

Space Infrastructure as a new critical Infrastructure

"Secure digitalisation for a safe, green and sustainable future"

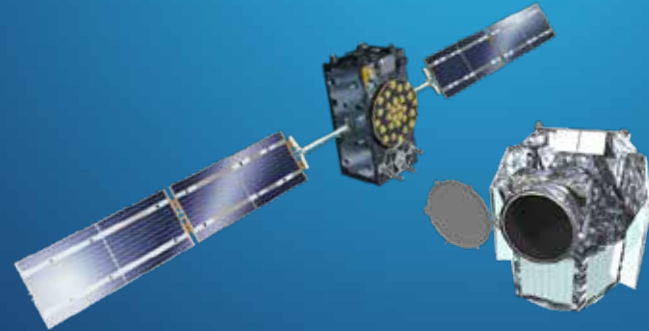
Isabelle Duvaux-Bechon, Head of Strategy & Development Office

International Digital Security Forum – Vienna - 02/06/2022

The European Space Agency



Make space
for Europe!



Implements 60% of the
European space budget

120+ unique missions
40+ missions upcoming



5 500+
ESA Workforce

22
Member States

3 Associate Members
1 Cooperative Member

2022 Budget

€ 7.13 billion =
12 per European



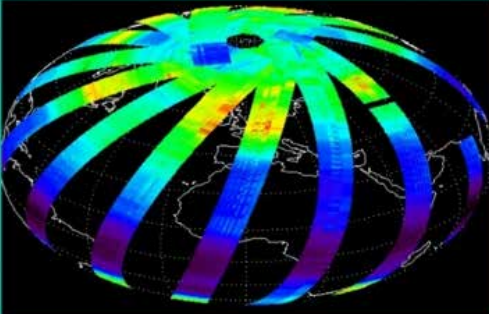
ESA is Europe's gateway to space



SCIENCE AND EXPLORATION



APPLICATIONS



SAFETY AND SECURITY



ENABLING AND SUPPORT

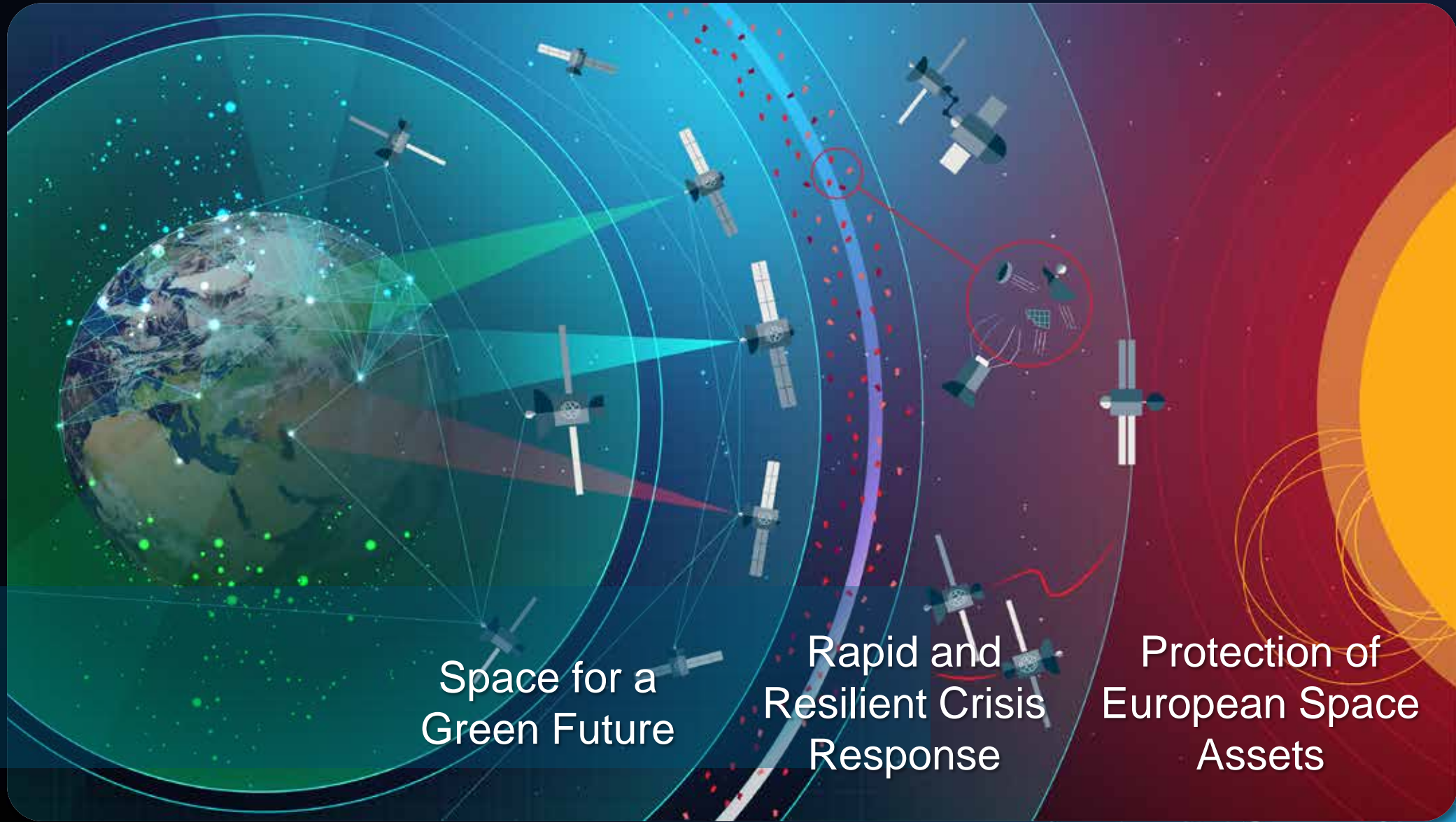


Accelerators: a new concept of action for Europe



- Focus on responding to urgent societal needs
- Upscale existing space investments to the next level
- Users at the centre
- Strengthen European leadership and STEM
- Attract new funding sources
- Combine strengths of e.g. ESA, EU, Member States, International Organisations and the private sector

Accelerating the use of space in Europe



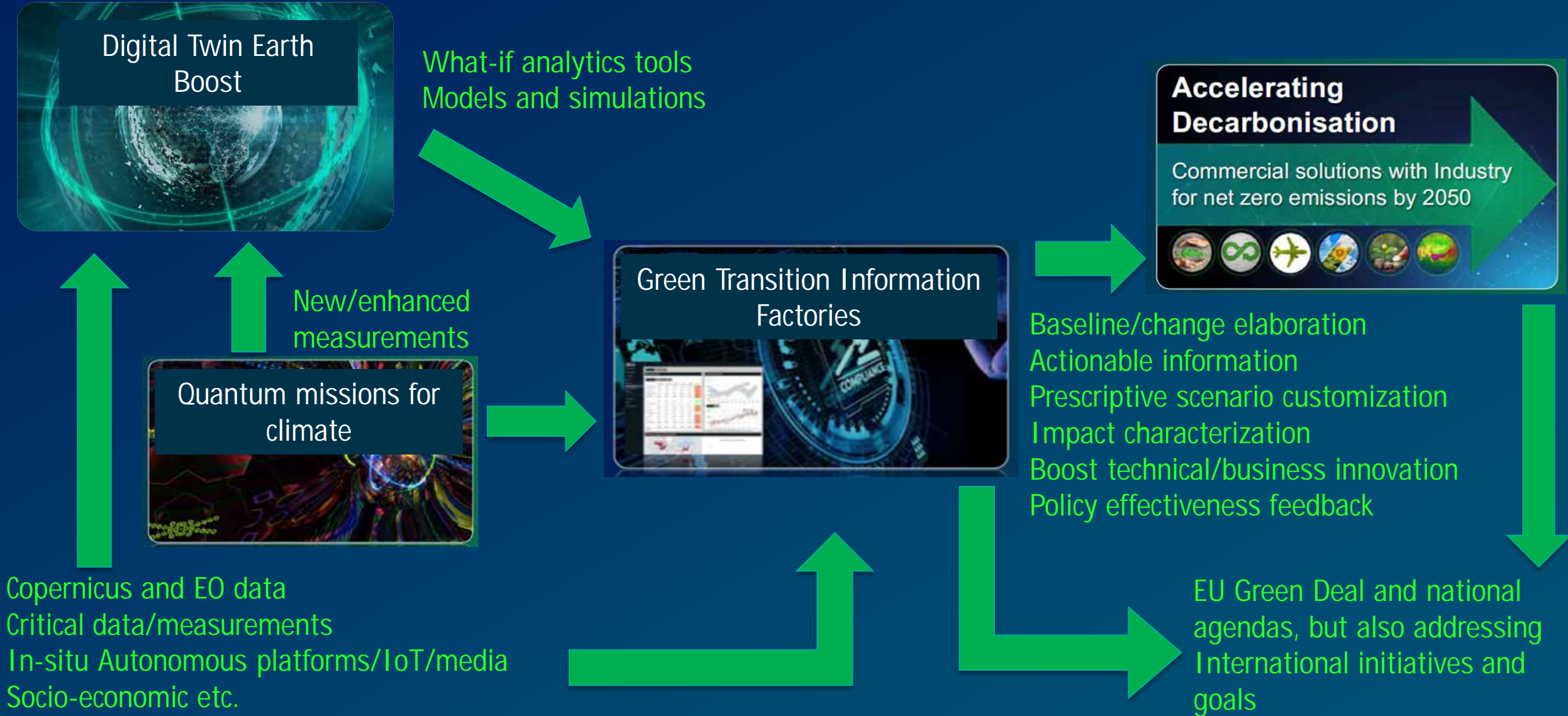
Space for a Green Future

Rapid and Resilient Crisis Response

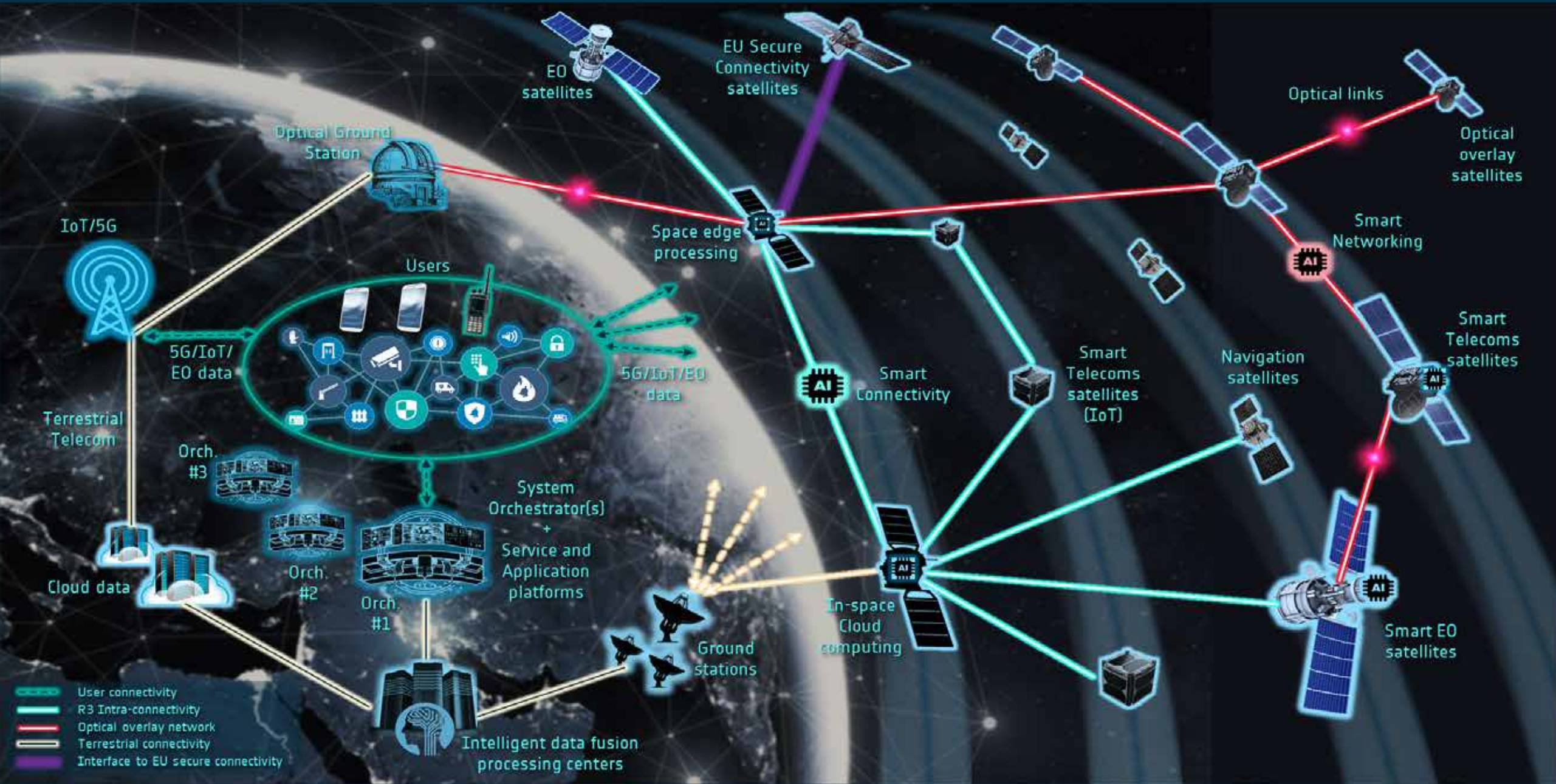
Protection of European Space Assets



Space for a Green Future (S4GF)



Rapid & Resilient Crisis Response (R3)



Protection of European space assets (PROTECT)



Protect our infrastructure from:

Space debris

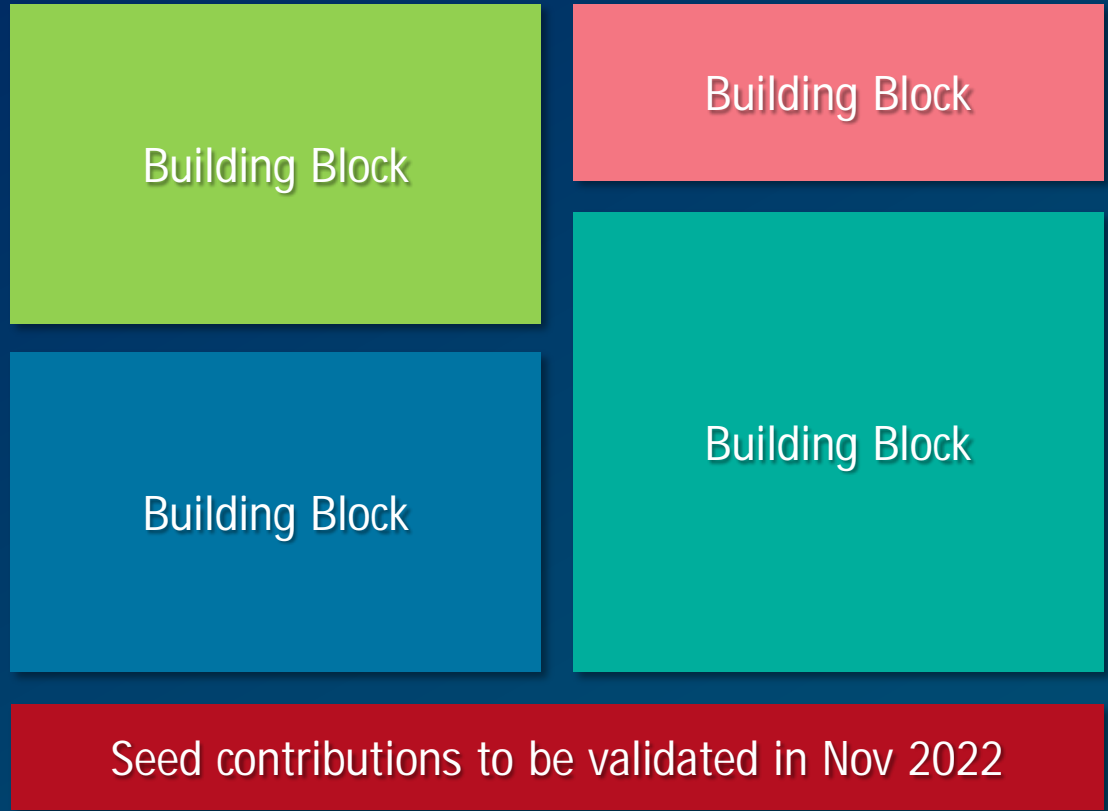


Space weather events



Developing the Accelerators: seed activities and building blocks

Many existing and planned programmes and activities of ESA can be seeds to the accelerators



Accelerator elements:

Seeds: some of the programmes proposed for subscription in November 2022.

Building blocks: existing activities which can contribute to the Accelerator or for which the Accelerator will be a customer, and new activities supported financially or in kind by partners. Will form the major part of the accelerator.

Common features to the 3 Accelerators

- **Critical infrastructures** proposed to serve major challenges for an Earth **greener, safer, more sustainable**
- Building on the **needs** of the « users »
- Proposing **new architectures** of collaboration to combine efforts and thus reach a new dimension
- Works only if the **right data / information** reaches the final user in good shape and in time and if **secure channels of communication** and **positioning information** are available
- Need to **protect the whole chain**, from command to acquisition, treatment, delivery and archiving, space and ground segments, hardware and software
- Includes capabilities to **ensure collectively political, strategical and competitive autonomy**
 - Knowledge building
 - Mastering critical technologies in all sectors, including digital transformation and AI capabilities
 - Involvement of strong industry from start-ups to large system integrators
 - Political will to take risk and invest even if there is no business case, for the citizens and society
 - Private commitment to develop business or charity funding

A central image showing a realistic Earth globe being held up by several hands of different skin tones against a starry space background. The hands are positioned around the globe, with fingers pointing towards it.

MAKE SPACE FOR EUROPE

#SpaceAmbition

www.esa.int