OQ Technology

The Direct-to-Device Impact on SatCom

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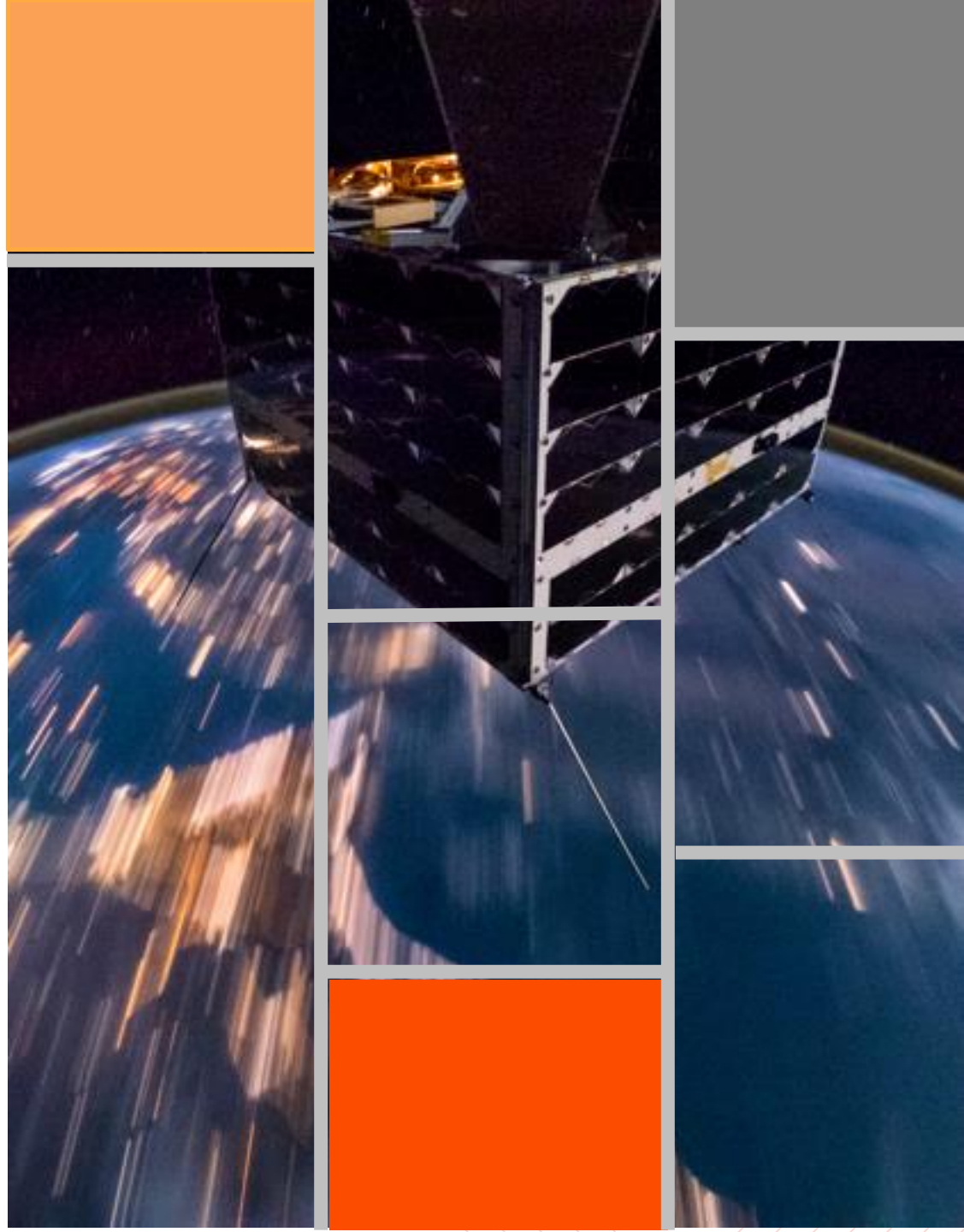
OQ Technology today

The fastest growing 5G NB-IoT company worldwide

- OQ Technology is a Low Earth Orbit satellite operator
- The world’s first LEO 5G IoT satcom company
- Global IoT and M2M satcom solutions
- Multi-Industry: energy, mining, logistics, maritime, agriculture
- Our patented technology facilitates IoT connectivity anywhere for billions of users, leveraging existing 5G IoT chips and integrating both terrestrial and satellite networks



About OQ Technology

Only European player in the market

Founded in 2016

HQ in Luxembourg
KSA, Greece, UAE, Rwanda

Global coverage: 10 satellites in orbit

International partnerships and customers

20+ 3GPP contributions made
One standard 3GPP – 5G NB-IoT / NTN Rel. 17

9 Patents granted in EU & US

Notified OQ own ITU filings – Licensed spectrum and landing rights

€ 20 Million Funding raised up to date

Awards and Recognitions

Recognized Leader in the 5G Satellite Industry

NOKIA

Winner Nokia Open Innovation Challenge 2017

MSUA Mobile Satellite Users Association

Mobile Satellite Newspace Award 2024

أرامكو السعودية saudi aramco

ARAMCO Space Age 2024 Award

INDUSTRY INSIGHTS WEBINARS POWERED BY IoT Marketing

Space Tech Solution of the Year 2021

MIDDLE EAST TECHNOLOGY EXCELLENCE AWARDS

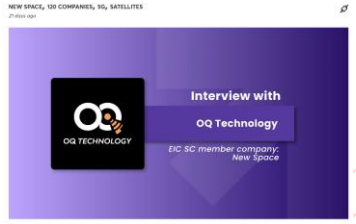
Middle East Technology Excellence Award 2023

LUXEMBOURG OFFICIAL TOP 150

Top 10 Startups in Luxembourg

EIC Scaling Club

Top 11 Innovative Startups in Europe in New Space 2025



European Innovation Council

EIC Accelerator Winner 2024 (Blended Finance)

Our Leadership Team

Experts from Satellite & Telecom Industries

Mr. Prasanna Nagarajan - CIO

NEC 3GPP ACCEMIC TECHNOLOGIES

Mr. Omar Qaise - Founder & CEO

esa SES your satellite company 3b NETWORKS OHB DLR EUMETSAT

Mr. Cyril Dufoing - CTO

esa Observatoire de Paris B medical systems From Azenta Life Sciences

Ms. Marwah Naseem – COO

Clayton homes BERKSHIRE HATHAWAY INC.

Mr. Hugo Alvarez –
Technical Product Manager

ORBCOMM TechniSat REVENGA Smart Solutions

Mr. Christoph Limmer –
VP Commercial

eutelsat SES your satellite company OneWeb

Mr. Michael Haller - CFO

SES your satellite company Regus Work your way Deloitte.

Today's IOT Networks Have Limitations

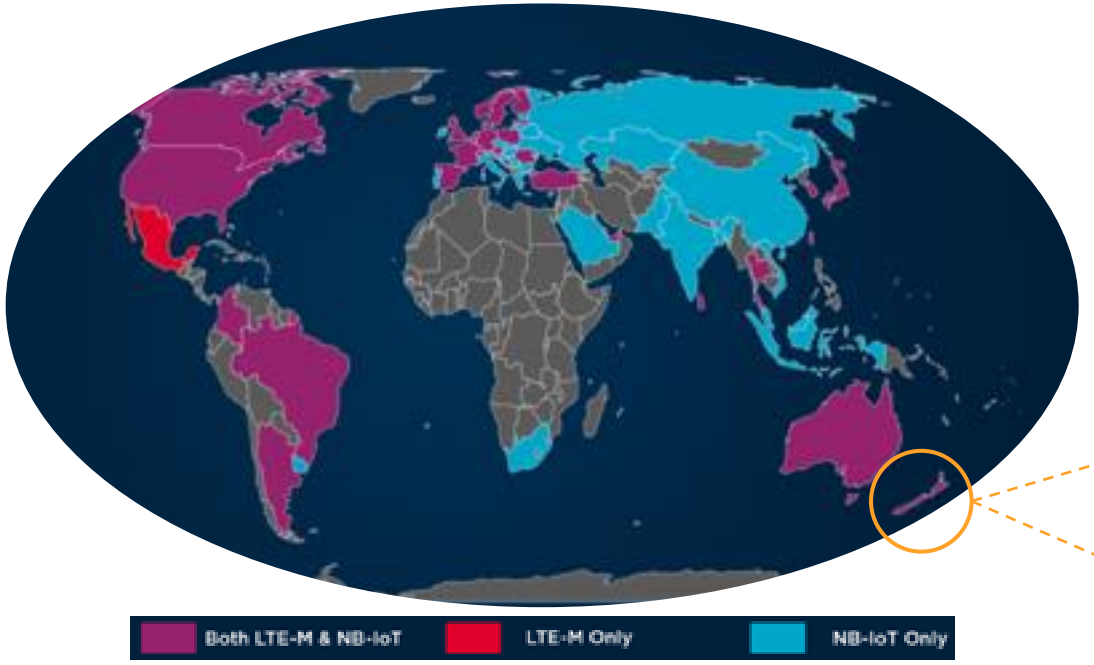
OQ TECHNOLOGY

CELLULAR is limited

- Cellular covers <20% of the world. *
- Fragmented
- Rural coverage gaps
- No roaming
- No mobility

SATELLITE IoT not viable.

- Bulky and Power-hungry
- Hardware & Connectivity VERY EXPENSIVE
- Non-Cellular Standard / Proprietary
- No indoor reach



Source: GSMA, 2021

The Unconnected

OQ TECHNOLOGY

5.61
BILLION

1.0 $
TRILLION

750
MILLION

20 %
COVERAGE

2.5
BILLION

31%
OF POPULATION

50%
FATALTY REDUCTION

5 American Players
Vs.
?? European Players

Problem / Solution Overview

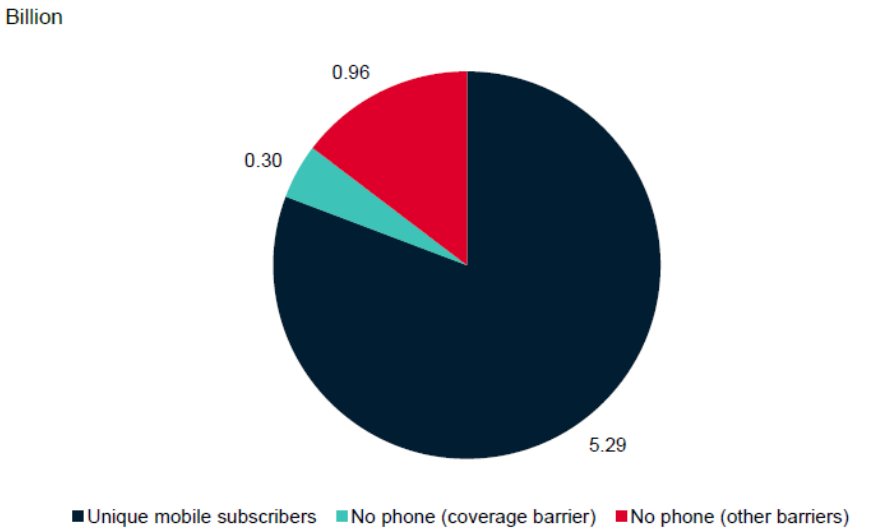
OQ Technology enables sustainable growth to vital industries

Problem:

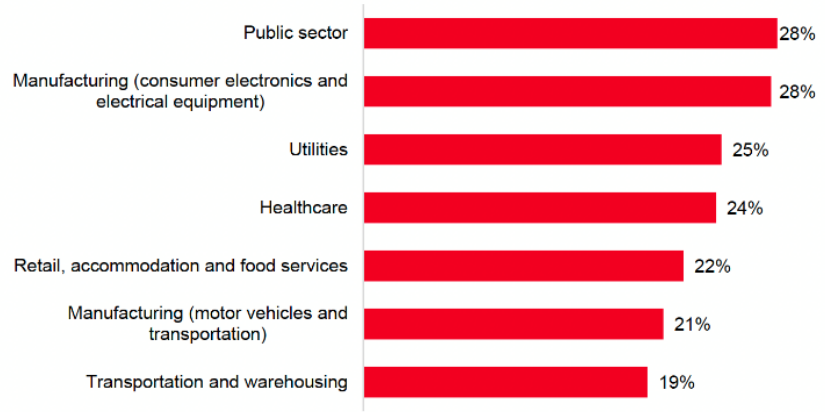
- 80% of the world has no mobile coverage
- Limited sustainable growth for vital sectors such as logistics, energy, agritech and utilities without connectivity

Solution:

- OQ is a comprehensive solution providing full coverage (4G/5G) connectivity in offering a global roaming service for all applications based on a LEO constellation of satellites
- Billion of devices can be accommodated on OQ's network with a truly global coverage, no gaps, ultra-low & ultra-reliable latency



Note: Data as of 2021
Source: GSMA Intelligence

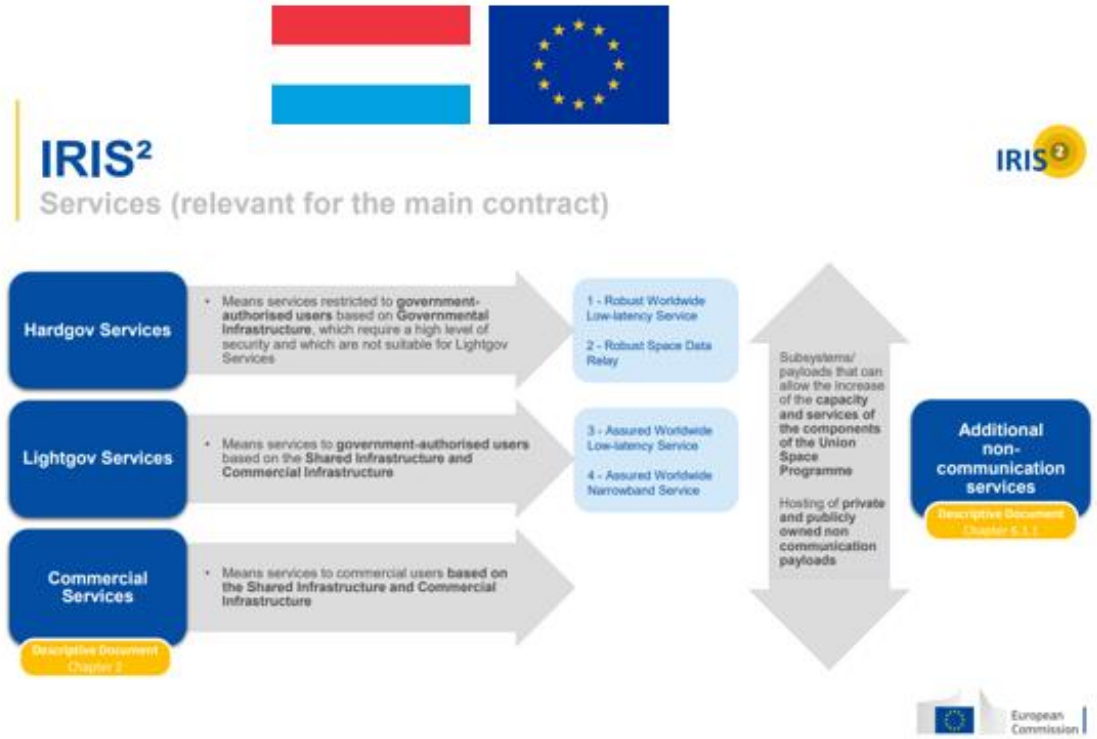


N=2,900
Source: GSMA Intelligence Enterprise in Focus Survey 2021

The Need We Address

There is a clear lack of European player in the Market

The Global market is only dominated by American players today.



OQ Technology, with its operational constellation, is already well positioned in the Market to address EU driven initiatives such as the IRIS².

The OQ ONE SOLUTION

ONE NETWORK

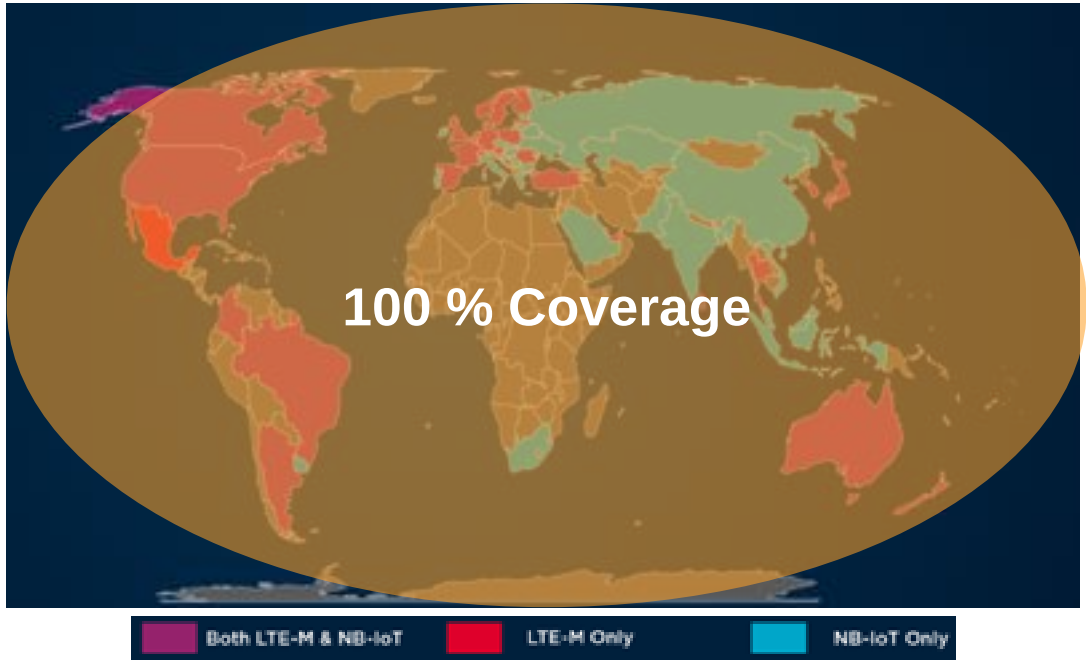
TRULY GLOBAL COVERAGE ⇢ NO COVERAGE GAPS ⇢ ULTRA-LOW, ULTRA-RELIABLE LATENCY

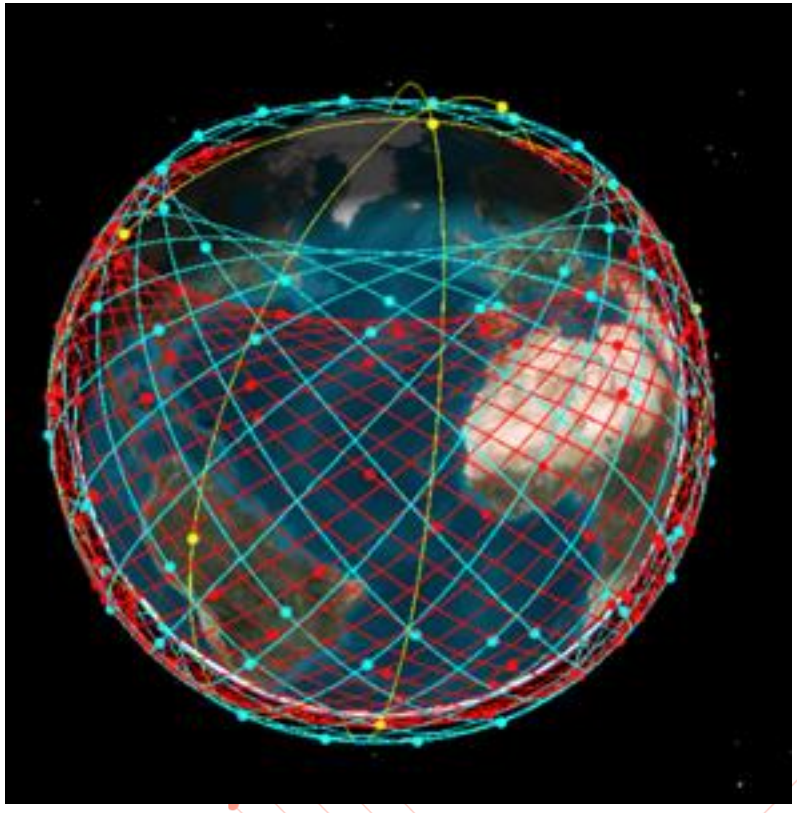
ONE SIM

GLOBAL ROAMING ⇢ NO FRAGMENTED NETWORKS ⇢ OPERATIONALLY SIMPLE

ONE STANDARD

CELLULAR 5G 3GPP COMPATIBLE ⇢ WHOLESALE MNO MODEL

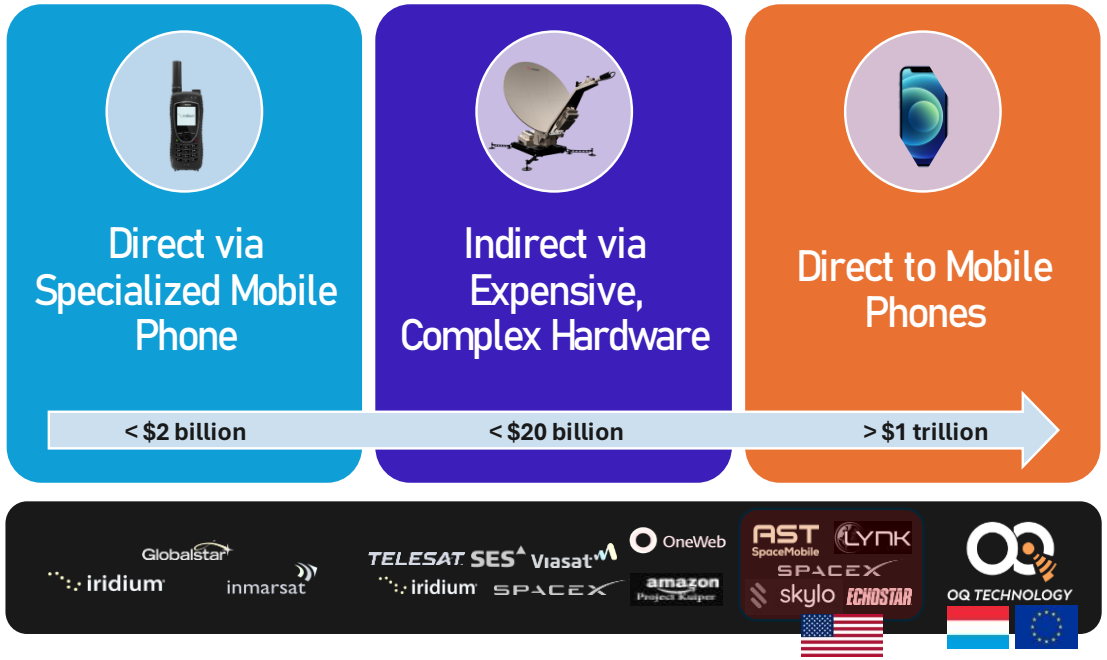




Market Opportunity

Satellite Connectivity market to reach US$19.9 billion by 2035

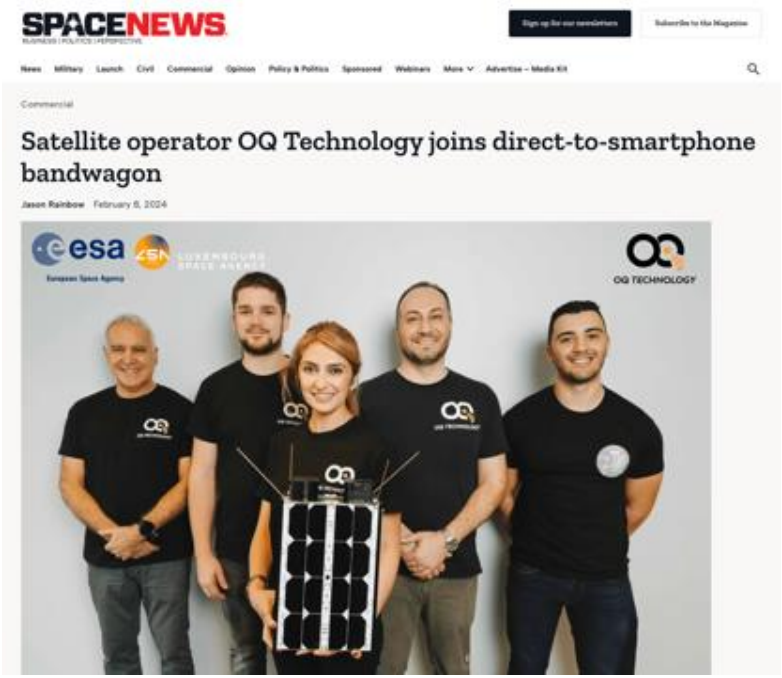
- **OQ Technology is already well positioned** to address the Satellite IoT Direct-to-Device market **as of 2024** with its 10 satellites in orbit.



- **OQ Technology** is **the only European Player,** while market is filled by American players.
- **Important for European Sovereignty.**

TAM: Global Telecom market **$1 Trillion**

SAM: Satellite direct to mobile device **$66.8B** in 2035


SPACENEWS

Satellite operator OQ Technology joins direct-to-smartphone bandwagon

Jason Rainbow February 8, 2024

Value Proposition

OQ Technology Advantages

3GPP Standards:

- Players following the 3rd Generation Partnership Project standard of 5G.
- Any 3GPP-compliant device with NTN capabilities can connect to OQ Technology's network. Free from proprietary lock-ins, allows scalability and easy integration.
- OQ has more than 14 contributions to 3GPP NTN standards

Patents:

- OQ Technology has been granted 9 NTN Patents (more in progress)
- Patents are part of company's IP strategy, encompassing hardware ad software as well as payloads
- Protection and rarrier to entry
- OQ patent claims map into the 3GPP NTN standard

Operating on Regulated 5G Spectrum:

- OQ has notified and brought-into-use own ITU spectrum filings allowing the system to be used for premium enterprise, controlled applications that require high reliability and service quality without leasing expensive spectrum

First-Mover Advantage:

- OQ Technology boasts significant licenses & landing rights across Asia, Africa, Australia, and Europe. Licensing initiatives for the Americas are in progress
- OQ has the first-mover advantage having de-risked the technology and business since 2016.

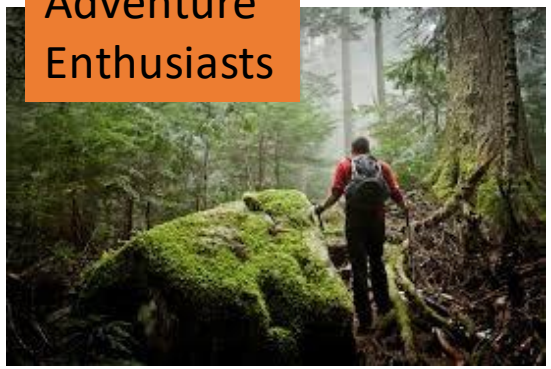
Target Market Segments & Use cases

Offsite Industry Workers

First Responders

Defense

Adventure Enthusiasts



MNOs / MVNOs

The Unconnected

Disaster Relief

Maritime

Agritech

Partnership Testimonial

LEO Satellite IoT Case Study: https://rb.gy/p53eb

“ OQ Technology successfully transmitted sensor data, including temperature, humidity, and CO2 emissions, from a remote oil wellhead to Aramco headquarters. OQ is currently establishing a global subsidiary in Saudi Arabia, which will become the only 5G space network operations center in the Middle East ”.

Mr. Nabil Al Nuaim - Aramco's SVP of Digital & Information Technology

وزارة الطاقة
MINISTRY OF ENERGY

CST
هيئة الاتصالات والفضاء والتقنية
Communications, Space & Technology Commission

أرامكو السعودية
saudi aramco

Broad Impact

OQ TECHNOLOGY

Inclusivity

Reliable communications to remote and underserved areas

Bridging the digital divide, with **3.5 billion** people still unconnected

Empowering communities with access to essential info

Emergency Services

Enabling SMS or SOS signals through satellites.

public safety & lives saving

Broadcast important information during disasters to be used an

Green Planet

Reduce the need for terrestrial infrastructure development

Minimize environmental disruption in sensitive ecosystems

Remote resource management

UN SDGs

SDG 9 Provide innovative space/telecom solutions and 3GPP contributions

SDG 11 Ensure inclusivity through messaging & emergency services

SDG 17 Establish European & Global partnerships (in Germany o2 Telefonica)

EU Programs

Digital Europe through extending advanced satcom services to underserved areas

European Green Deal emphasize sustainability and environmental responsibility

Horizon Europe R&D for future 3GPP advanced satcom solutions (such as 5G broadband NR).

Job Creation

Create jobs in satellite development, telecoms, 3GPP protocols, standards.

Foster innovation and economic growth in technology and emergency response sectors.

Challenges for NTN D2D

- Limited providers for 5G NTN software.
- Limited Iot Devices (Chipsets/Modules) available for LEO NTN
- Limited Smartphone availability for NTN that are NTN compatible.
- Direct-to-Device for current generation UE’s require non-standard modifications of the NR stack.
- High CAPEX drivers for NTN Infrastructure – New Market – Requires Investments

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