African Communications Office

RCEP GABON

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Session 2:

Achieving the next level of connectivity with Satellite Communications

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STEPHANE MEBALEY EKOME

Stimulate and develop ICT across Africa

Doctor in Electronics, Stephane has more than seventeen (17) years of experience in the telecommunications, information systems and digital processes. Passionate about new technologies and keen to disseminate and transmit his expertise, he initiated an ICT Consulting and Training activity for the benefit of African governments, businesses and civil societies.

- **International expert in Telecom and ICT**
- **International negotiator (ITU, ATU, CEPT)**
- **Entrepreneur in ICT and digital transformation in Gabon**

African Communications Office

Expert in Telecom & ICT

PhD in Electronics, Optronics and Systems & Telecom Engineer

17 years of international expertise: SES, ANFR, CNRS, CGI, Orange Labs

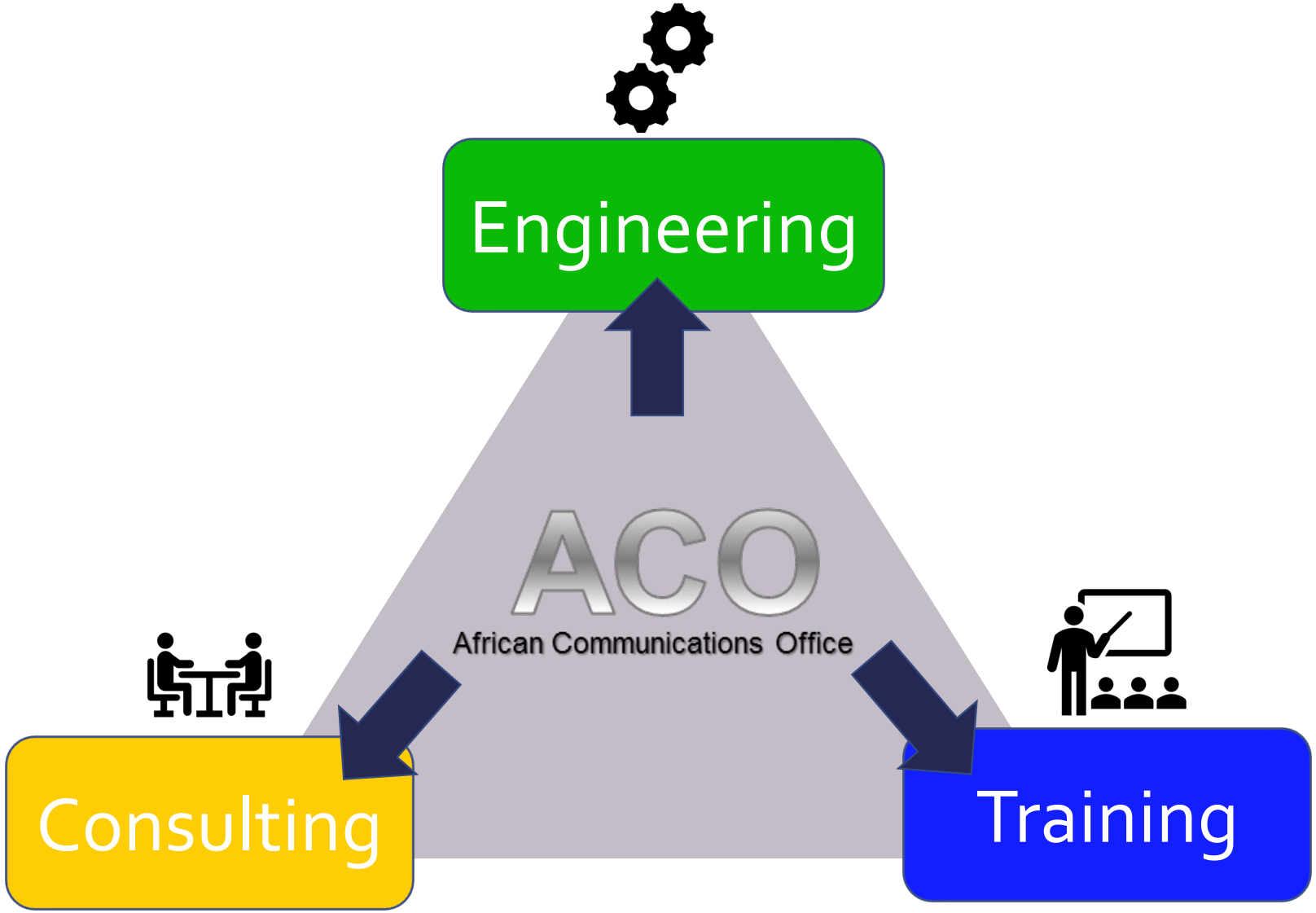
African Communications Office Founder, Director

Spectrum Management, Telecom infrastrctures, Consultancy in ICT, Training

SES ANFI AGENCE NATIONALE DES FRÉQUENCES 5G cnrs Logica CGI orange GRANIOU

Heart of activities

Supporting you at every step and every perspective of your ICT projects.



Bridging the Digital Divide

All individuals should have access to the internet and all opportunities it brings.

- regardless of income
- regardless o location

All technologies should contribute and be used in a complimentary approach.

- Terrestrial services
- Satellite services

Requires appropriate regulation

Affordability of technologies and services play a critical role

- Cost of infrastructure
- Cost of service

Supporting Key Sectors and Services

Satellite technology is a reliable solution that enhances connectivity, contributing to bridge the digital divide and supporting the achievement of UN Sustainable Development Goals.

Agriculture and Food Security

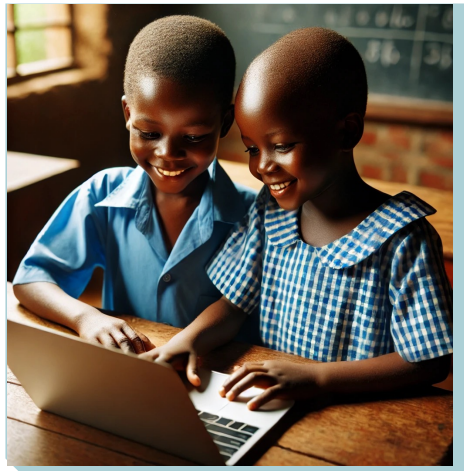
Precision farming improved and optimized with Satellite imagery

Financial Services

Satellite expands access to mobile money, and other financial tools

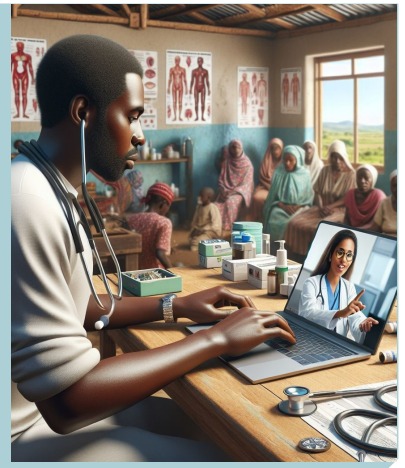
Backup to terrestrial networks

Satellite backup terrestrial networks for continuous service



Education

E-learning and remote schools connectivity enabled with satellite



Healthcare

Telemedicine enabled for underserved areas by satellite technology

Support economy with high value services

Defense and disaster relief services

Access to public services in rural areas

Socio-Economic Considerations

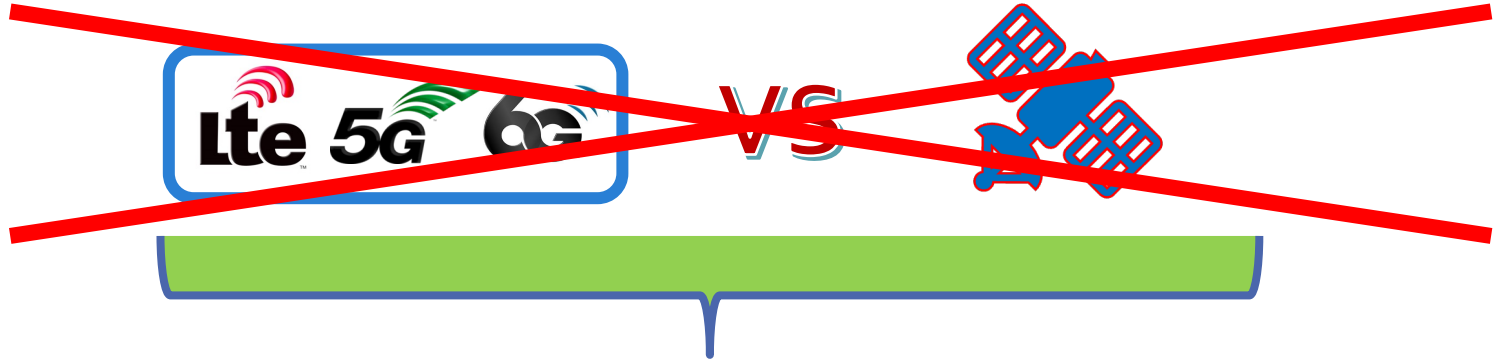
140% growth of satcom broadband users for Africa & Middle East by 2030

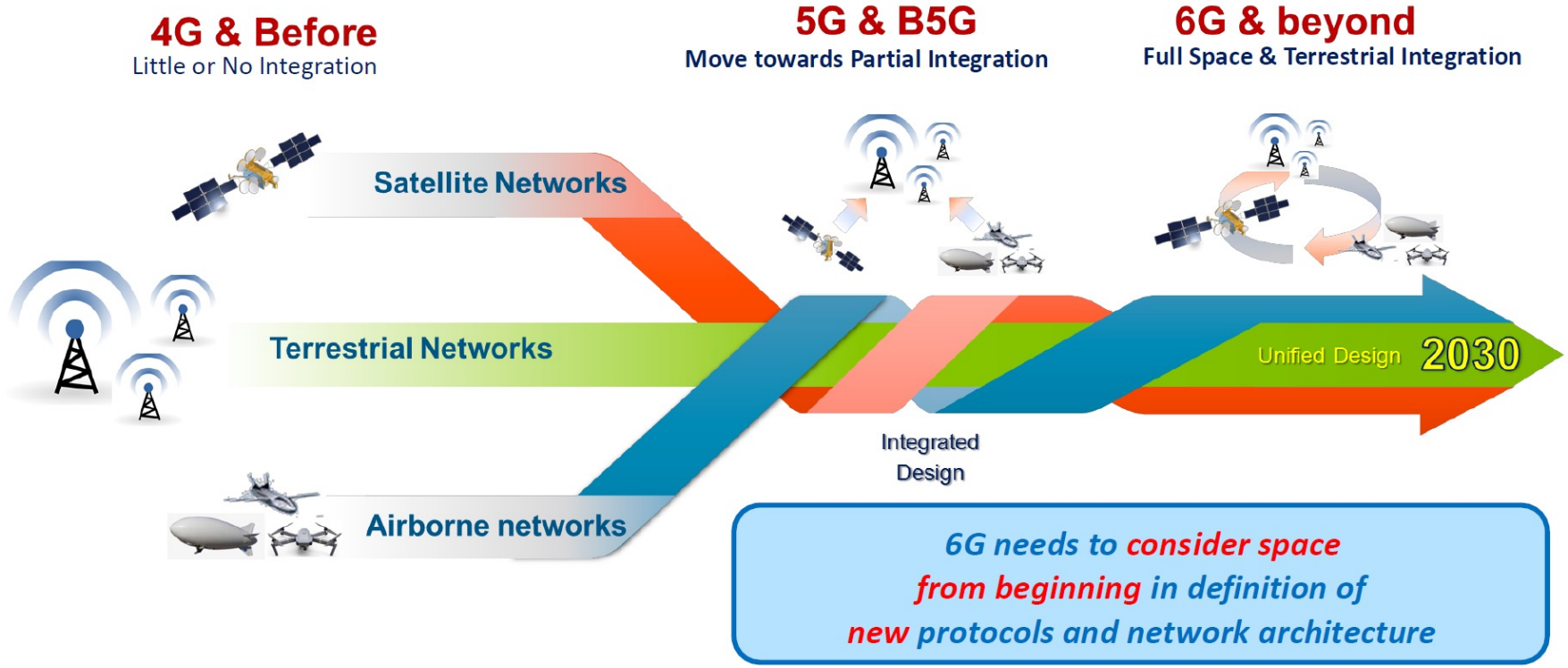
By 2030 81 million students will benefit from satcom tele-education &
74 million people from satcom tele-medicine by 2030

- **Study commissioned by GSOA found that broadband connections delivered by satellites will generate almost $60 Billion direct and indirect socio-economic impacts on society globally by 2030, almost doubling compared to 2022**
- **The global socio-economic benefits of satellite domestic broadband are estimated to reach $52 billion by 2030**
- **The global socio-economic benefits of satellite tele-education are estimated to reach $2.5 billion by 2030**

Source: GSOA presentations

Convergence of networks is KEY

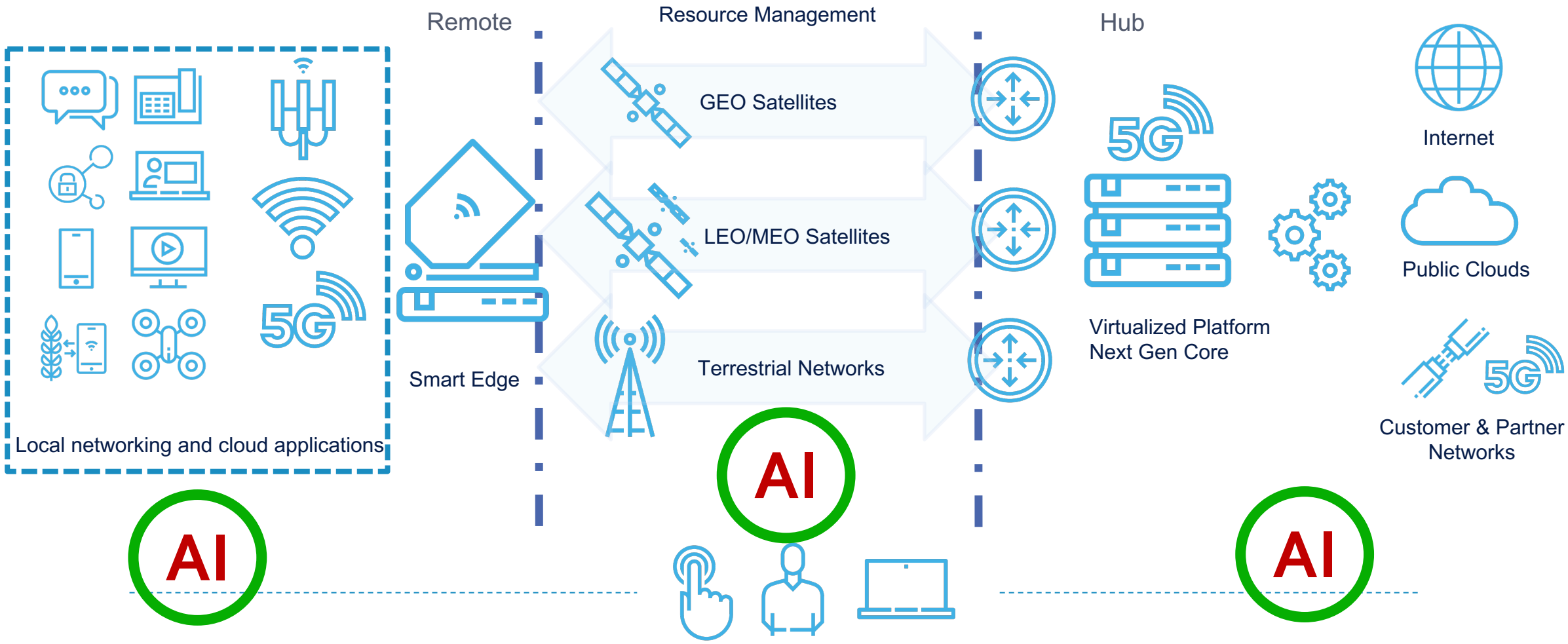




Source: GSOA presentations

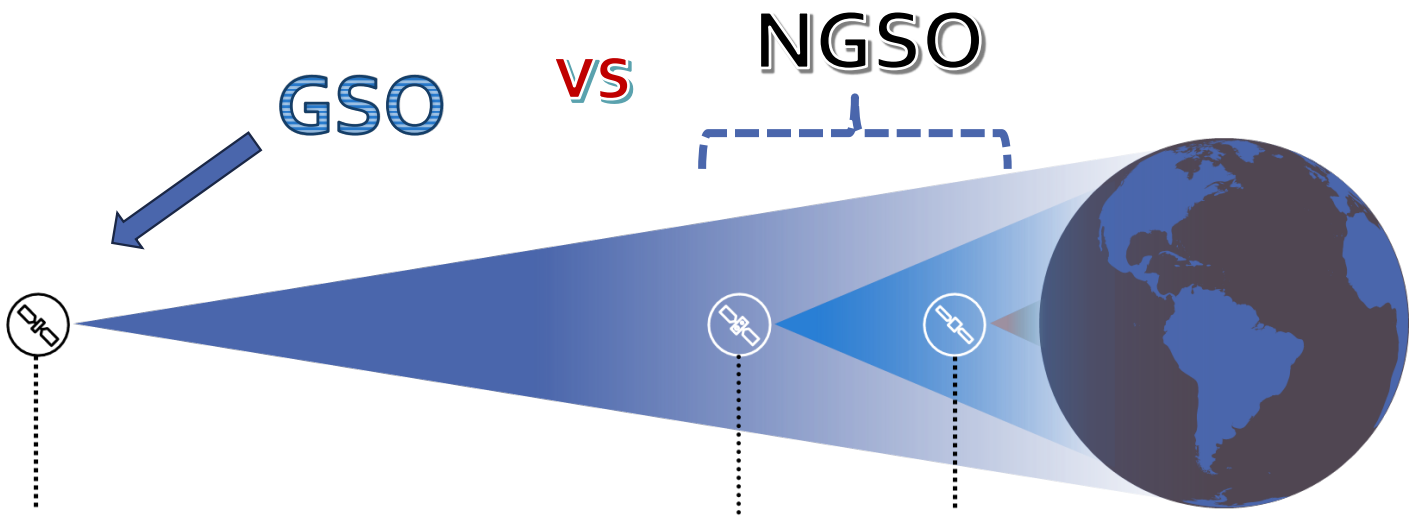
Architecture of the Next-Gen Networks

Multi-Orbit end-to-end system seamlessly integrated & interoperable based on standards

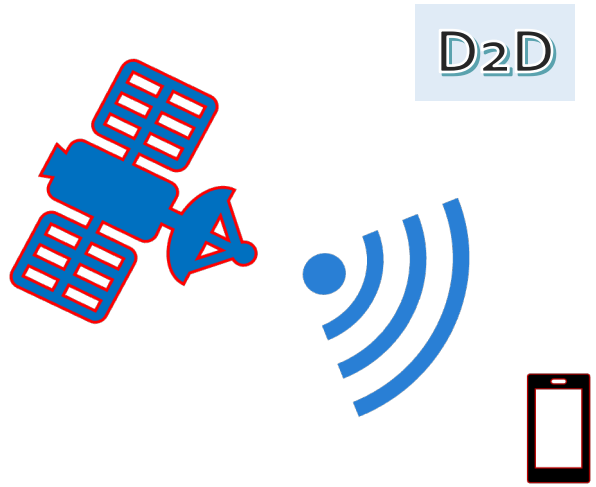


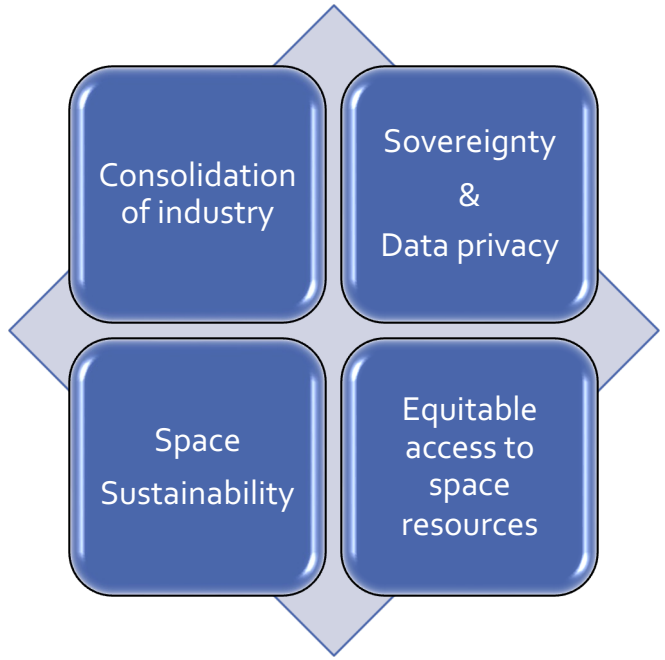
Source: GSOA presentations

Hot topics



GEO	MEO	LEO
36,000km	~ 8,000km	~ 1,000km
E.g., Viasat, SES, Intelsat, Eutelsat	E.g., SES O3b mPOWER	E.g., Starlink, Oneweb, Telesat, Kuiper
Broad coverage—3 satellites for global coverage	Extended reach—tens of satellites, scalable	Limited view—hundreds to thousands of satellites
High latency—operationally simple	Low latency—operationally simple	Low latency—operationally complex
Expansive coverage	High throughput, high flexibility, high performance	High capacity, contended bandwidth, requires many gateways





Government policies play a key role

- Implement comprehensive policies to address the digital divide and ensure universal service accessibility.
- Maintain technology-neutral objectives and policies, focusing on broader goals such as the expansion of broadband services without specifying particular technological solutions.
- Develop adaptable regulatory frameworks to facilitate the adoption of innovative technologies and service models.
- Foster a competitive telecommunications landscape, both domestically and internationally, by creating an environment conducive to market entry for domestic and foreign service providers.
- Prioritize digital inclusion through widespread connectivity initiatives, emphasizing coverage expansion over increased speeds in underserved areas.

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Thank You

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