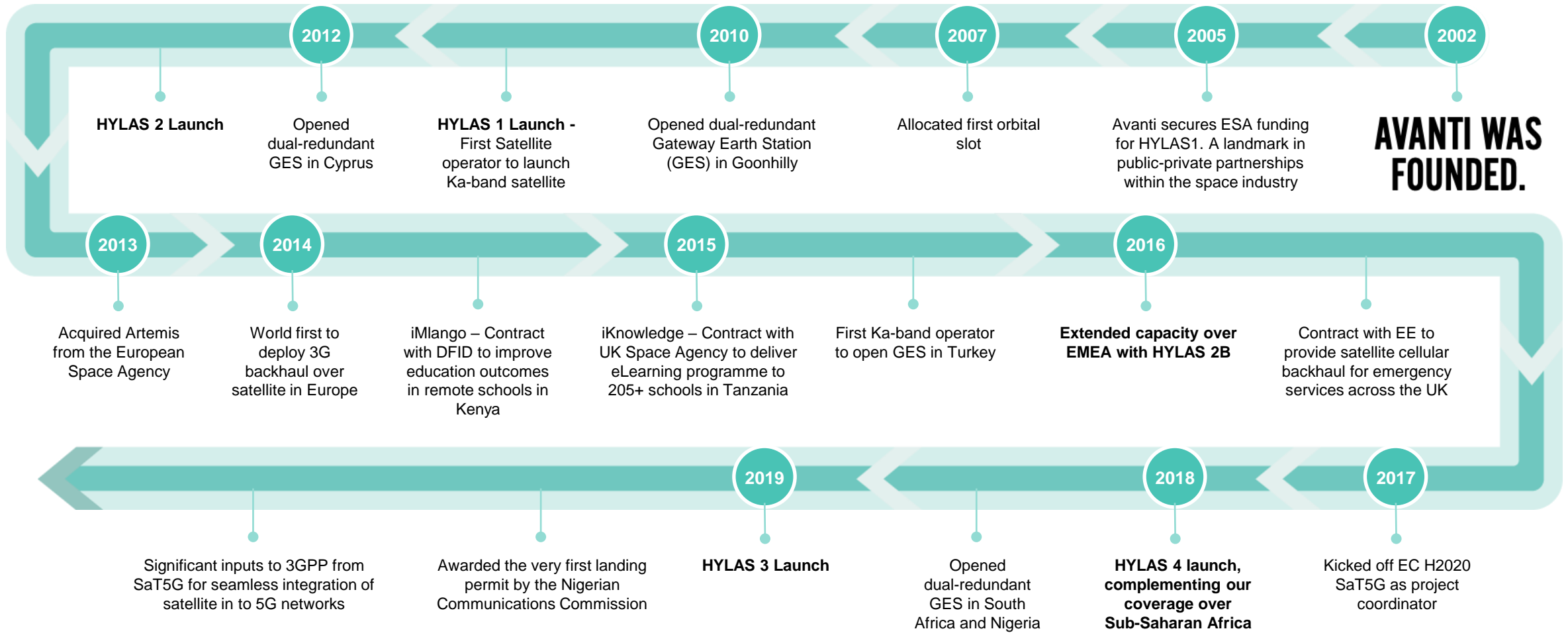


We are the leading Ka-band high-throughput satellite capacity partner to the communications industry in Europe, Middle East and Africa.

With over 10 years of commitment to deliver reliable and highly secure satellite capacity, we extend and guarantee coverage for defence missions, enterprise solutions and critical public services.



A Technology Pioneer



A high-angle, hazy photograph of a city skyline, likely Los Angeles, with numerous skyscrapers and buildings visible under a warm, golden light. The image is partially obscured by a white diagonal shape that serves as a background for the text.

Who we work with

We operate across 3 sectors, providing a comprehensive range of services.

CARRIERS

Mobile Network Operators
Network providers

DEFENCE & SECURITY

Defence & Security agencies

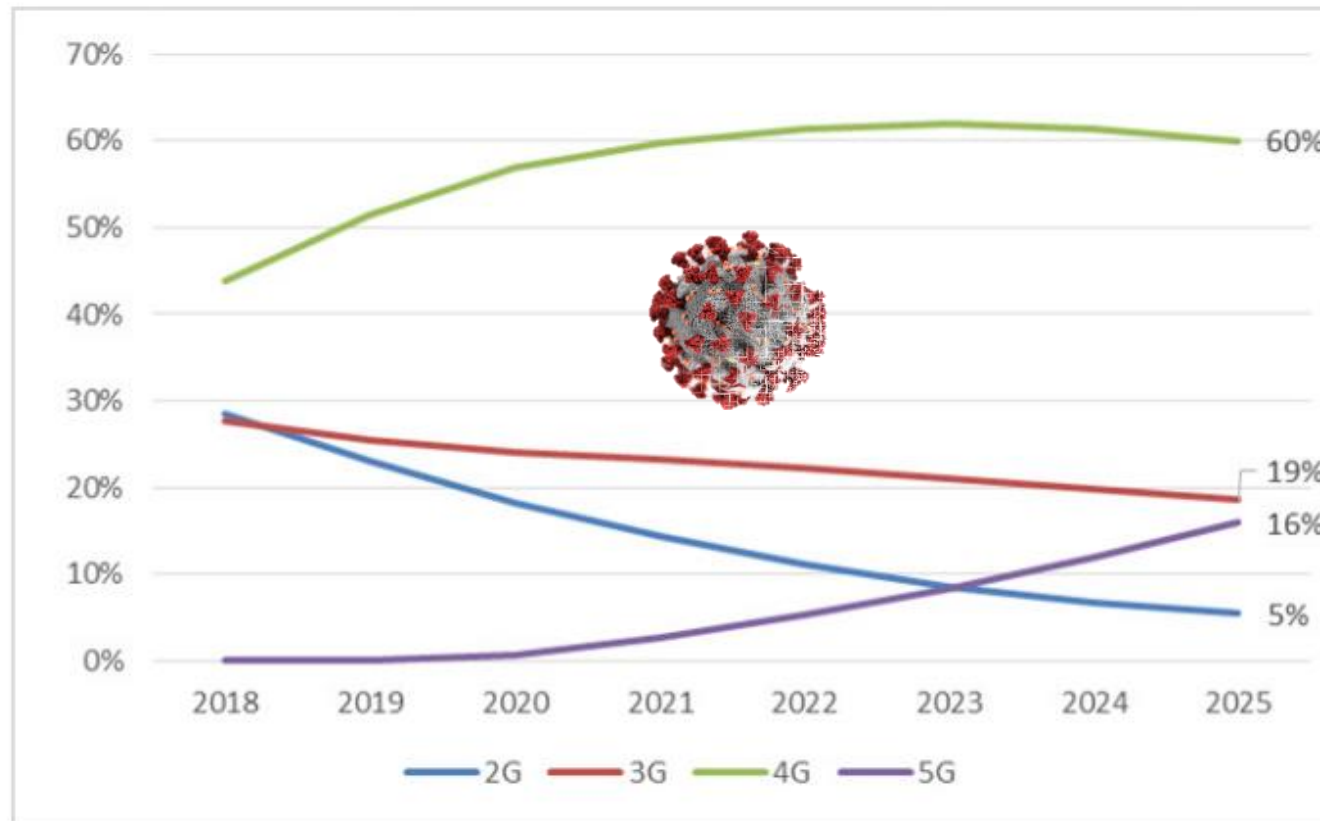
SATELLITE INDUSTRY

Satellite operators, Satellite integrators

We invested \$1.2 billion in the latest Ka-band technology and shaped it to meet the communications industry.

Predicted 5G take up globally

Proportion of connections globally



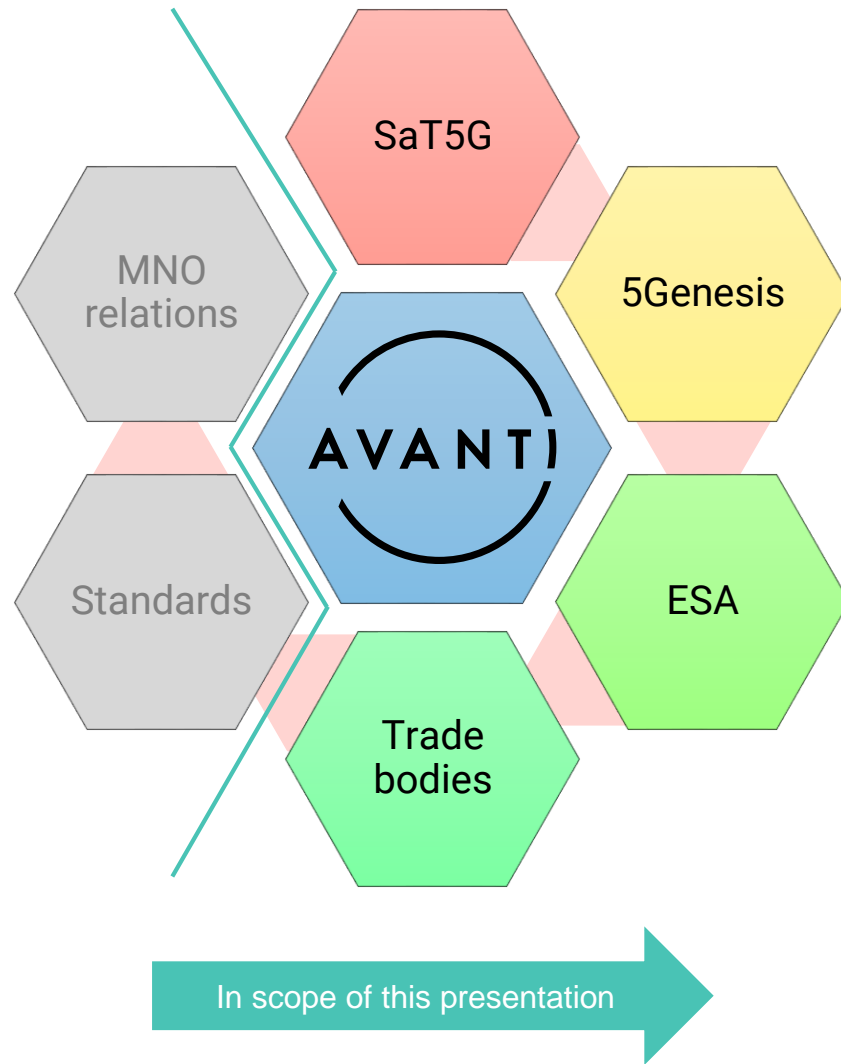
Source: GSMA Intelligence

4G is not going away anytime soon

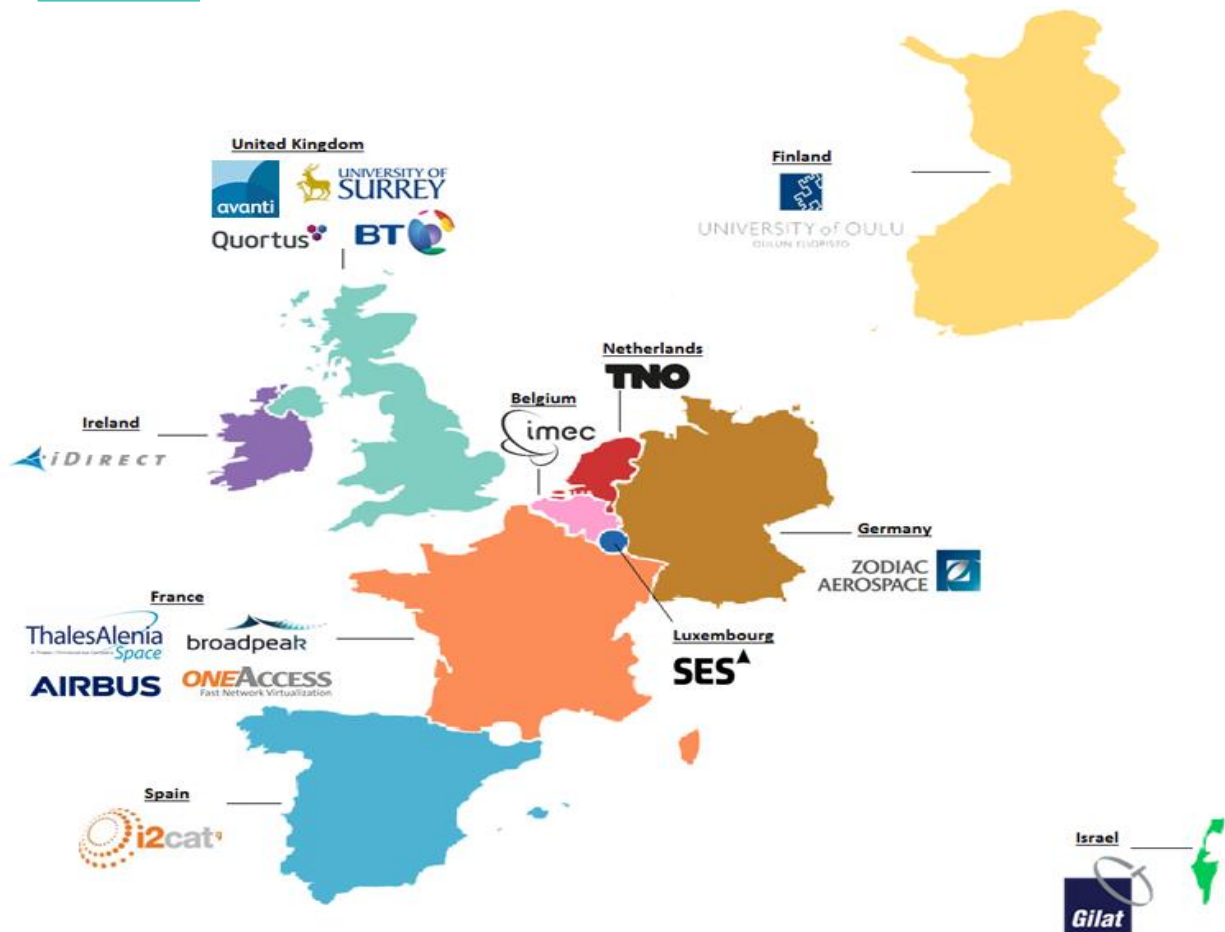
Predictions made prior to pandemic

5G is becoming significant

Avanti's involvement in 5G



SaT5G

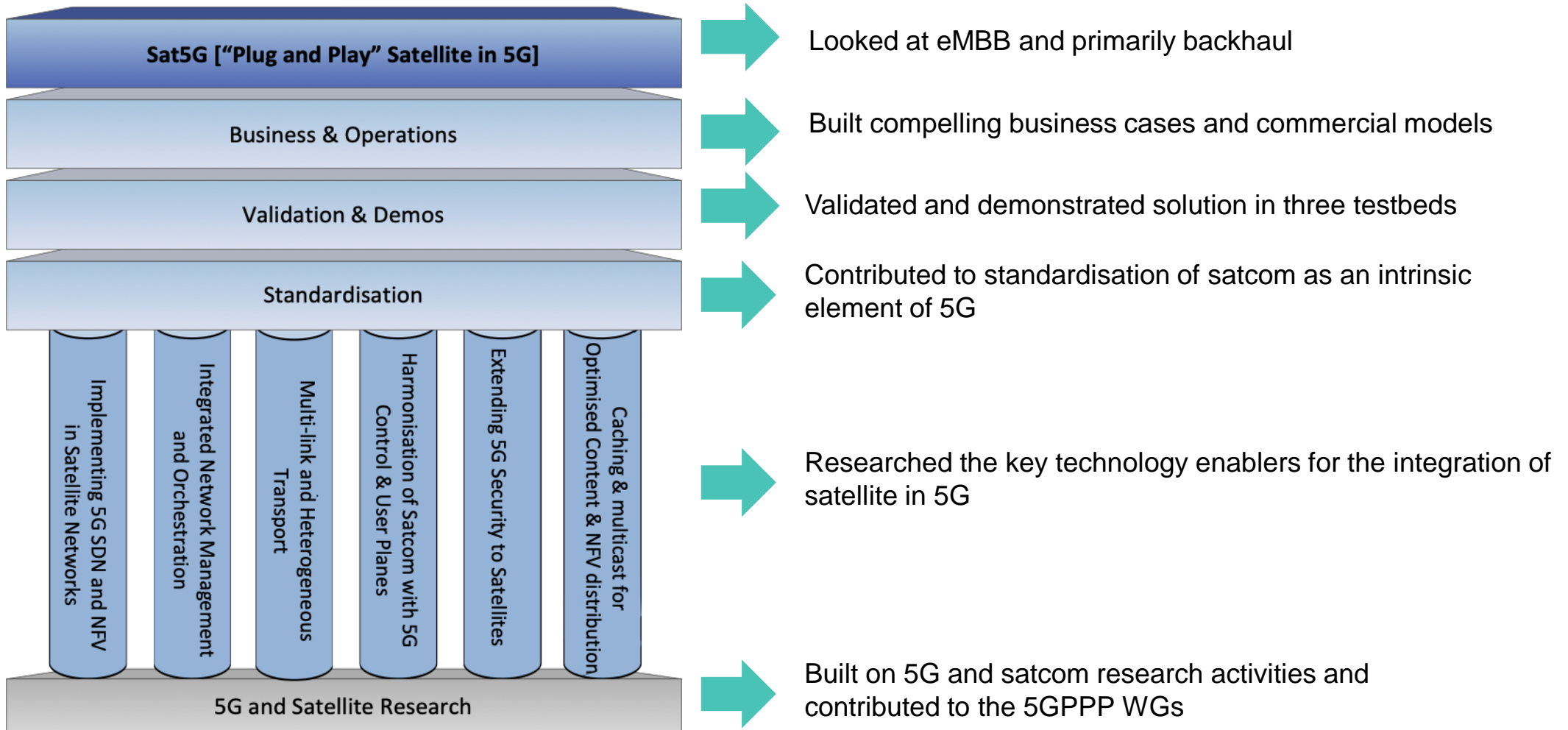


16 organisations
9 countries
200+ standards contributions



Acronym	SaT5G
Title	Satellite and Terrestrial Network for 5G
Programme	H2020
Call	H2020-ICT-2016-2
Topic	ICT-7-2017 5G PPP Research and Validation of critical technologies and systems
Type of Action	Research and Innovation Action (RIA)
Grant Agreement No.	761413
Duration	30 months (+3 months for some parts)
Dates	June 2017 to March 2020
Project Coordinator	Avanti Communications
Technical Manager	Now UoS (was TAS)
More information	http://sat5g-project.eu/

SaT5G Concept



5Genesis



- H2020 ICT 17 project
 - 36 months starting July 2018
 - 29 partners
 - Builds five platforms to validate KPIs for vertical use cases
- One platform specifically including satellite communications
 - Limassol using Avanti capacity to provide 5G satellite backhaul service
 - Addressing the underserved and near shore communications
 - Simpler, less sophisticated and lower volume solution than SaT5G using standard VSAT hubs and modems
- Sister project – 5G Vinni
 - Also had a satellite link component (SES et al)



ESA and 5G



- Satellite for 5G initiative
- Multiple projects including
 - Satis5G – complementary to SaT5G adding mMTC use cases
 - Support for 5Groningen
 - ...
- SSIG (Standards special interest group)
 - Regular calls to coordinate standards activities
 - Led by TAS and ESA



European Space Agency
Agence spatiale européenne



Other significant groups



- **ESOA**

- Includes active standards working group
- Market Representation Partner in 3GPP



- ESOA has signed a co-operation agreement with **NGMN**
 - Joint project for deep rural communications
 - Want direct to UE but happy for backhaul to be included



- **Networld2020**

- Has a satellite working group
- Provides some direction for new innovations



- **Horizons 5G**

- UK group including AVA, ADS, 5GIC, BT/EE and others
- *"Space as an embedded and integrated part of the 5G network"*





**Be
More.**

Connect to 5G satcoms

www.avantiplc.com

