









Natalia Vicente **Director Public Affairs & Communications GSOA** 

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#### The Evolution

The global voice of the satellite industry to promote common interests at national, regional & global levels.

2002 - 2013 Europe

2014 - 2021

**EMEA** 

2022

Global

#### **GSOA Members**











































































#### Examples of benefits



Applications using satellite communications, Earth observation and navigation enable a sustainable, inclusive, digital society



(+70%)

In times of adverse global events such as COVID-19, satellite broadband connections have seen a 70% increase across Western/ Central Europe and Latin America



49% communications: Satellite comms can help connect the 49% of the world's unconnected population



Satellite communications contribute to every Sustainable Development Goal , either directly or



5G Connectivity: Satellites extend the reach of terrestrial networks enabling 5G on a global scale



Broadcast: Satellites provide live, global coverage of world events and transmission of real-time information



Security: Governments worldwide often rely on satellites for secure communication



+M

Multicast: Satellites can enable software and firmware overthe-air updates for millions of connected vehicles and devices

WØRLD ECONOMIC FORUM Six ways space technologies benefit life on Earth BRIEFING PAPERS SEPTEMBER 2020

Global Future Council on Space Technologies 2019-2020







### The Last-mile Internet Connectivity Solutions Guide

Sustainable connectivity options for unconnected sites 2020















# Satellite COMMUNICATIONS

for Early Warning, Environmental Monitoring & Climate C

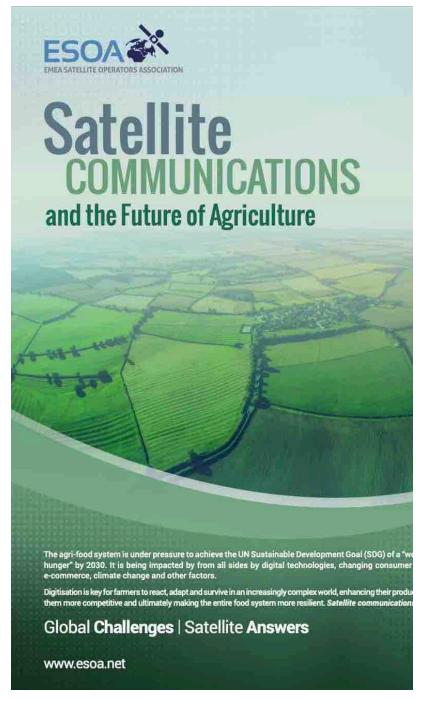


Year on year, humanity suffers devastating consequences of natural disasters and a rapidly char that steals lives and livelihoods from millions around the world. In short, our vulnerabilities are fast, that many things are beyond our control.

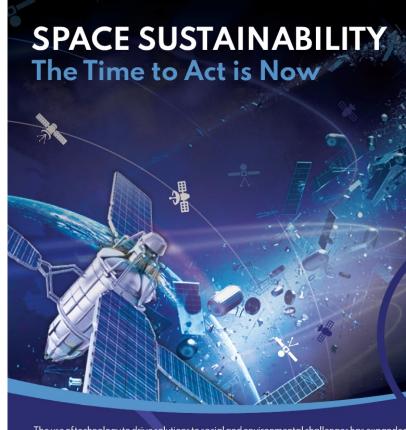
The use of satellite imagery to monitor large scale changes to the planet is well understood and The role of satellite communications, however, is less well-known, but of equal and increasing in

Global Challenges | Satellite Answers

www.esoa.net







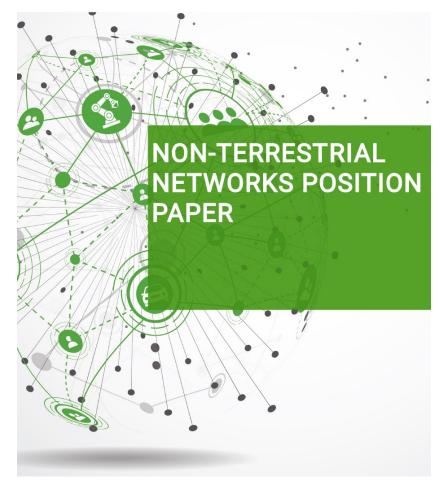
The use of technology to drive solutions to social and environmental challenges has expanded the Earth itself. The importance of these solutions is such that social and economic function stability fundamentally rely on a host of space-based services for which there is often no alternative to the social and economic functions.

The increased interest in space and pace of launches in recent years highlights the raction to deal with space debris and collisions and to ensure space remains sustainal and accessible for all.

Global Challenges | Satellite Answers

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Relevant Outputs
from Cooperation
with NGMN

(Mobile operators)

**GSOA VISION:** Satellite In The Networks **GEO Of Tomorrow** MULTIPLE CONSTELLATIONS MULTIPLE SATELLITES **MEO MULTIPLE ORBITS MULTIPLE BEAMS MULTIPLE FREQUENCY BANDS LEO MULTIPLE ACCESS TECHNOLOGIES SINGLE BEAM** 



#### **Changing Economics of Satellite Industry**

#### **Demand**

## Increasing need for universal broadband connectivity

- ⇒ Digitisation & demand for access to data is exploding
- ⇒ Pandemic & "Building back Better with Broadband" to achieve SDGs
- ⇒ Connectivity on the move (aero, maritime)

Rapidly evolving government policies & investment landscape for connectivity

#### **Supply**

### Technology advancement is driving down costs:

- ⇒ Lower production costs & different designs mean that more can be done with a smaller form factor
- ⇒ Lower cost to launch & increasing choice of launchers

Lower barriers to entry - more systems being launched

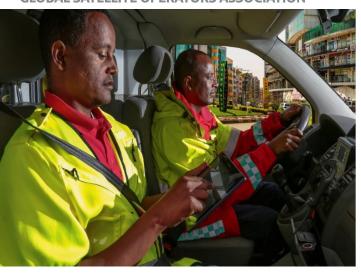








#### The Ever-Increasing Role & Importance of Satellite



**Essential Mobile Services** 

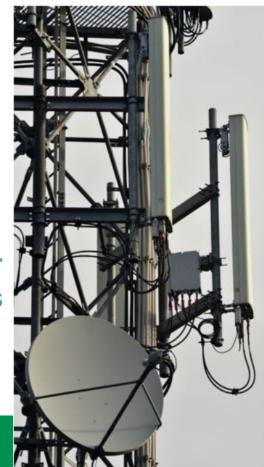


Satellite enabling community WiFi



Satellite broadband solutions enabling 100 mbps in the USA

Cellular backhaul for rural mobile stations



Diverse, flexible, cost-effective solutions to extend connectivity







