

# Hungarian Universities Space Technology Research Forum

BUDAPEST  
March 28th 2024

PRESENTING

**THALES ALENIA SPACE**  
**#spaceforlife**



*TAS Activities, Partnership Initiatives, and future challenges...*

# FROM EARTH TO DEEP SPACE...

36 000 KM

23 000 KM

8 000 KM

800 KM

700 KM

400 KM

20 KM

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PROPRIETARY INFORMATION

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THALES ALENIA SPACE OPEN

ThalesAlenia  
Space  
Thales / Leonardo company

JOINT VENTURE



**THALES (67%)**  
**LEONARDO (33%)**



77,000

employees



68

Countries  
Global presence



5 markets



Digital identity & security



Ground transportation



Defense & security



Aerospace



Space

1 bn €

self-funded R&D



17.6bn €

Sales in 2022

# THALES ALENIA SPACE IN 2022

**2,2**  
BN € SALES



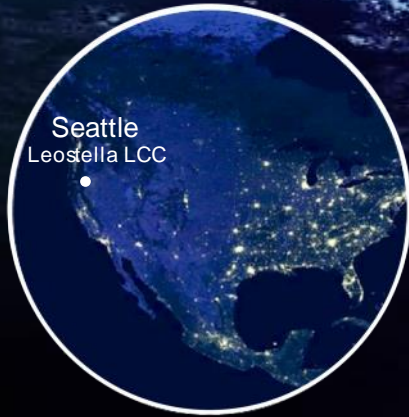
**8,500**  
EMPLOYEES



**18** SITES  
WORLDWIDE



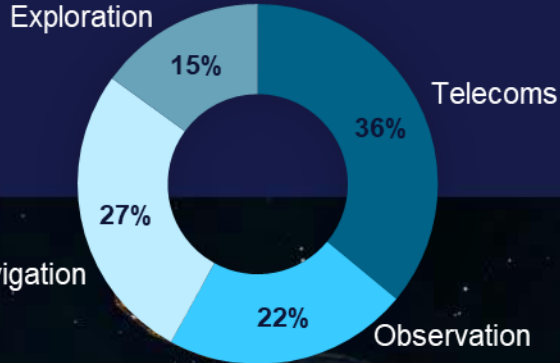
# SERVING THE WORLD FROM EUROPE & THE USA



**SPACE  
FOR  
LIFE ///**

**SPACE TO  
CONNECT**

**SPACE TO  
SECURE  
& DEFEND**



**SPACE TO  
OBSERVE  
& PROTECT**

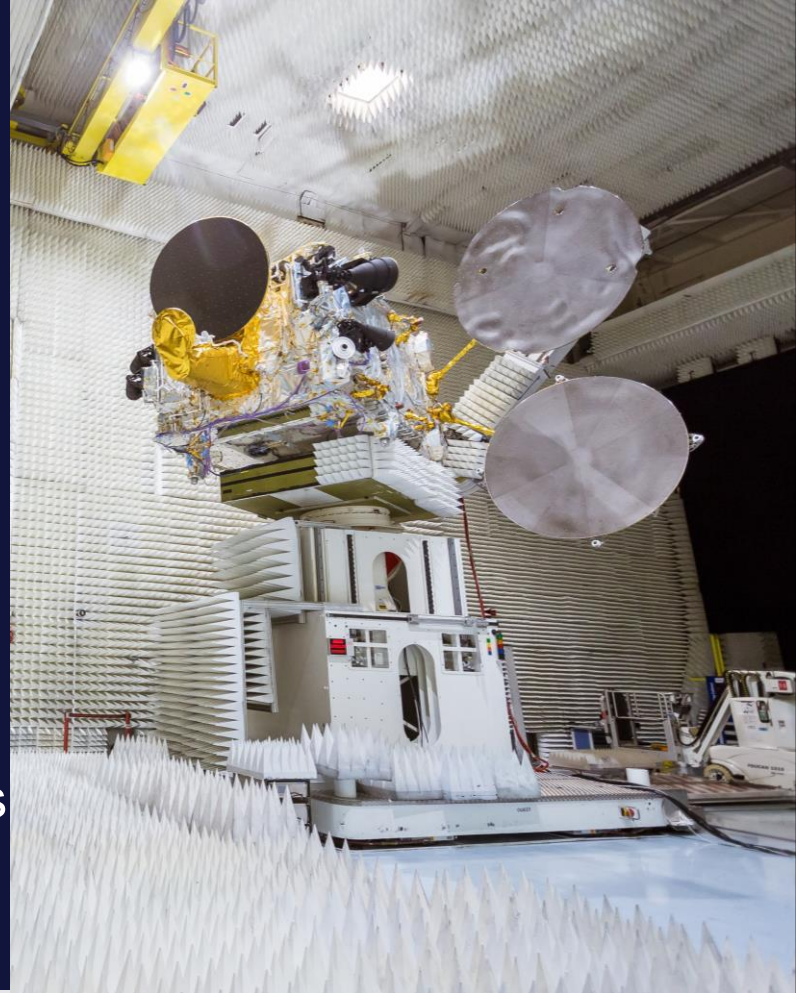
**SPACE TO  
EXPLORE**

**SPACE TO  
TRAVEL  
& NAVIGATE**

# SPACE TO CONNECT

/// Connectivity matters more than ever

- / Very high throughput satellites based on our Spacebus NEO platform
- / Space Inspire™ solutions with our Software-Defined-Satellites system
- / Constellations paving the way to worldwide broadband connectivity systems & space-based 5G/6G services
- / Advanced ground solutions to best serve the space systems

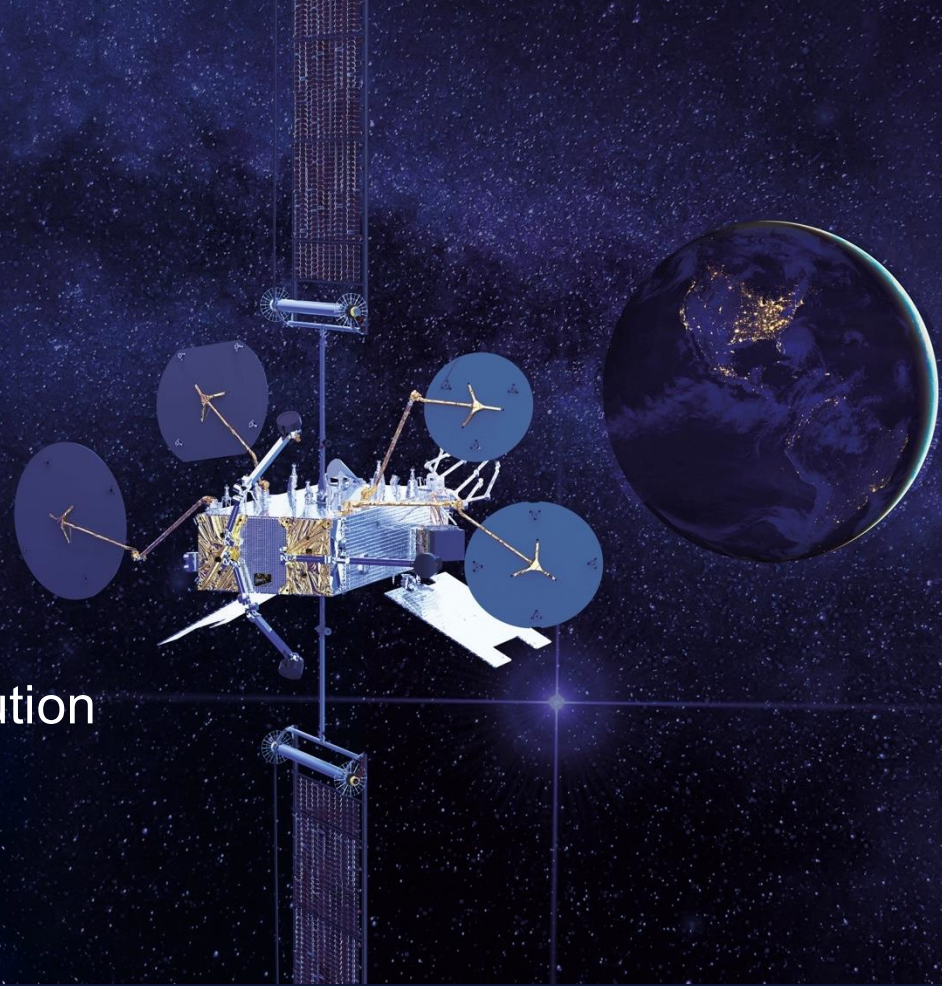




# SPACE TO CONNECT

/// Connectivity matters more than ever

- /// Very High Throughput Satellites based on our Spacebus Neo platform
- /// Software-Defined-Satellites with our Space Inspire™ system solution
- /// Advanced ground solutions to best benefit of the space systems



# SPACE TO CONNECT

A unique track record in telecom constellations since 3 decades,  
best served by state-of-the-art digital payload & system solutions




Globalstar 1

Globalstar 2

O3b Networks

Iridium® NEXT



A soldier in camouflage is operating a laptop computer. The laptop screen displays a satellite map of a landscape with a large circular structure. To the left of the laptop is a black walkie-talkie. The scene is set outdoors with green foliage in the background.

**SPACE TO SECURE & DEFEND**



# SPACE TO SECURE & DEFEND

What we make possible to ensure freedom of action and sovereignty...

- /// Enabling image & signals intelligence
- /// Providing secured & resilient communications for Security & Armed Forces
- /// Safety & security in Space

An aerial photograph of a road cutting through a dense forest. A red car is visible on the road. The image has a blue tint. Two white lines with dots at the end point to the text.

**SPACE TO TRAVEL & NAVIGATE**

An aerial photograph of a two-lane road cutting through a dense, green forest. A small red car is visible on the road, positioned in the upper-middle section. The overall color palette is dominated by various shades of green and blue, giving it a cool, natural feel.

# SPACE TO TRAVEL & NAVIGATE

What we make possible...

- /// Delivering accurate & reliable location services
- /// Ensuring the safety of travelers
- /// Enabling the Internet of Things

# SPACE TO OBSERVE & PROTECT

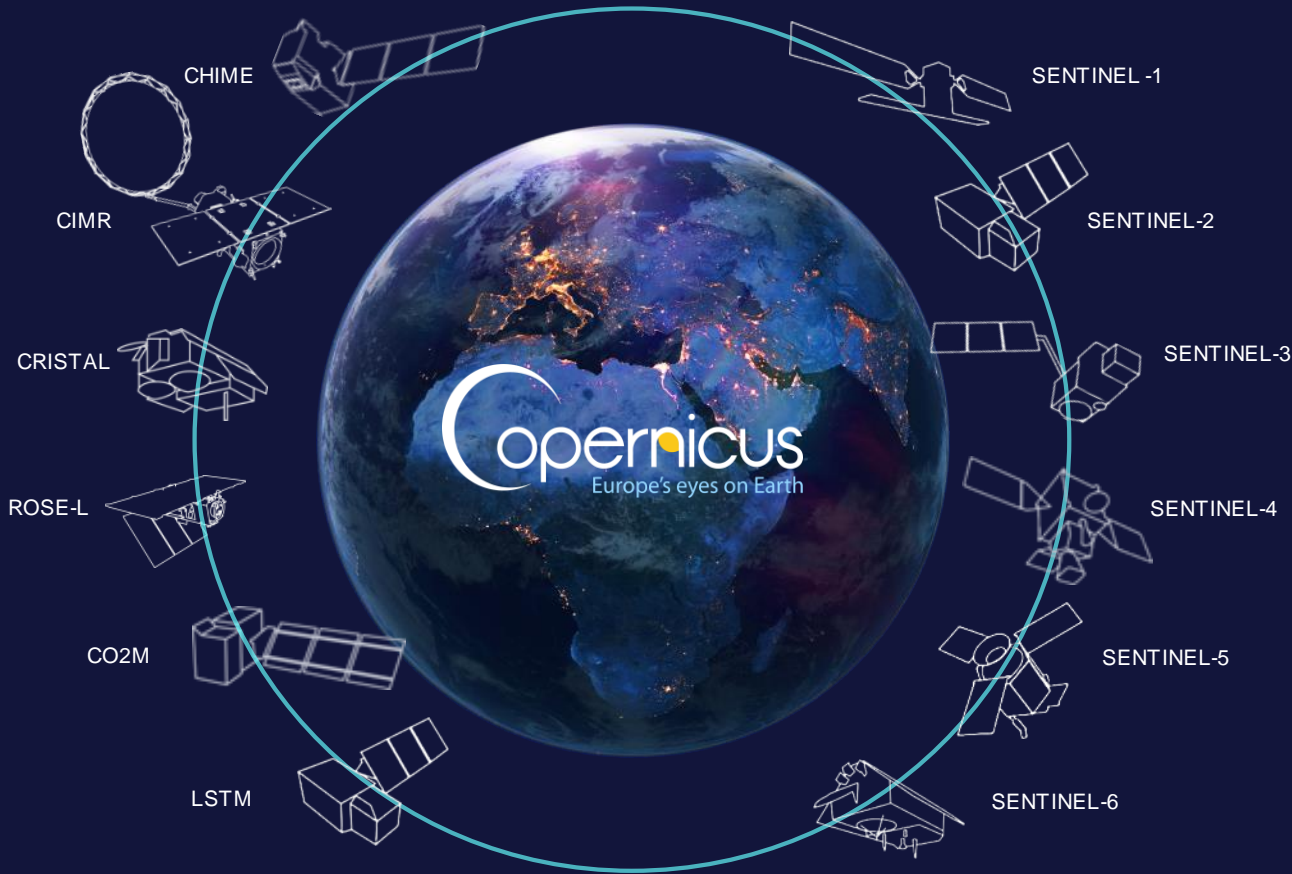
/// Climate monitoring at the heart of societal concerns

- ! Meteorological satellites
- ! Environmental satellites
- ! Atmospheric sounders, radar altimeters & hyperspectral instruments



© contains modified Copernicus Sentinel data, processed by ESA

# SPACE TO OBSERVE & PROTECT





# SPACE TO EXPLORE

## /// World Leader in LEO Orbital Infrastructures

- ! Manned and unmanned pressurized modules
- ! Building and supplying the ISS
- ! Contributing to the creation of the first commercial space station, Axiom
- ! Enabling easy access to Space with re-entry vehicles



Partner Team integrated in Telecom or Earth Observation Program Team located in Cannes and Toulouse sites



# OUR PARTNERSHIP APPROACH WITH...



We have created since 2012

ThalesAlenia Partnership Initiative  
a Thales / Leonardo company *Space*

A unique model of cooperation  
thanks to the support of **ESA**

« *share our visions*  
*foster innovation*  
*sustain competitiveness* »



# FOCUS ON

# ThalesAlenia Partnership Initiative

a Thales / Leonardo company *Space*

# WITH HUNGARY



November 2021

Signature of the Strategic Agreement between  
TAS France and the Hungarian Government



WORKSHOP  
in TOULOUSE



WORKSHOP  
in CANNES



#### PROPRIETARY INFORMATION

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THALES ALENIA SPACE OPEN

# Thales Alenia Space Initiatives to combine “best of New Space” and TAS Heritage for next challenges and cooperation opportunities

Smallsats-HAPS-.. cooperation opportunities

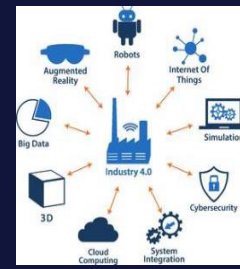
Miniaturization

New Missions (*Nav-Telecom-Earth Obs. -Exploration/Human in Space*)

Optical communications

Ground as a Services

Industry 4.0



## Connexion with SME's & Start-ups « best in class partners »

# OUR KEY MISSION TARGETS

## Telecom

GEO & MEO - flexible, digital, high-throughput  
5G D2D – toward seamless 3GPP networks  
Secure Communication  
Military

## New or specific ventures

Atmospheric - Stratobus  
Quantum Communication  
Space Situational Awareness  
In-Orbit Servicing

## Observation

Optical (High accuracy or high Revisit)  
Radar (High accuracy or high Revisit)  
Hyperspectral  
Carbon Imagers  
Weather  
Altimetry

## Navigation

Galileo  
PNT

## Exploration

Manned missions  
Deep-Space Communication  
Back to the Moon  
Mars missions

We believe in Space as humankind's  
new horizon to build a better,  
sustainable life on Earth

# SPACE FOR LIFE



**THANK YOU FOR YOUR ATTENTION**

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