





living planet BONN 23-27 May 2022

TAKING THE PULSE OF OUR PLANET FROM SPACE









EC-ESA Earth System Science Initiative and its multi-natural hazard component

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ESA UNCLASSIFIED - For ESA Official Use Only



ESA and EC (DG-RTD) collaboration agreement





The European Commission's Deputy Director General for Research and Innovation, Patrick Child and ESA's Director General, Josef Aschbacher at the signing ceremony, January 2020.



A common goal

".... to jointly advance Earth system science and its contribution to respond to the global challenges that society is facing in the onset of this century"

Joint EC-ESA Earth System Science Initiative



ESA

FutureEO

ESA new Science and Innovation Earth Observation Programme



Horizon Europe

New EU Research and Innovation Framework Programme



- The initiative will be implemented through a set of coordinated activities and collaborative projects funded respectively by ESA FutureEO and EC Horizon Europe.
- Fostering networking and scientific collaboration across these activities and EC funded projects.
- Coordinated Work Plan under preparation to be launched in 2023.





FLAGSHIPS ACTIONS

Water resources Kick-off in pilot phase (2020-2022) **Biodiversity** Food systems Sien of Green and Sustainable of the sustainable of Terrestial Polar carbon regions Air quality Ocean and health health Natural Disasters

In preparation full implementation phase 2023*

Observing and Understanding Multi-Hazards, Compound and Cascade Events









New ITT - Addressing the major lack of understanding of multi-hazards, compound and cascade effects of multiple interdependent hazards (e.g., hydro-climatic extremes) that jointly contribute to multiply societal or environmental risk.

A better understanding and characterization of multi-hazards, including aspects related to attribution, vulnerability, risk and impact are required.

1MEuro - Q3 2022







Come to discover the joint scientific plans of ESA and EC

Agora Europa: Thursday 25th at 10:50