

→ UNITED SPACE IN EUROPE, UNITED EUROPE IN SPACE



# Scientific missions in the new era

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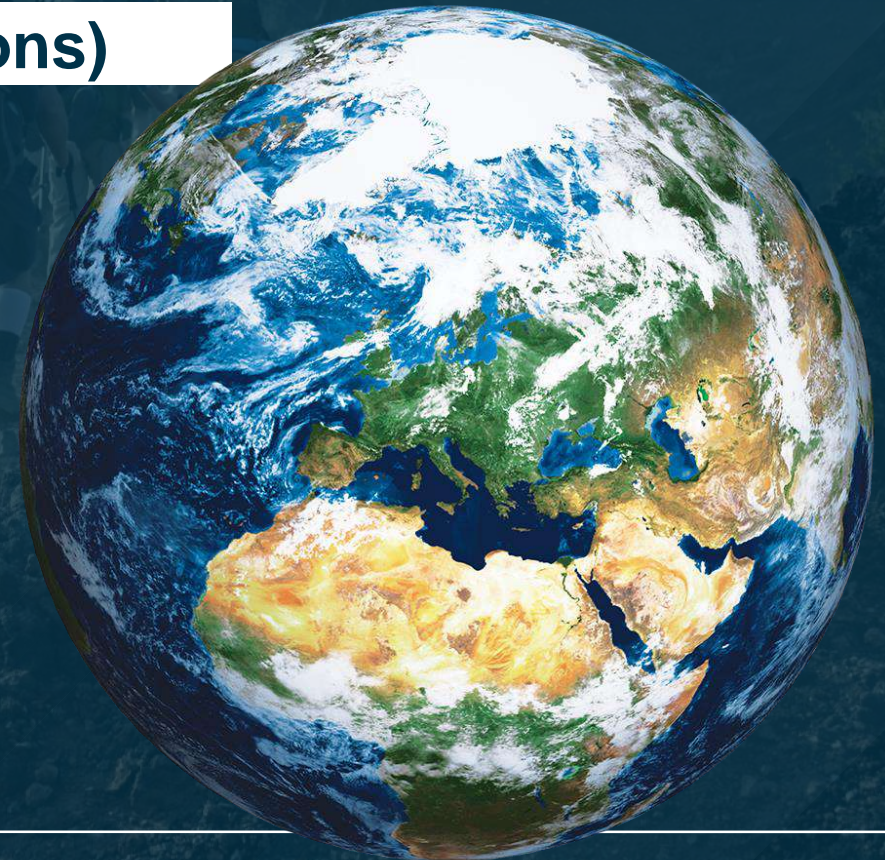
## SCIENTIFIC AND PEACEFUL PURPOSES

### 1. EXPLORE THE UNIVERSE (Science Programme)

### 2. IMPROVE LIFE ON EARTH (Space Applications)

Provide and promote for exclusive peaceful purposes, cooperation among European States

In space research and technology and their space applications with a view to their being used for scientific purposes and operational space systems  
(Art.2 ESA Convention)





# 1975 SIGNING OF ESA CONVENTION

The European Space Agency (ESA) is an intergovernmental organisation established by its funding document : the ESA Convention, which was opened for signature by its member States in Paris, France, on 30 May 1975 and entered into force on 30 October 1980.

The Convention is ESA's most important legal document.

In ESA Member States, it is a legal reference text guiding space activities.

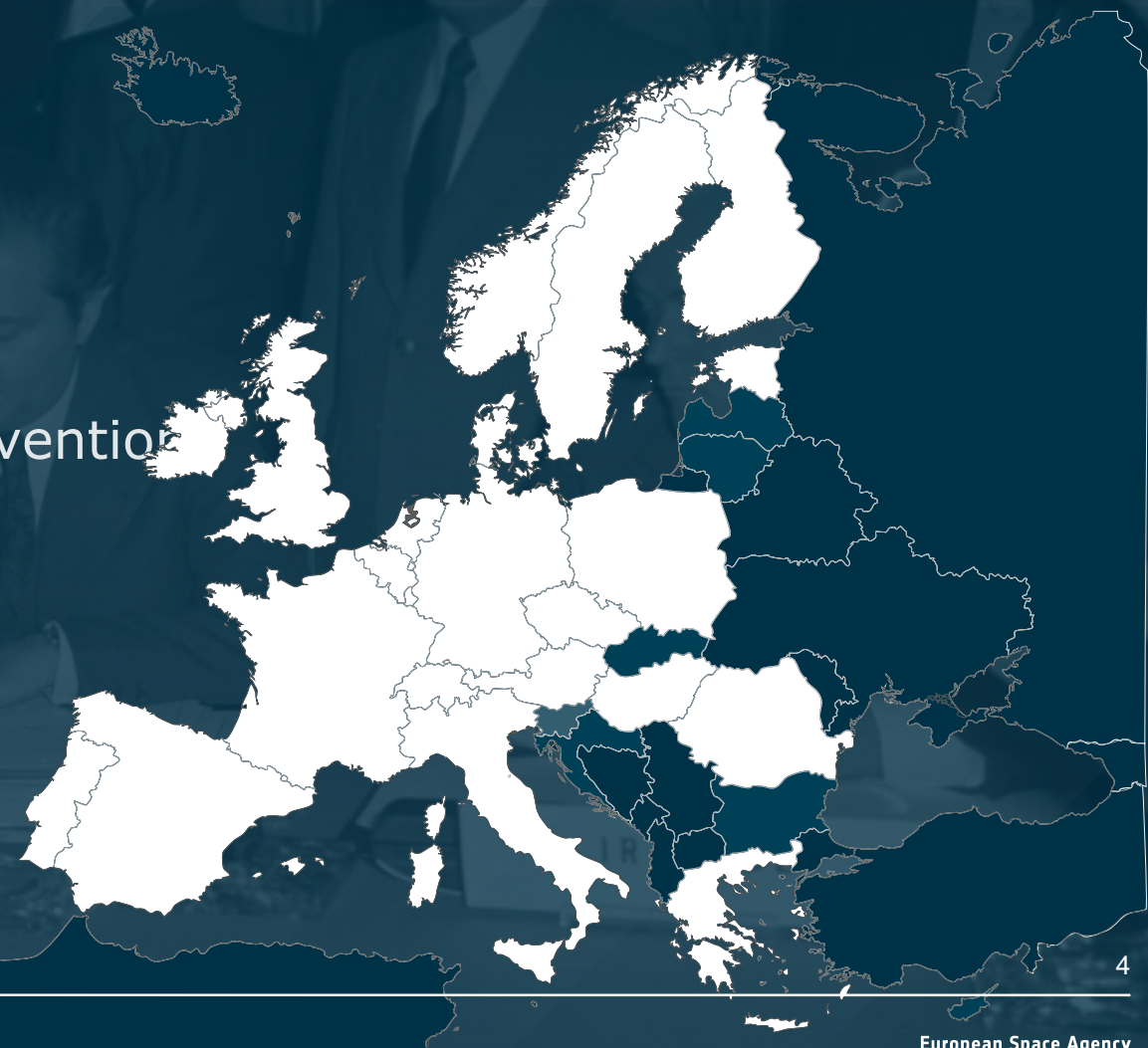
10  
MEMBER  
STATES



The Agency was founded by sovereign States and it is established on a permanent basis.

ESA is a subject of international law possessing a legal personality (Article XV.1 and Annex 1 Article 1 of the ESA Convention)

This means that ESA is capable to enforce rights and duties and that it is entitled to actions and responsibilities distinct from the ones of its Member States.



## EUROPE'S GATEWAY TO SPACE

### WHAT

22 Member States, 5000 staff and contractors

### WHY

Exploration and use of space for exclusively peaceful purposes

### WHERE

HQ in Paris, 7 sites across Europe and a spaceport in French Guiana

### HOW MUCH

€5.72 billion = €12 per European per year





# WHAT DOES ESA DO?



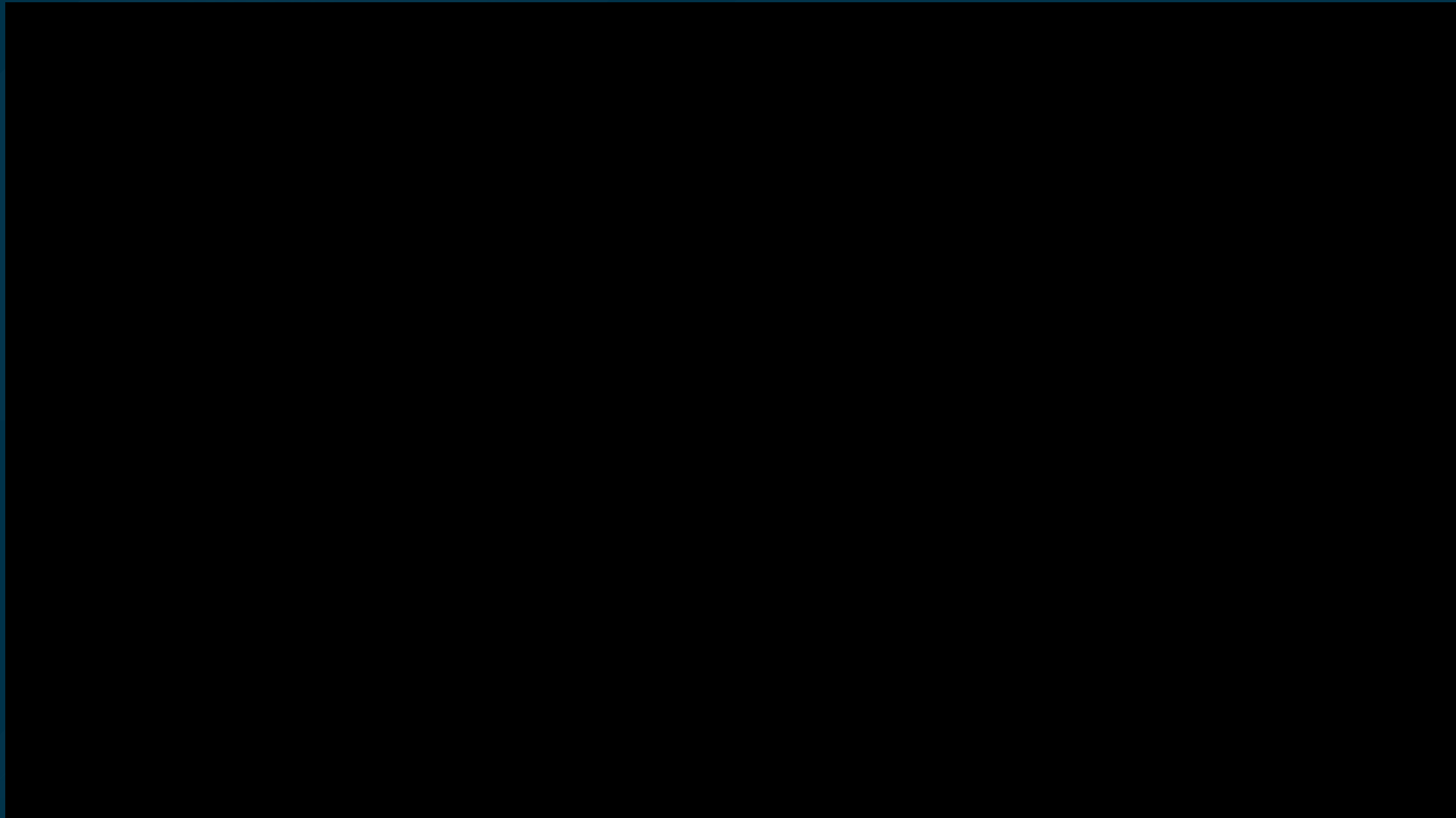
**ALL OF THIS IS POSSIBLE THANKS TO THE COLLABORATION OF MEMBER STATES**

**ESA** is active across **every area** of the **space sector**

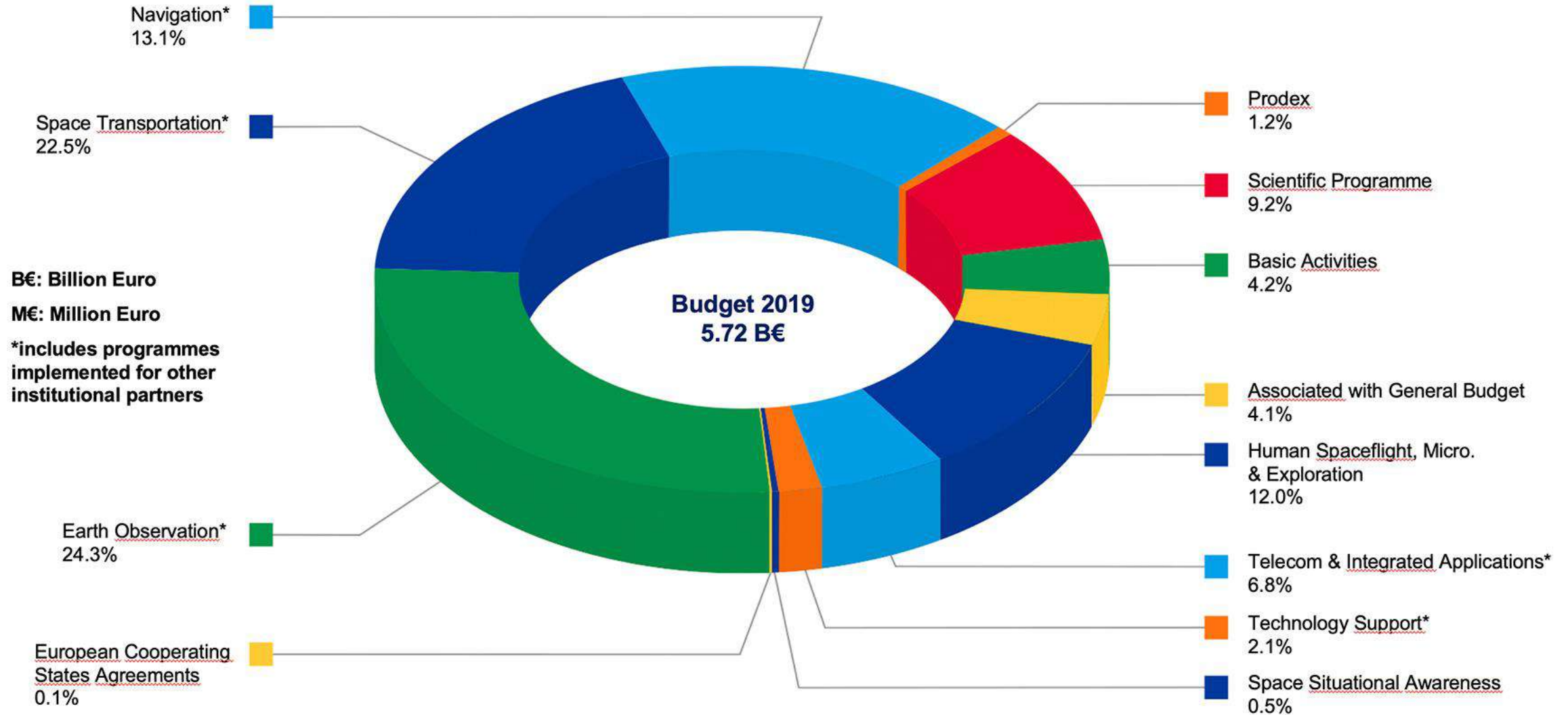
**World leader** in **science** and **technology**

**Over 80 satellites** developed, tested, and operated **since 1975**

**More than 220 launches** from Europe's Spaceport in Kourou



# ESA Budget per activity in 2019: 5.72B€





## TRAVELLING TO SPACE

► Europe's Spaceport, Kourou, French Guiana





# ENABLING AND SUPPORTING

## TAKING CONTROL ► ESOC control room





# ENABLING AND SUPPORTING

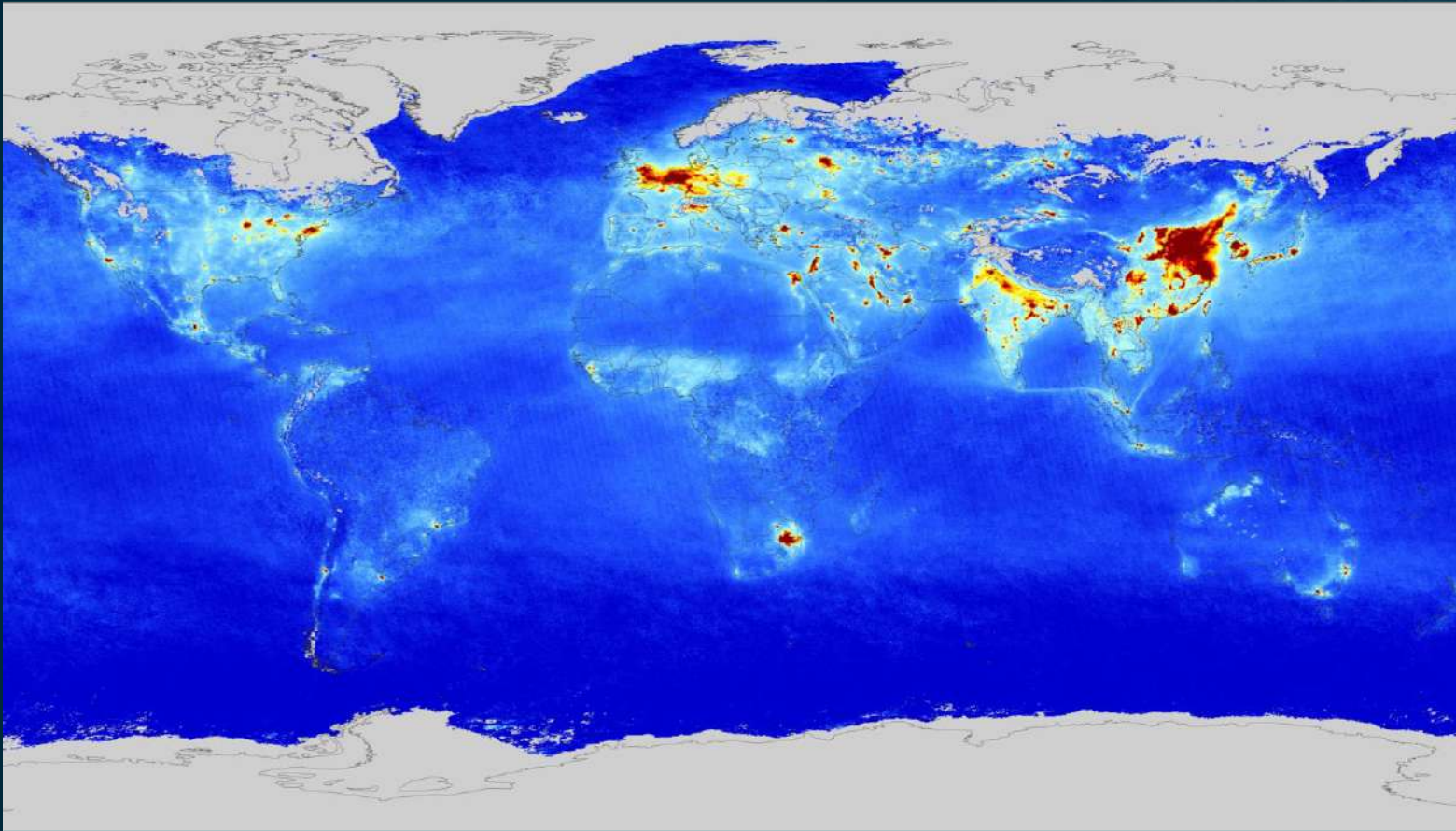
## NETWORK OF SPACE ANTENNAS

► Spain, Australia & Argentina





## WATCHING OVER OUR EARTH ▶ Air quality map





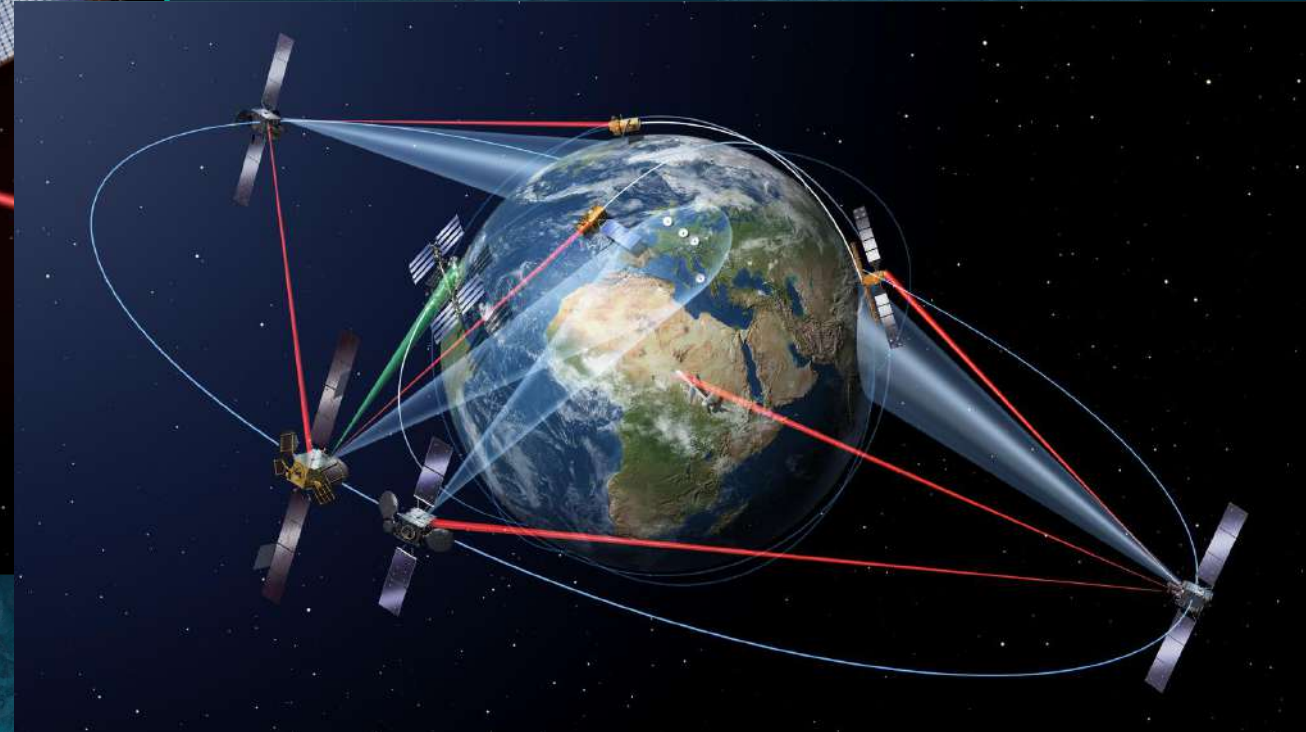
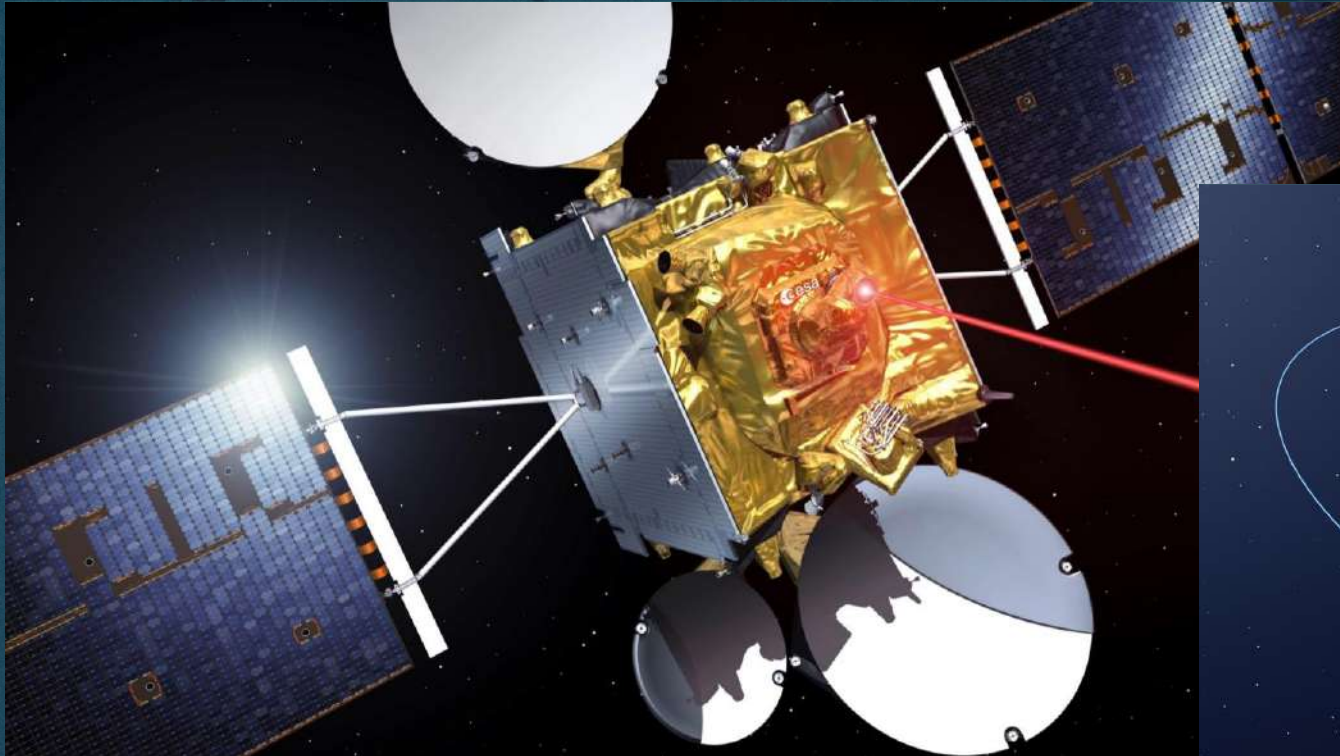




## CONNECTING YOUR WORLD

► EDRS Global

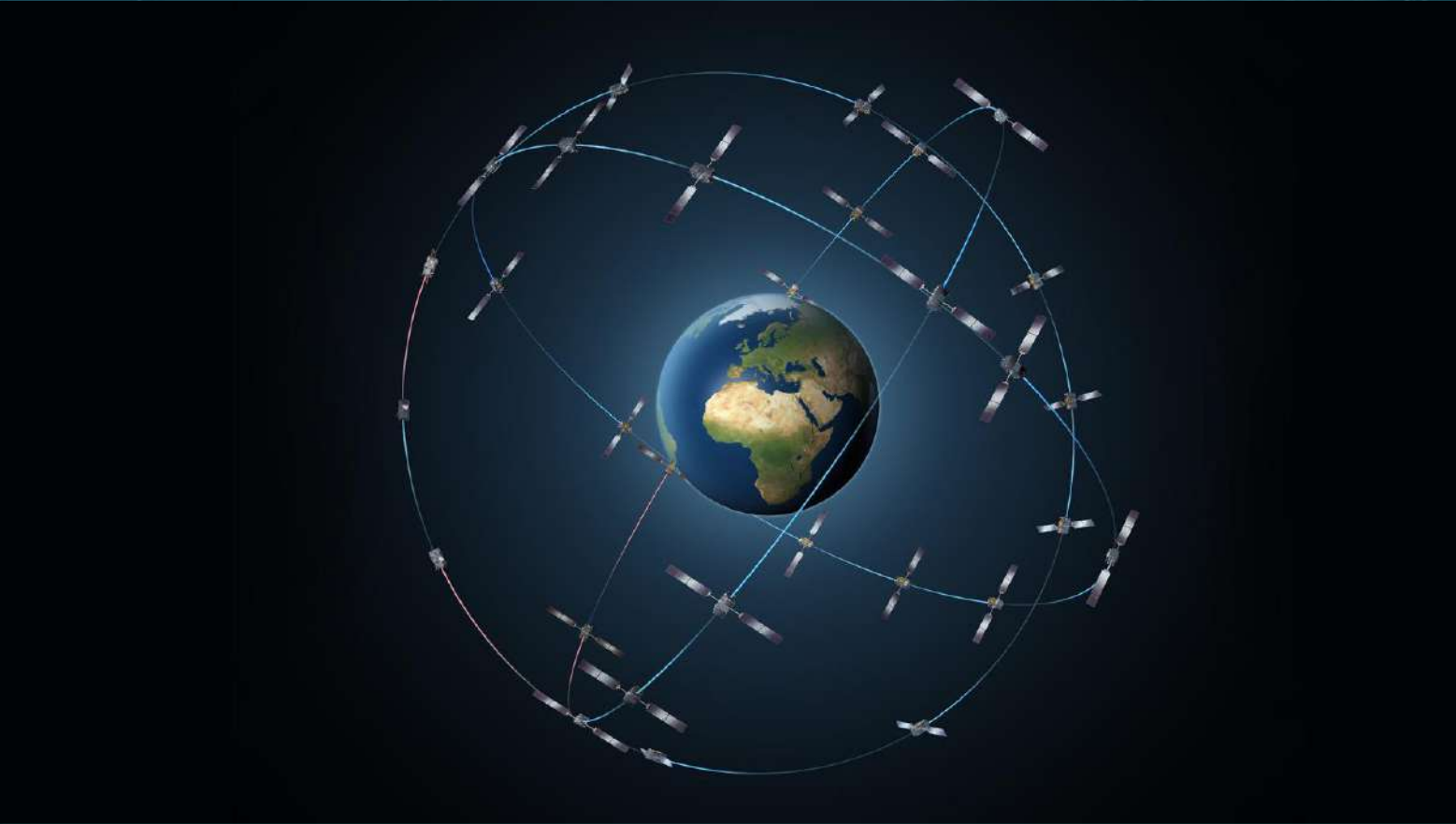
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## CONNECTING YOUR WORLD

### ► Galileo constellation

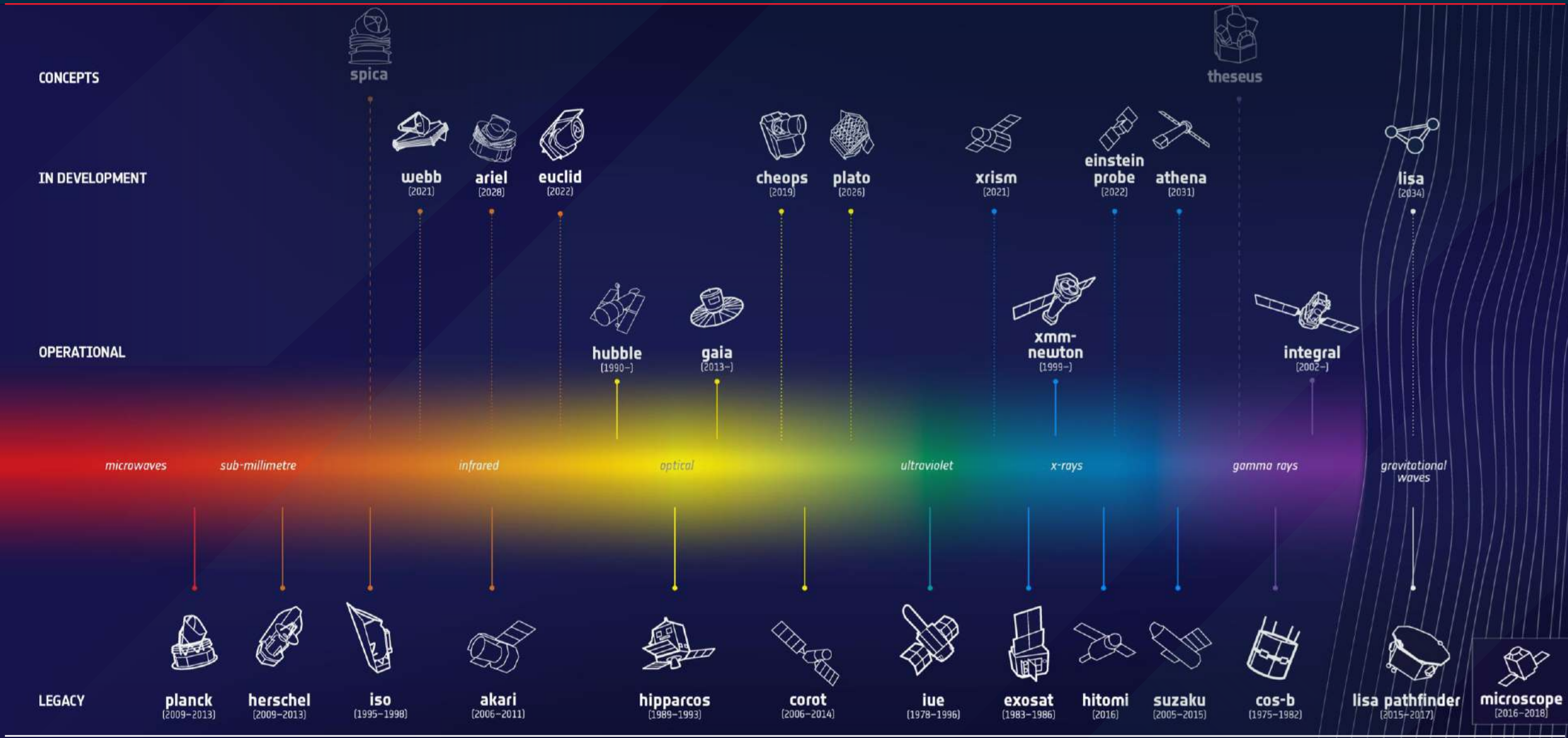








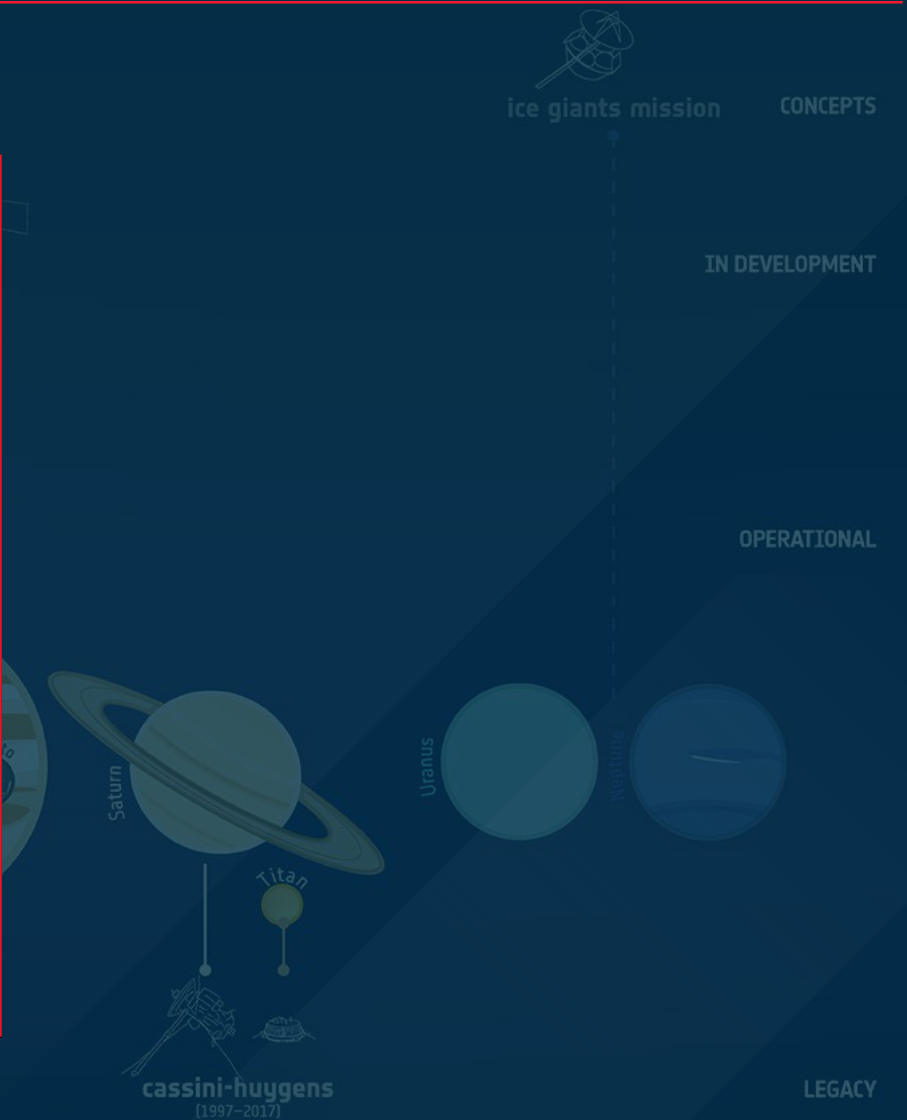
# SCIENCE AND EXPLORATION





AMAZING NEW SCIENCE

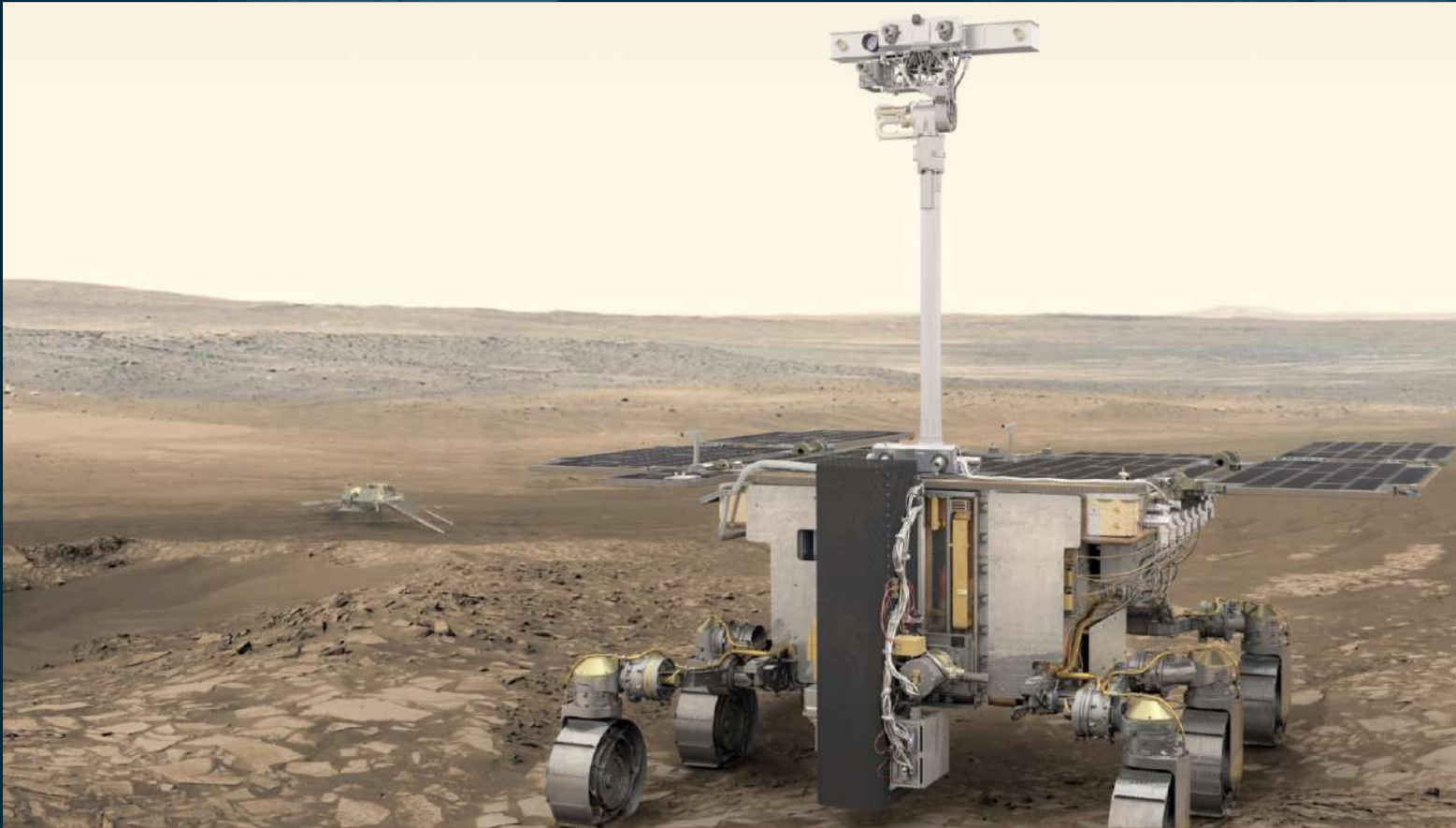
► Rosetta



ulysses (1990-2009)    venus express (2006-2014)    giotto (1985-1992)    double star (2003-2008)    smart-1 (2003-2006)    chandrayaan (2008-2009)    chang'e 1 (2007-2009)    rosetta (2004-2016)

ESA UNCLASSIFIED - For Official Use

## EXPLORING THE UNIVERSE ▶ ExoMars rover









# Who decides about space missions ?

## The role of the ESA Legal Officer

Before any decision on a (scientific) space mission is taken a number of legal texts have to be prepared and submitted to the relevant bodies of the Agency for their approval.  
The Legal Officers play an important role in preparing such documents.





ESA has two organs:

**the Council and  
the Director General**

assisted by the staff (Article 10, ESA Convention).



**The Council is the organ representing the Member States**, it meets as and when required either at Ministerial or delegate level. Appointed by the Council, the Director General represents the Agency in all its acts.

The **Ministers of ESA Member States** gather every 2-3 years to define the policy to be followed in pursuit of ESA purpose. During these Councils at Ministerial Level, decisions are taken on the main orientations for the upcoming years, the level of resources to the Agency and to programmes. Member States also agree to start new programmes or eventually to terminate them.

# ESA COUNCIL (the decision making process)



On a more regular basis, **Delegations nominated by the Member States meet during the Council** organised mainly at ESA Headquarters (Paris, France).

During these sessions, they review each programme, prioritise them and determine the course of their implementation.

They adopt the budgets, the financial and staff regulations. More generally, they take all measures necessary for the fulfilment of the goals of the Agency.

Each Member State has one vote and it is represented by a delegation composed by a maximum of 2 persons. However a Member State shall only have the right to vote on matters concerning exclusively accepted programmes in which it takes part.



# PLENARY SUBORDINATE BODIES (the decision making process)

As requested in the Convention, the Council has set-up subordinate bodies to be assisted in its duty.

Each of the **Committees** and Programme **Boards** take decisions, make recommendations or are kept informed according to the amount of powers invested in them by the Council in their given area of responsibilities.

Each Member States nominates its representation to the boards and committees (often accompanied by experts).

**Administrative and Finance Committee (AFC)** makes recommendations to the Council, the Programme Boards and the Director General, as appropriate, on matters of an administrative, staff, financial or legal nature.

**Industrial Policy Committee (IPC)** its role is to define, implement and monitor ESA's industrial policy; approve procurement and contract proposals for the implementation of ESA's activities.

**International Relations Committee (IRC)** assists the Council in concerting the policies of the Member States in the space field with respect to other national and international organisations and institutions.

The Science Programme Committee is the only committee, the creation of which is explicitly provided for by the ESA Convention itself (Art. XI.8.a)

**By delegation of the Council the SPC has the authority for :**

- the **selection and adoption** of within the overall mandatory **scientific programme** and the ceilings approved by the Council
- the **follow up** of the execution of the scientific programme and of forward looking studies devoted to scientific activities (with a view to the preparation and selection of future projects)
- **The review and approval of the legal arrangements** necessary for the execution of the programme

The SPC shall follow the same rules of procedure of the Council



# IN CONCLUSION: WHO BENEFITS from SPACE ACTIVITIES?

YOU



OUR ECONOMY



OUR PLANET



OUR FUTURE







[https://www.esa.int/Applications/Observing\\_the\\_Earth/Space\\_for\\_our\\_climate/Earth\\_Day\\_taking\\_the\\_pulse\\_of\\_our\\_planet](https://www.esa.int/Applications/Observing_the_Earth/Space_for_our_climate/Earth_Day_taking_the_pulse_of_our_planet)

# Are you ready to discover more?



[www.esa.int](http://www.esa.int)



European Space Agency