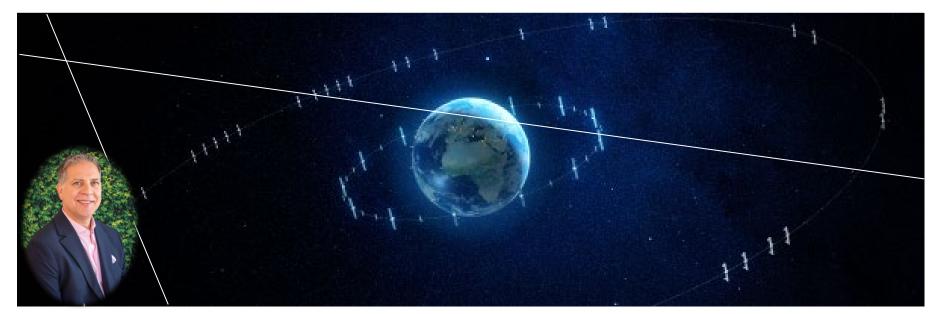
# IT'S NOT "ONE ORBIT FITS ALL"

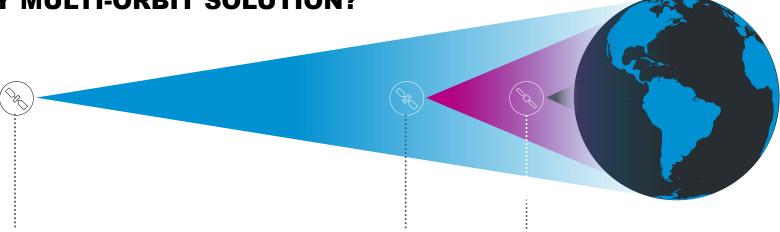
Presented by Diego Paldao, SES

C21 - HTS and vHTS Roundtable



SES Proprietary and Confidential 5 DECEMBER 2025

WHY MULTI-ORBIT SOLUTION?



### **GEO** – 36,000km

E.g., Wideband, GEO HTS

Broad coverage—3 satellites

Low Throughput, High Latency

Fully flexible traffic landing

## **MEO HTS – 8,000km**

E.g., O3b mPOWER

Extended reach—6 satellites, scalable

High Throughput, Low Latency

Mid flexible traffic landing

## **LEO** – 400 - 1,200km

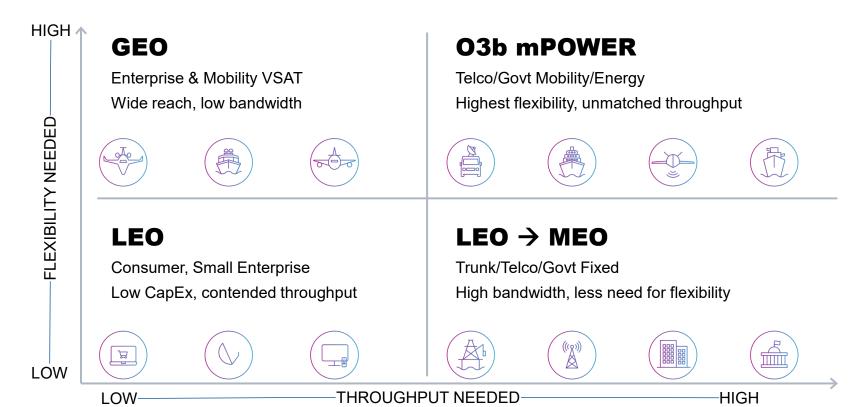
E.g., Starlink, OneWeb, Kuiper

Limited view—hundreds of satellites

Medium Throughput, Lowest Latency

Pre-determined traffic landing

## Why NOT "ONE ORBIT FITS ALL"?



#### **MULTI-ORBIT USE CASES**

Offshore Exploration



Offshore Production



**Onshore Production** 



Mining



**Tower Co** 



Upgrade to LTE/5G



**Disaster Recovery** 



**Core Resiliency** 



Private LTE/5G for Enterprise



#### LATENCY PERFORMANCE REQUIREMENTS

Requirements and options vary

#### Optimized for superior user experiences

Web browsing **VR** applications Video **User-generated content** Industrial control **High Frequency Trading** streaming Voice, Video calls, Cloud applications services <700 ms <150 ms <50 ms <1 ms is sufficient is sufficient is sufficient is sufficient **GEO MEO LEO** edge

#### **GROUND SYSTEMS**

Proven Technologies and New Developments

#### **INDUSTRY STANDARDS**





#### **MOBILE FLEXIBILITY**







#### **NEW ESA TECHNOLOGIES**

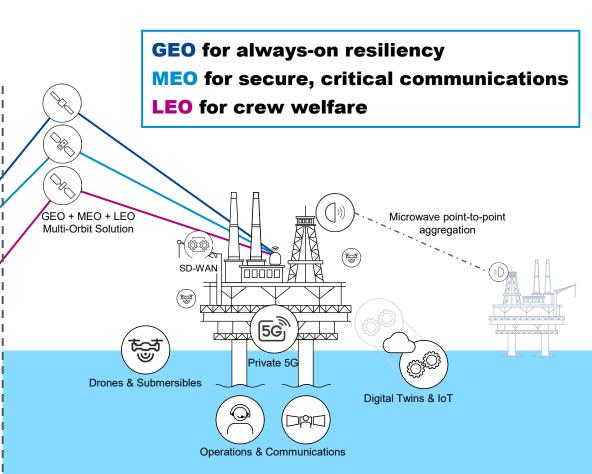






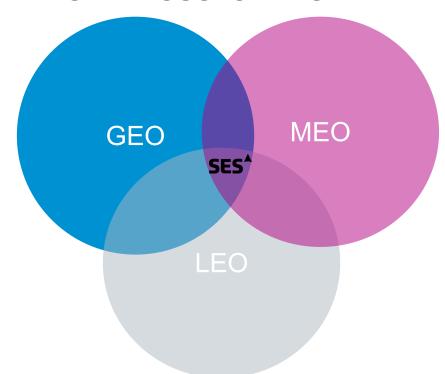
### "ALL ORBIT" EXAMPLE

Private Cloud Digital Twin PoP Customer PoP aws **SES Cloud** SES Cloud SES Gateway **Partner** Direct Azure **IBM Cloud** SD-WAN ORACLE Public LEO Gateway Cloud Infrastructure Internet



#### WHAT IS IMPORTANT TO PARTNERS AND CUSTOMERS?

- ▲ Time to market?
- ▲ Cost per bit?
- ▲ Latency?
- ▲ Flexibility?
- ▲ Forward Throughput?
- ▲ Return Throughput?
- ▲ Coverage?
- **▲** Dependability?
- ▲ Hardware?
- ▲ Availability?



DOES YOUR PROBLEM REQUIRE A MULTI-ORBIT SOLUTION?

## **SES'S UNIQUE MULTI-ORBIT OFFERING**



>40

GEO High Throughput and Widebeam satellites



**26** 

MEO High Throughput Satellites (O3b & O3b mPOWER)





