



TRANSFORMING GLOBAL COMMUNICATIONS FOR THE OIL & GAS INDUSTRY



“Combining existing technology in a novel way to solve a very big challenge”

APRIL 2024

Walt Anderson (Founder & CEO)
waltanderson@avealto.com



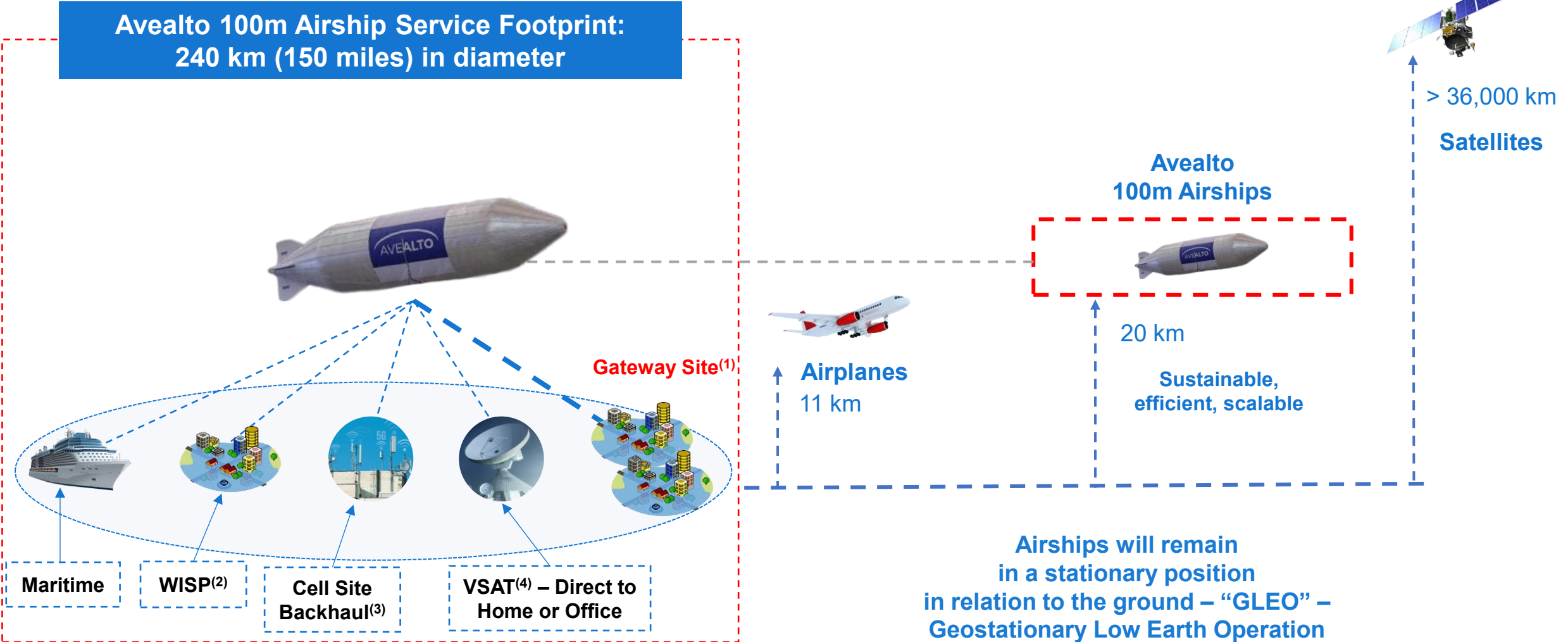
High Altitude Wireless Infrastructure Platform

- Lower Risk of Operational Failure Than Telecom Satellites
- **Lower Cost & Higher Quality than LEO, MEO or GEO Satellites**
- Exceptionally High Operating Margins
- Low Capital Cost to Begin Services and Rapid Return of Capital

“Fibre-in-the-Sky” Airships - Higher Quality Connection Than Satellites And At A Lower Cost



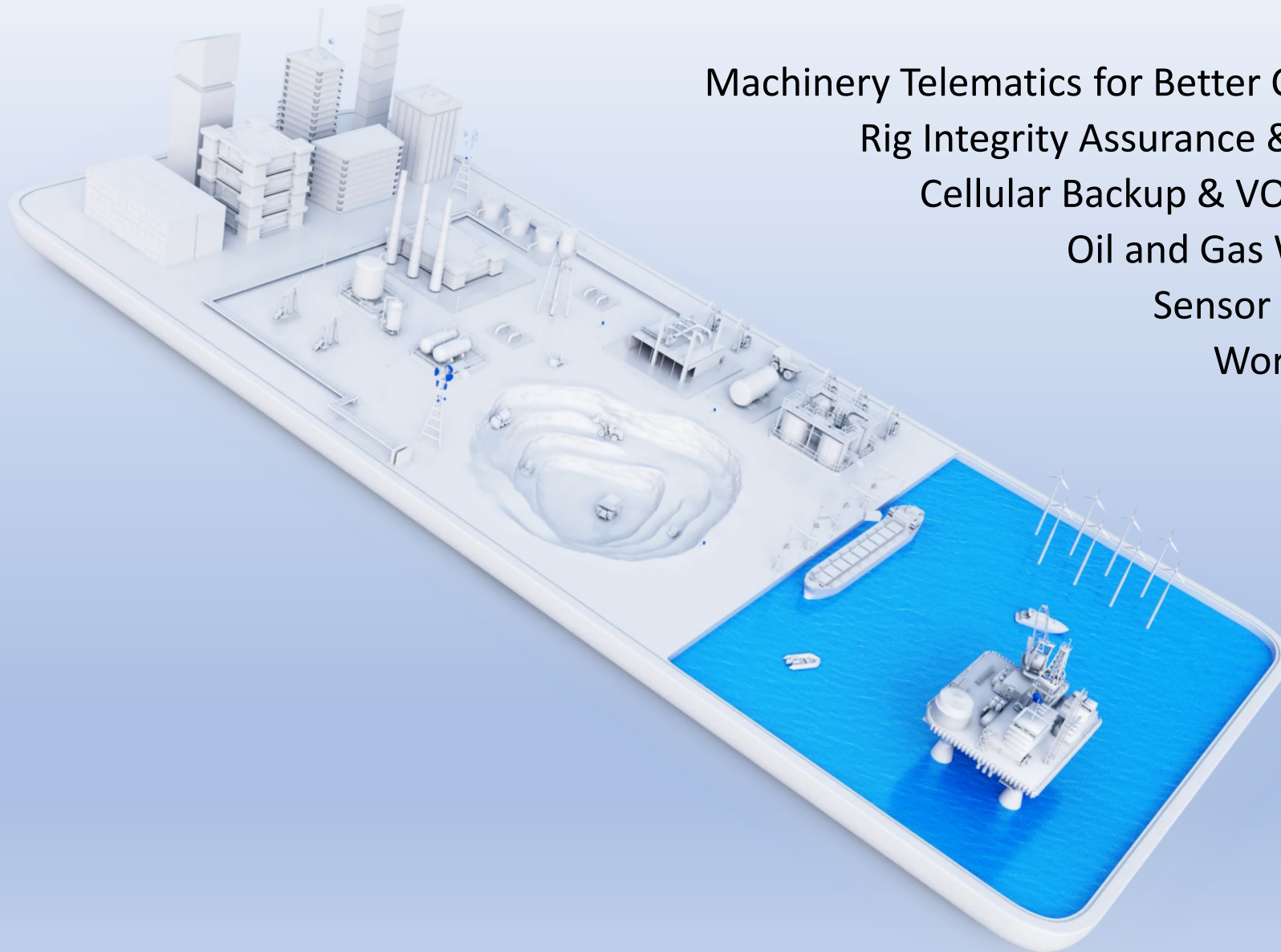
**Avealto 100m Airship Service Footprint:
240 km (150 miles) in diameter**



Note(s): [Business Standard](#), [CableFree](#), [GSMA](#), [TechTarget](#), [TechTarget](#), [TechTarget](#)

(1) A gateway site (also referred to as a teleport or hub) is a ground station that transmits data to/from the satellite to the local area network. It houses the antennas and equipment that convert the Radio Frequency (RF) signal to an Internet Protocol (IP) signal for terrestrial connectivity; (2) A wireless Internet service provider (WISP) is an Internet service provider (ISP) that allows subscribers to connect to a server at designated hot spots (access points) using a wireless connection. This type of ISP offers broadband service and allows subscriber computers, called stations, to access the Internet and the Web from anywhere within the zone of coverage provided by the server antenna. This is usually a region with a radius of several kilometres; (3) The most common network type in which backhaul is implemented is a mobile network. A backhaul of a mobile network also referred to as mobile backhaul connects a cell site towards the core network; (4) A very small aperture terminal (VSAT) is a small-sized earth station used to transmit/receive the data, voice, and video signals over a satellite communication network, excluding broadcast television. A VSAT end user needs a box that interfaces between the user's computer and an outside antenna with a transceiver

COST EFFECTIVE TELECOM INFRASTRUCTURE ON DEMAND



Machinery Telematics for Better Care & Worker Safety

Rig Integrity Assurance & Monitoring Sensors

Cellular Backup & VOIP Service Telephony

Oil and Gas Wellhead Monitoring

Sensor Based Tank Monitors

Worker Communications

Pipeline Monitoring

Asset Tracking

SCADA

IOT

Avealto Team – Seasoned \$ Billion Telecoms Creators



Walter Anderson
Co-founder and CEO

- **25+ years** of experience creating fast-growing, successful telecommunications companies
- Founder of **2 unicorns** in the telecom sector
- Pioneer of NewSpace industry – Co-founder of International Space University
- Founded Esprit Telecom (UK) the first pan-European telecommunications operator, IPO'd and acquired for **\$850m**
- Founded Telco Communication Group, Inc., which IPO'd in 1997 and was acquired by Excel for **\$1bn**



Global TeleSystems Group to Buy
Esprit Telecom for \$850 Million

Los Angeles Times



Excel Agrees To Buy Telco For \$1
Billion

The New York Times

Source(s): [Los Angeles Times](#), [The New York Times](#)



Carlos Gardellini, Director – Payload Development

- Extensive experience in satellite design and engineering
- Ex-MicroSat Launch Systems, Hughes Aircraft



Andrew Cox, High Altitude Aviation Specialist

- **30+ years** of experience in the aerospace engineering design
- Ex-Facebook



Neil Campbell, Director – Vehicle Development

- **25+ years** of experience in risk and safety management
- Ex-Royal Navy



Jaime Gamell-Riera, Director – Regulatory Affairs

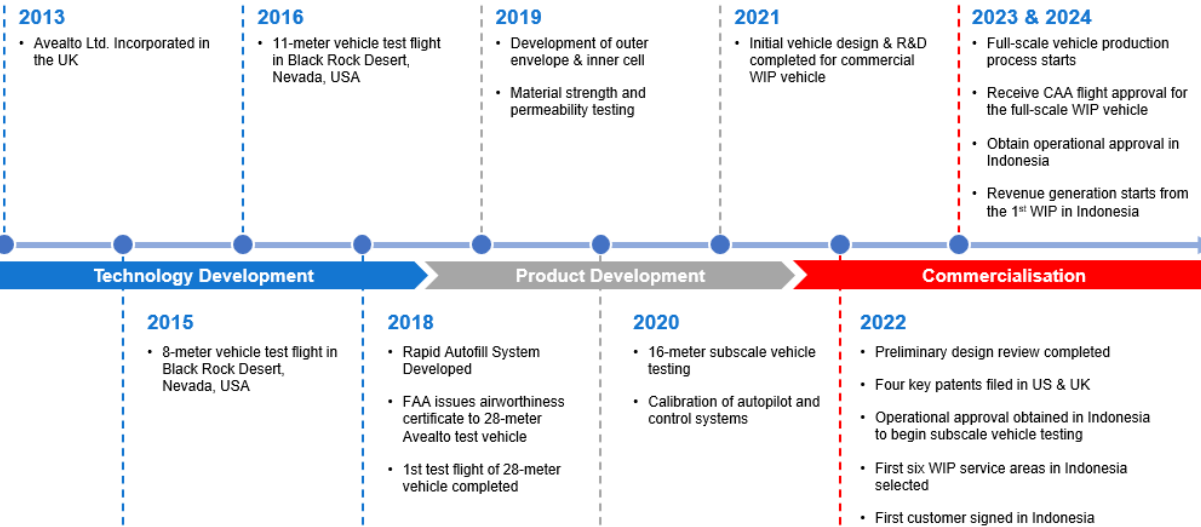
- **30+ years** of experience in the Telecom sector
- Ex-First Pendil Group, Telefonica Atlas Telecom, GEC Siemens



Thomas A. Olson, Director – Business Development

- **30+ years** of experience in Aerospace and other sectors
- Ex-Esprit Data, CMD Services

9+ Years Of R&D, Based On Only \$9.6m Capital Raised, Translating To Rapid And Efficient Commercialisation

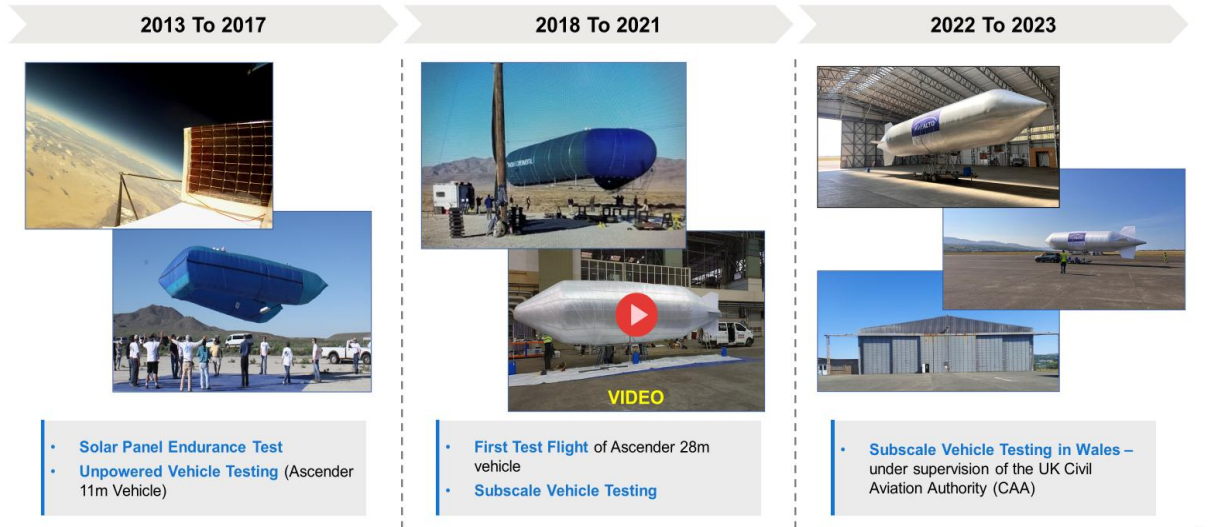


20

Development And Testing – 2013 To 2023



Avealto's Key Development and Testing Activities Over 10 Years – Only One More Hurdle Left



6

STRICTLY PRIVATE AND CONFIDENTIAL

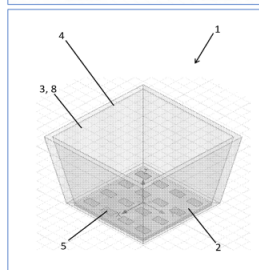
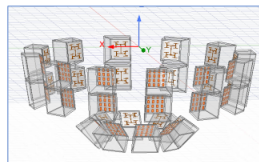
Backed By Robust IP



3 KEY PATENTS GRANTED

- Communications Platform**
 - Airship maintains at a constant position at an altitude of 15km to 22km
 - Comprises a communications payload for providing a communications relay service with a ground station within one or more of the C-band, X-band, Ku-band, K band, and Ka-band
- Novel Antenna**
 - Antenna assembly comprising a patch antenna and a deflector – to reduce sidelobe gain of the patch antenna, which projects from a plane of the patch antenna (see the Antenna Diagram images)
- Airship Control System**
(filed in the US and the UK)
 - Lighter-than-air Airship comprising a steering and propulsion system, and a control system
 - The control system comprises sensors to monitor the position and orientation of the Airship and is configured to control the operation of the steering and propulsion system based on sensed data

Antenna Diagram for the Patent



Risk Mitigated By 100 Years Of Accumulated Experience And Well-Established Technology



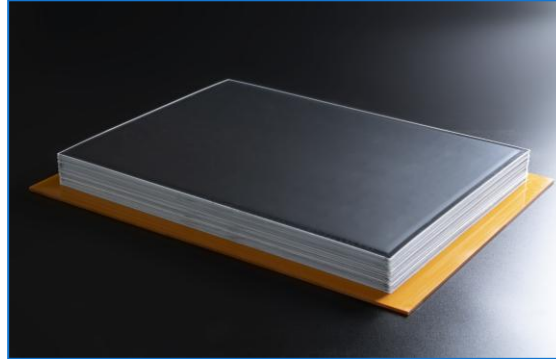
Over **100 Years** Of Airship Development - Now Electrified And Automated

Why Now? Core Components Have Significantly Advanced



Solar Panels (Photovoltaic Cells)

- Modern solar cells enable lower power consumption
- Lightweight and flexible with higher efficiencies
- Now **2x** more efficient in the last 15 years and cost **50% less** per watt



Batteries

- Batteries now have a much higher energy density
- Volumetric energy density of lithium-ion batteries increased over **8x** between 2008 and 2020⁽¹⁾



AI UAV Management

- AI has transformed the ability to control and manage large fleets of autonomous vehicles
- The technology to operate Autonomous Unmanned Vehicles is now very mature.



Communications Electronics

- Higher performance, lower power electronic chips with low noise RF power amplifiers are now available off-the-shelf
- Can now be used to build high-altitude transponders

Source(s): Avealto estimates, [Next-Generation Cobalt-Free Cathodes – A Prospective Solution to the Battery Industry's Cobalt Problem](#)

Note(s): (1) Volumetric energy density refers to the amount of energy that can be contained within a given volume. Increasing the volumetric energy density of batteries allows electric vehicles (EVs) to travel further without increasing the size of the battery pack. Conversely, it can allow an EV to travel the same distance with a smaller battery pack, thus saving space, weight, and manufacturing costs.

STRICTLY PRIVATE AND CONFIDENTIAL

Risk Mitigated By 100 Years Of Accumulated Experience And Well-Established Technology



1917
Goodyear B-2



1932
Goodyear Columbus



2011
Goodyear N07-101



2017
Airlander 10



2023
SCEYE – Stratospheric
Telecoms



Technology upgrade to electric propulsion with solar charging allows **3 to 6 months of geostationary autonomous operations** to provide “fibre-in-the-sky” telecom infrastructure services

Over **100 Years** Of Airship Development - Now Electrified And Automated

A TECHNOLOGY WHOSE TIME HAS COME



“By providing reliable, high-performance connectivity to the most remote and challenging locations on Earth, HAPS can play a pivotal role in creating a more connected and equitable world.”

Proprietary & Confidential



The UN agency for
digital technologies

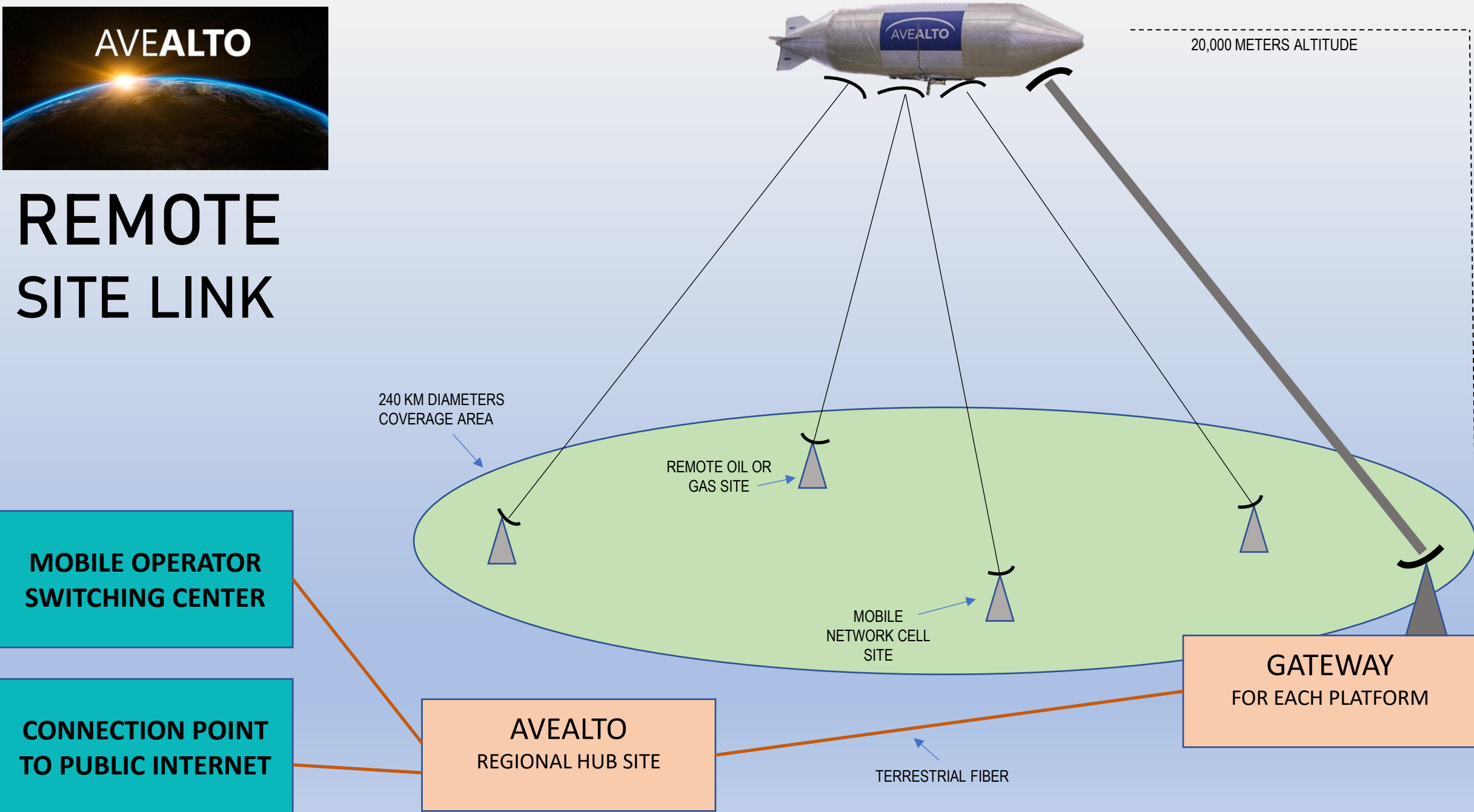
**World Radiocommunication
Conference 2023
(WRC-23)**

ITU World radio Conference 2023 has identified additional frequencies for High Altitude Platform (HAP) vehicles.

STRICTLY PRIVATE AND CONFIDENTIAL

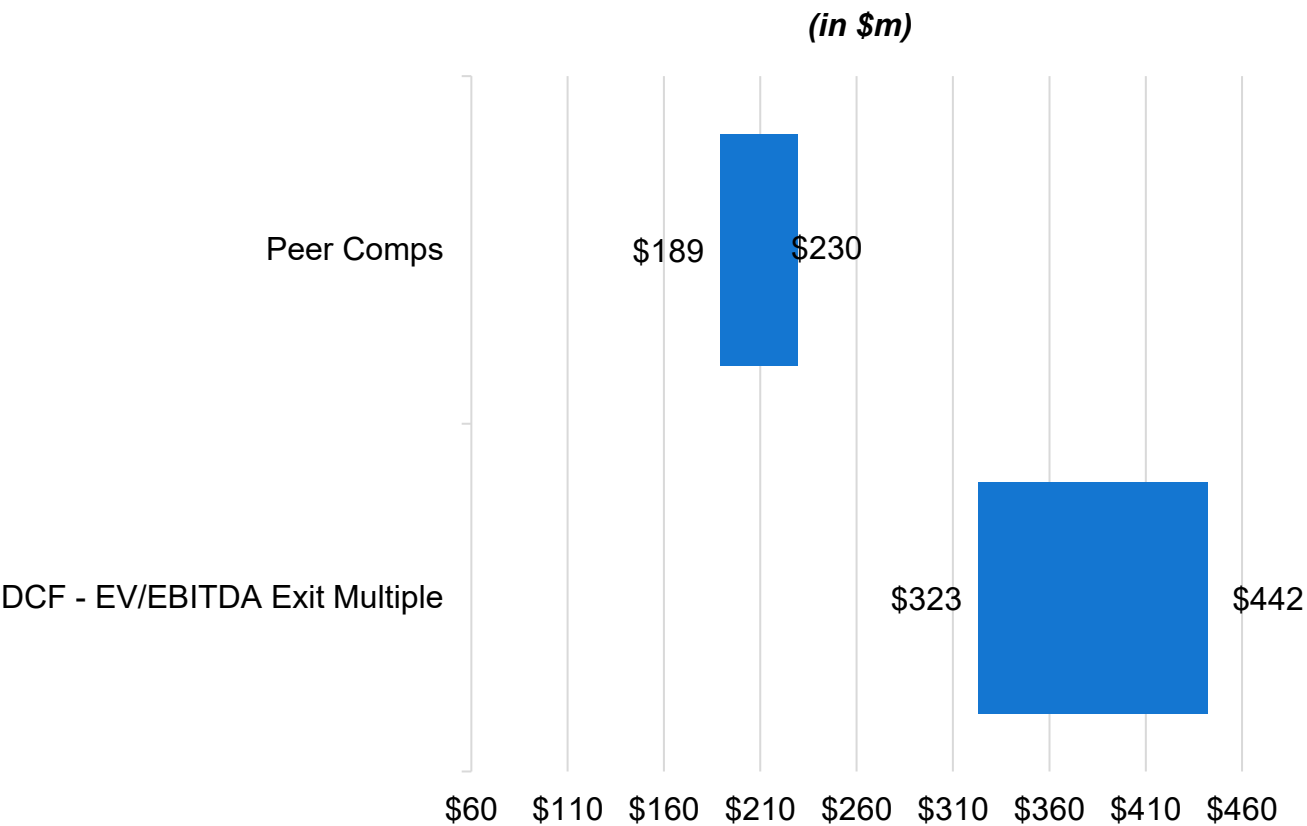


REMOTE SITE LINK



Indicative Valuation Range

Indicative Enterprise Valuation Overview



The indicative enterprise value of Avealto would be in the range of ca \$190m to \$230m based on the methodologies listed above

Indicative Enterprise Value Summary

Methodology	% Weight	Avealto's Valuation
Peer Valuation		
	25%	\$203m to \$253m
	25%	\$259m to \$270m
	20%	\$140m to \$187m
	15%	\$140m to \$187m
	15%	\$166m to \$222m
Average	100%	\$189m to \$230m
DCF Valuation		
EV/EBITDA Exit Multiple	-	\$323m to \$442m
	100%	\$189m to \$230m

Opening the Dawn of a New Connected World...

...a technology whose time has come...

Today

Expensive and
ineffective satellites

2027

Cost-effective,
low-latency
Airship-connected world



Walt Anderson – Managing Director

waltanderson#@avealto.com

+1 202 817-9222