



FPCUP – Working Group Africa \_ Webinar #4

## Webinar introduction *WG Africa project overview*

**Linda TOMASINI**, CNES  
WG Africa Coordinator

8/04/2025



WORKING  
GROUP  
**AFRICA**



## WG Africa Training of Trainers Program

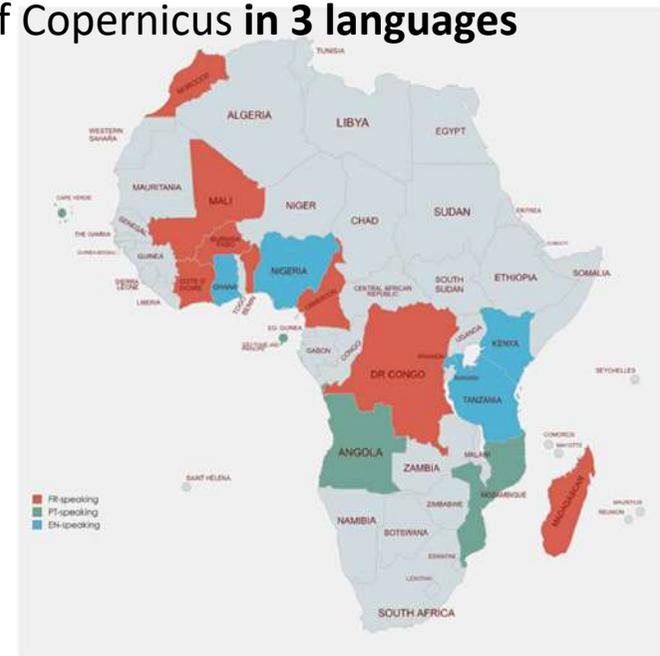
*Joint Effort of 12 Institutions from 8 European Countries **under CNES coordination.***

*Funded by European Commission*

### Objectives:

- To Train at least 20 African Trainers to the use of Copernicus in **3 languages** (PT, EN, FR) in **16 African Countries**
- To **Co-develop** and Implement Copernicus Local Training Sessions
- To Train in total 300 local trainees and Integrate Copernicus Modules into existing local Curricula and Training Catalogues
- To Develop the **network of Copernicus Relays and Academies in Africa**
- To Raise awareness regarding Copernicus in Africa (through webinars in 3 languages)

**Planning** : from October 2022 to October 2025

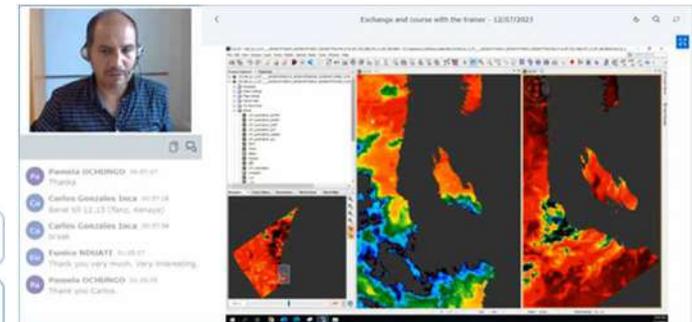




# 1<sup>st</sup> phase : Future trainers selection and training (2023)

- Constitution of **3 groups of Future Trainers** (10/language)
- Development and implementation of an **advanced training program** (10 weeks)

- Mod. 1 • Trainer pedagogical methods and techniques
- Mod. 2 • GIS basics
- Mod. 3 • **Remote Sensing** and Optical data basics
- Mod. 4 • **European Union Copernicus Program**
- Mod. 5 • **Python** scripting, Jupyter notebook/JupyterLab
- Mod. 6 • **SAR Basics** ; Data and Processing tools
- Mod. 7 • **Artificial Intelligence** for Earth Observation data analysis
- Mod. 8 • **Webmapping** and geo-data visualisation
- Mod. 9 • **Thematic** trainings with the support of Entrusted Entities





# Development of a Digital Learning Platform

## Training materials

- Course material
- Exercises
- Answers to exercises
- Training recordings
- Resources
- Recordings

## Used by

- **WG Africa trainers** for **self-training** and **training development-implementation**
- **New Users** (on demand / motivation letter) for **self-training**

Home Dashboard My courses Site administration

Copernicus Working Group Africa

KNOW MORE >

### Training of Trainers Programme

The WG Africa Training of Trainers Programme is a joint effort of 11 national institutions of 8 European Countries, in the framework of the European Framework Partnership Agreement on Copernicus User Uptake (FPCLUP), a project aiming at enhancing the user uptake of Copernicus data and products. The main objective of the Programme is to enhance capacities in Africa in the sector of Earth Observation (EO) from Space, in complement to other institutional efforts such as GMES & Africa.

#### Available courses

Module 4 - Forum	Module 4 - EN - Copernicus	Module 4 - FR - Copernicus	Module 4 - PT - Copernicus
Health_FR	Health_PT	Health_EN	Marine Pollution_Link to video
Marine Pollution_FR	Marine Pollution_PT	Marine Pollution_EN	Natural hazards_Link to video



## WG Africa 2nd phase: Local Training sessions 2024-25

### Objectives:

- Support the African Trainers in the development and implementation of local Training sessions on Copernicus applied to Local thematics
- Communicate, disseminate and exploit their training events
- Build long-term partnership relationships





## Overview of local training sessions in 2024-25

### Thematics :

- Landscape and landcover monitoring; Forest monitoring, agriculture, water and environment management, Hydrology, Urban and risks management, Health
- Access to Copernicus data and services
- Python for geospatial data analysis, semi-automatic classification with QGIS,

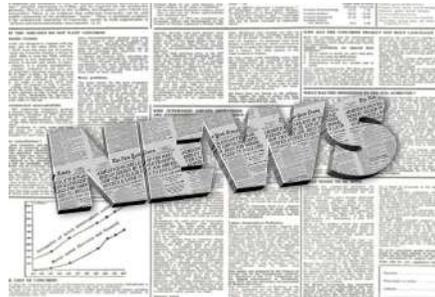
**12 Countries :** Sao Tome e Principe, Mozambique, Kenya, Tanzania, Madagascar, Mali, RDC, Benin, Morocco, Cameroon, Burkina Faso, Ivory Coast

**Nb of trainees :** around 1500





## WG Africa Outreach and Communication activities



**Newsletters** introducing the African Trainers and their activities

➤ How to read the NL:



**Webinars** on Copernicus related topics : Copernicus Services and GMES & Africa

➤ How to watch the replay:



Participation to international events and conferences

- ✓ EO4Africa
  - ✓ CLMS General Assembly
  - ✓ GEO Week
- *Living Planet Symposium, Wien, June 2025*



# Thanks for your attention

Project Coordinator: Linda Tomasini (CNES)\_ [Linda.Tomasini@cnes.fr](mailto:Linda.Tomasini@cnes.fr)

## Consortium Partners & Affiliated Entities



## With the collaboration of



## Social Media

-  FPCUP - Working Group Africa
-  FPCUP - Working Group Africa
-  FPCUP - Working Group Africa





**Thank you!**  
**Obrigada !**  
**Merci !**

# EU – Africa space partnership programme:

## Strengthening Africa-EU Partnership on Space technologies and related services



# The Geopolitical European Commission

A stronger Europe in the  
World promoting a just,  
*green* and *digital*

Stronger together  
through *sustainable*  
*investments*



# The Global Gateway, principles

EU sustainable offer to partner countries to accelerate their fair transitions and to meet infrastructure needs



EDUCATION AND  
RESEARCH



HEALTH



TRANSPORT



CLIMATE & ENERGY



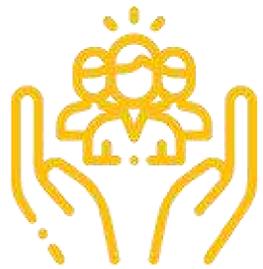
DIGITAL

✓ Soft skills

✓ Regulatory  
environment

✓ Physical  
Infrastructure

# Investments Objectives



Inclusive expansion  
of digital  
Connectivity



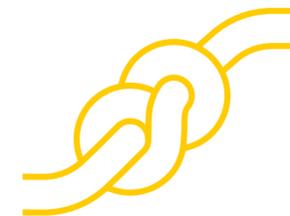
Resilience and  
Security of digital  
Connectivity



An open, global,  
and interoperable  
internet



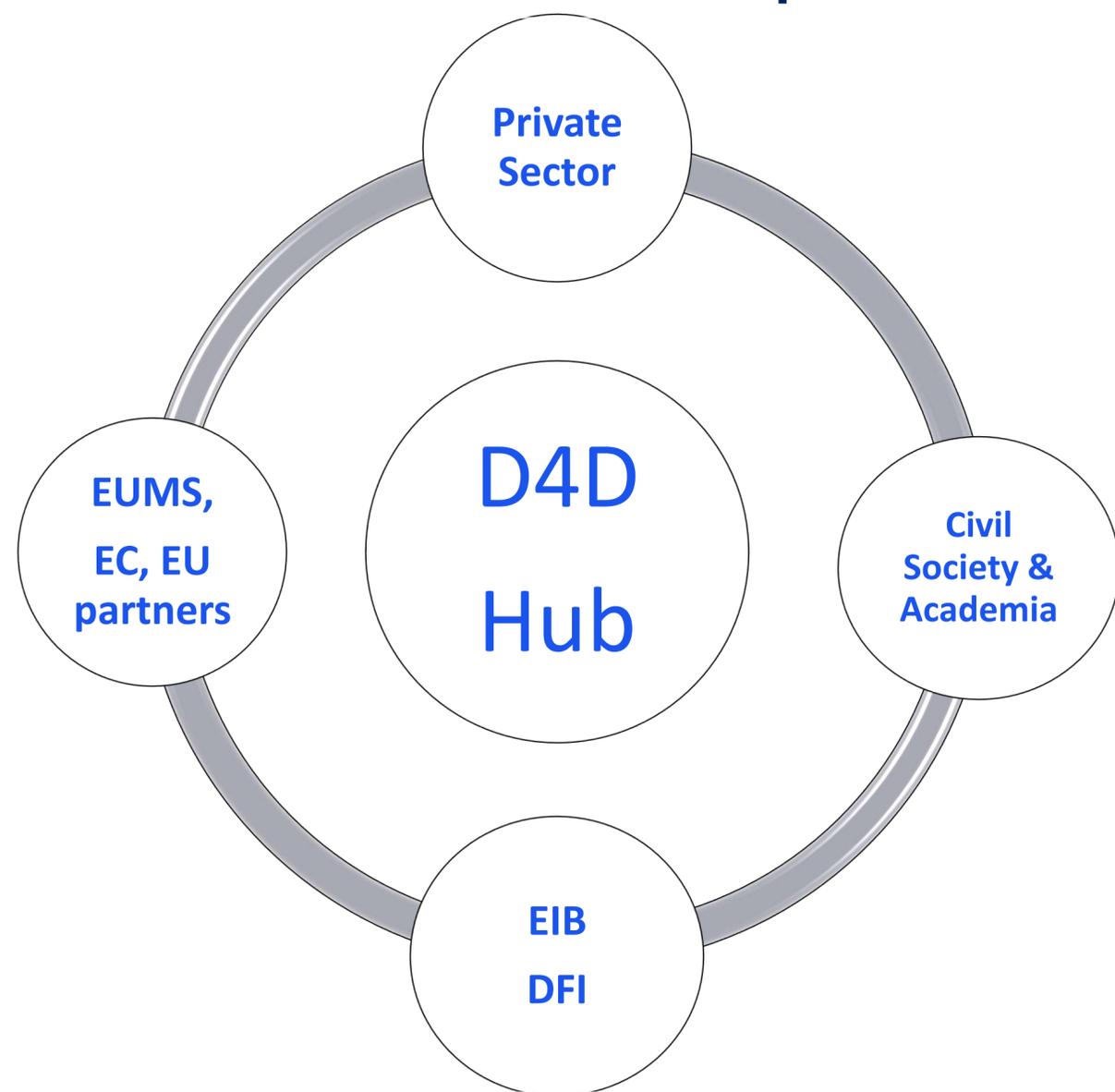
Contributing to  
« twin  
transition »



International  
cooperation on  
R&I and the  
Green Deal

# Team Europe to reach the target, the D4D HUB

D4D Hub: strategic multi-stakeholder platform to foster digital cooperation between Team Europe and its global partners.



- Multiple stakeholder groups coming together for a joint action
- Opportunities for dialogue, partnerships and investments to advance the human centric model of digital transformation in partner countries
- Joining digital expertise, networks and resources for impact
- Sharing information, good practices

# Building on our common experience...

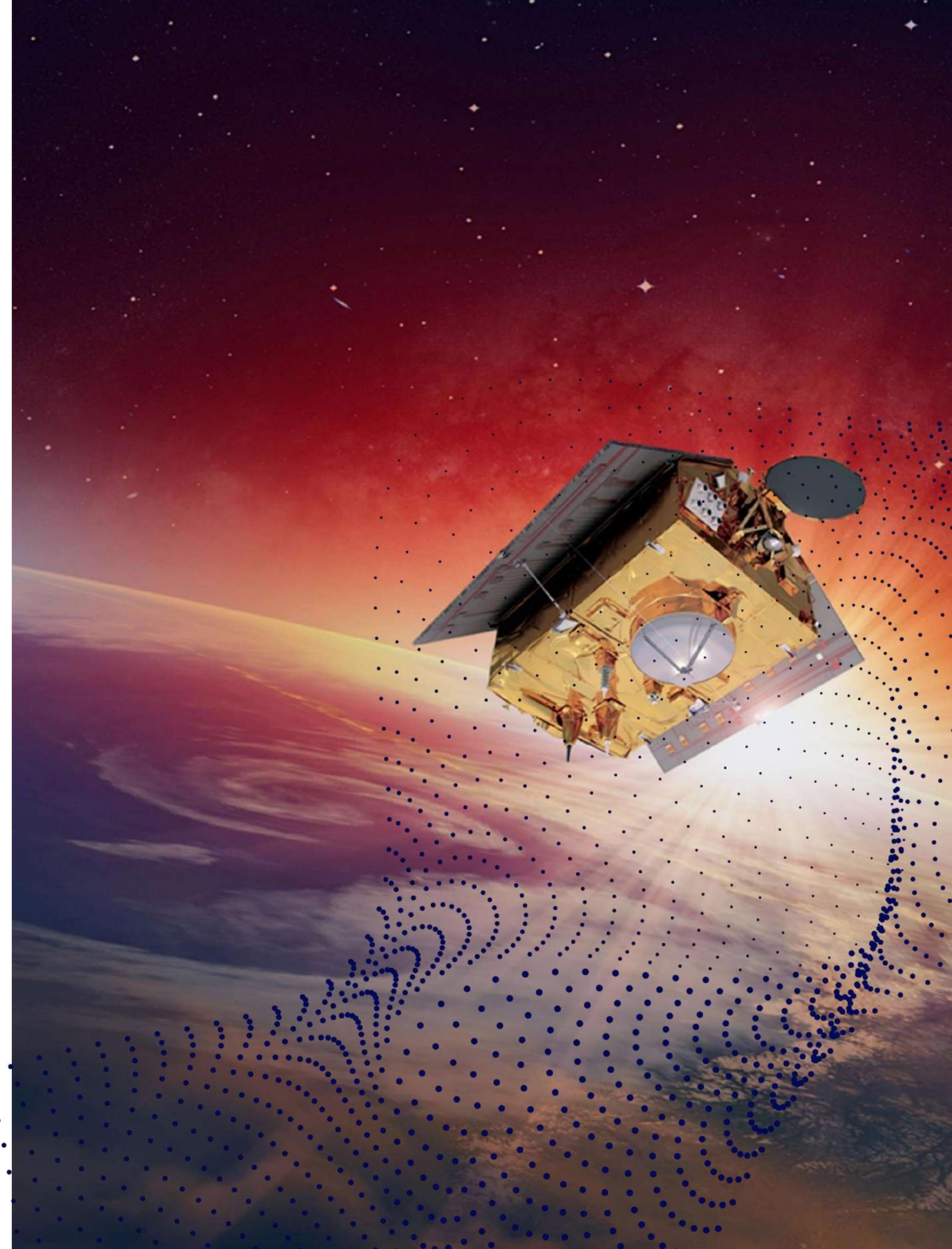
**GMES&Africa – Monitoring  
Environment and Security**

**ClimSA – Climate Services and  
Related Applications**

**SBAS – Satellite Based  
Augmentation System**

**PUMA – AMSED – MESA**

**200+ MEUR invested since 2001**



# For a renewed & stronger partnership

Work together on a long-term partnership on space and related services

+

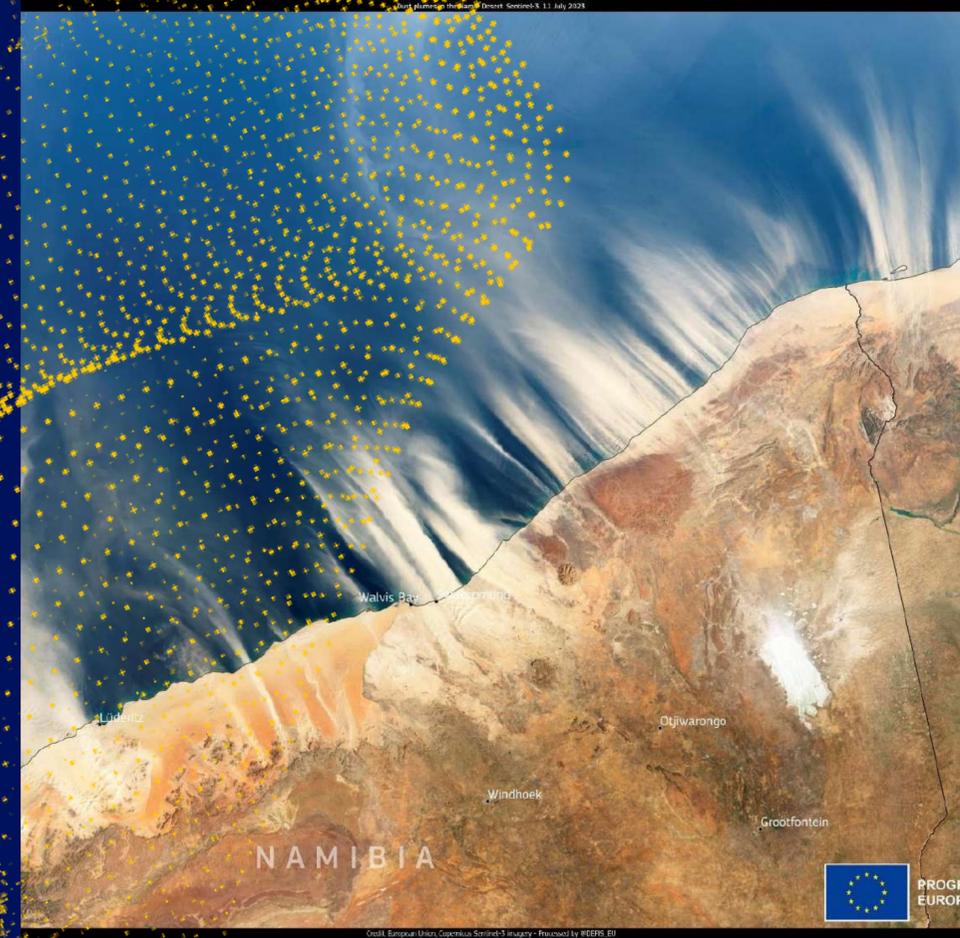
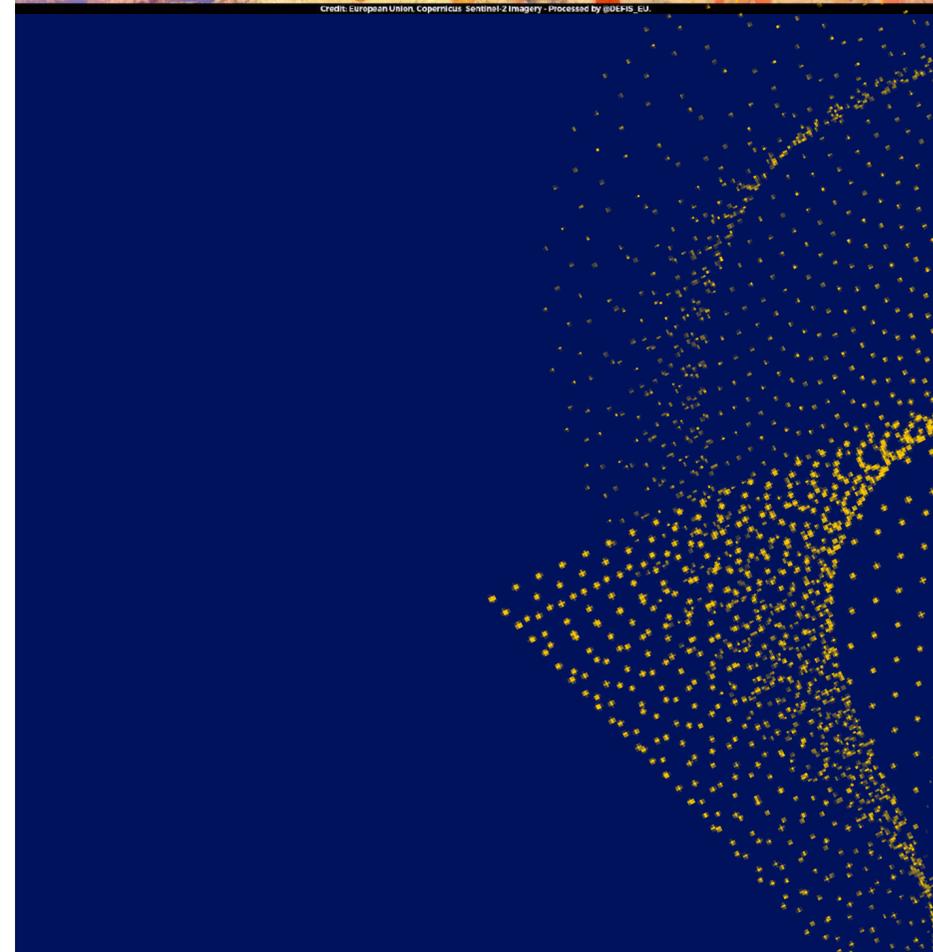
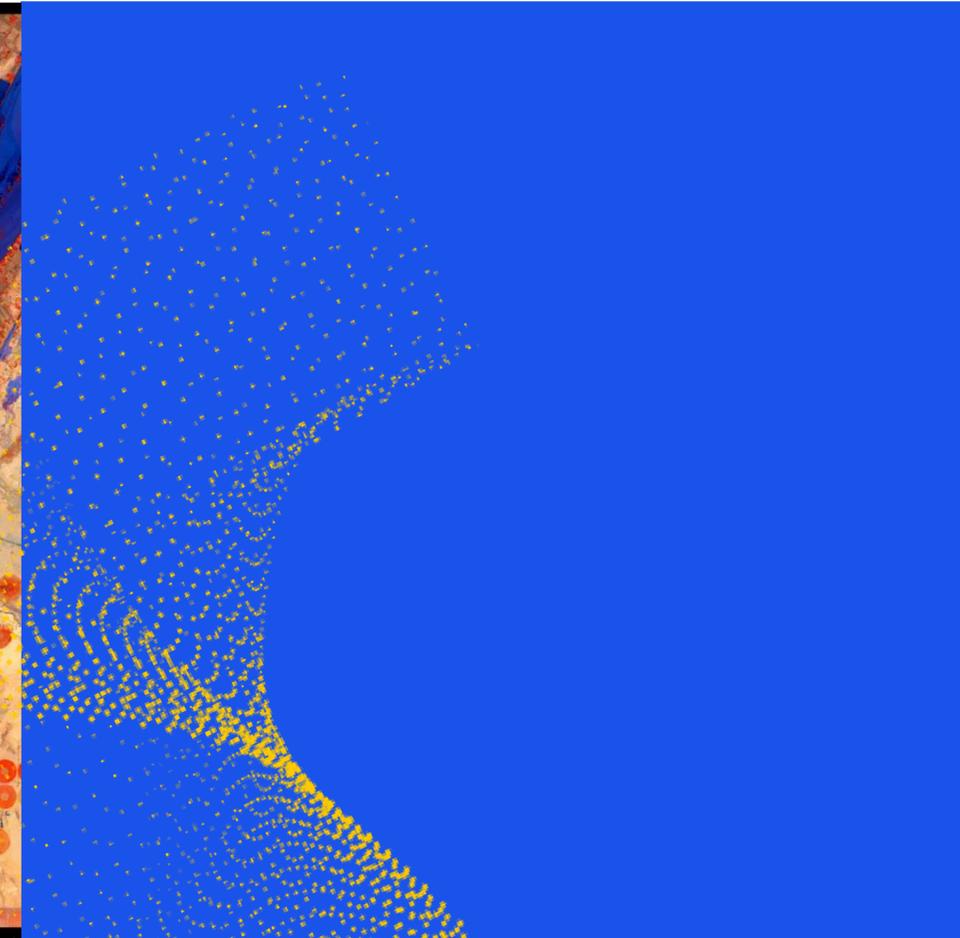
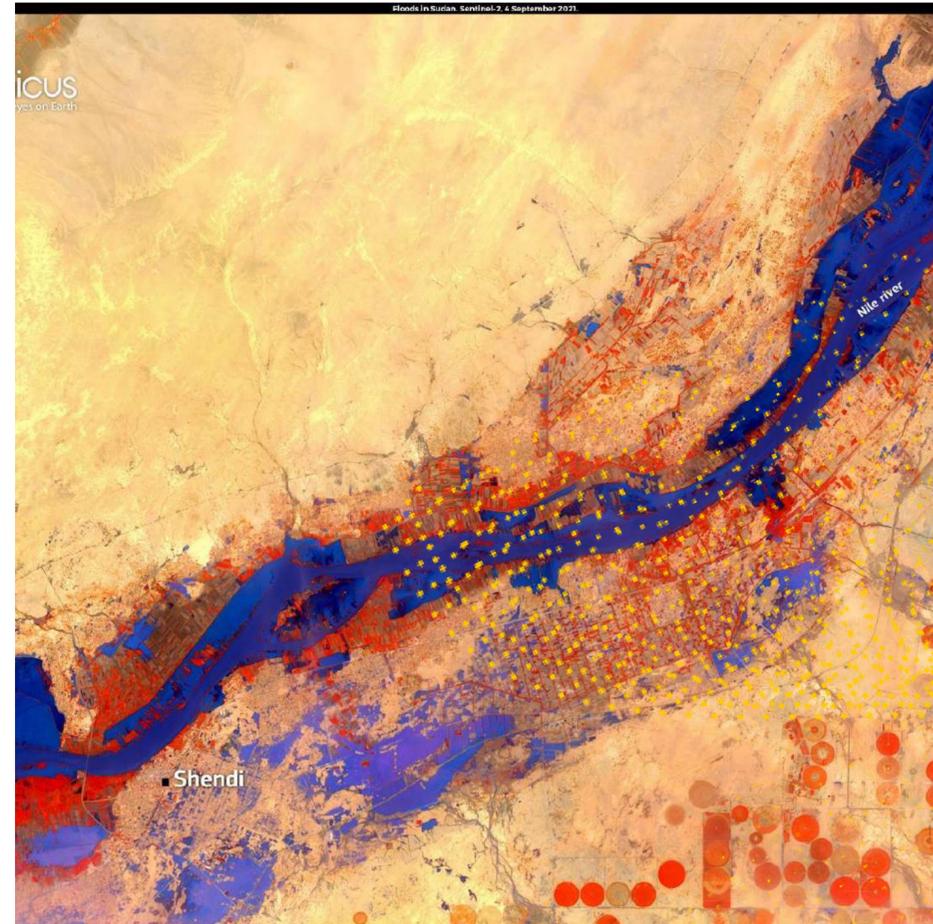
Streamline our cooperation, enhancing benefit

+

Increase focus on private sector and data-driven economy

=

Space flagship





# Africa – EU space partnership programme: the approach

## 1. Space & Inst. Partnership

Focus on strategic dialogue (tech & innovation partnership, multilateral agenda)

## 2. Space & Green Transition

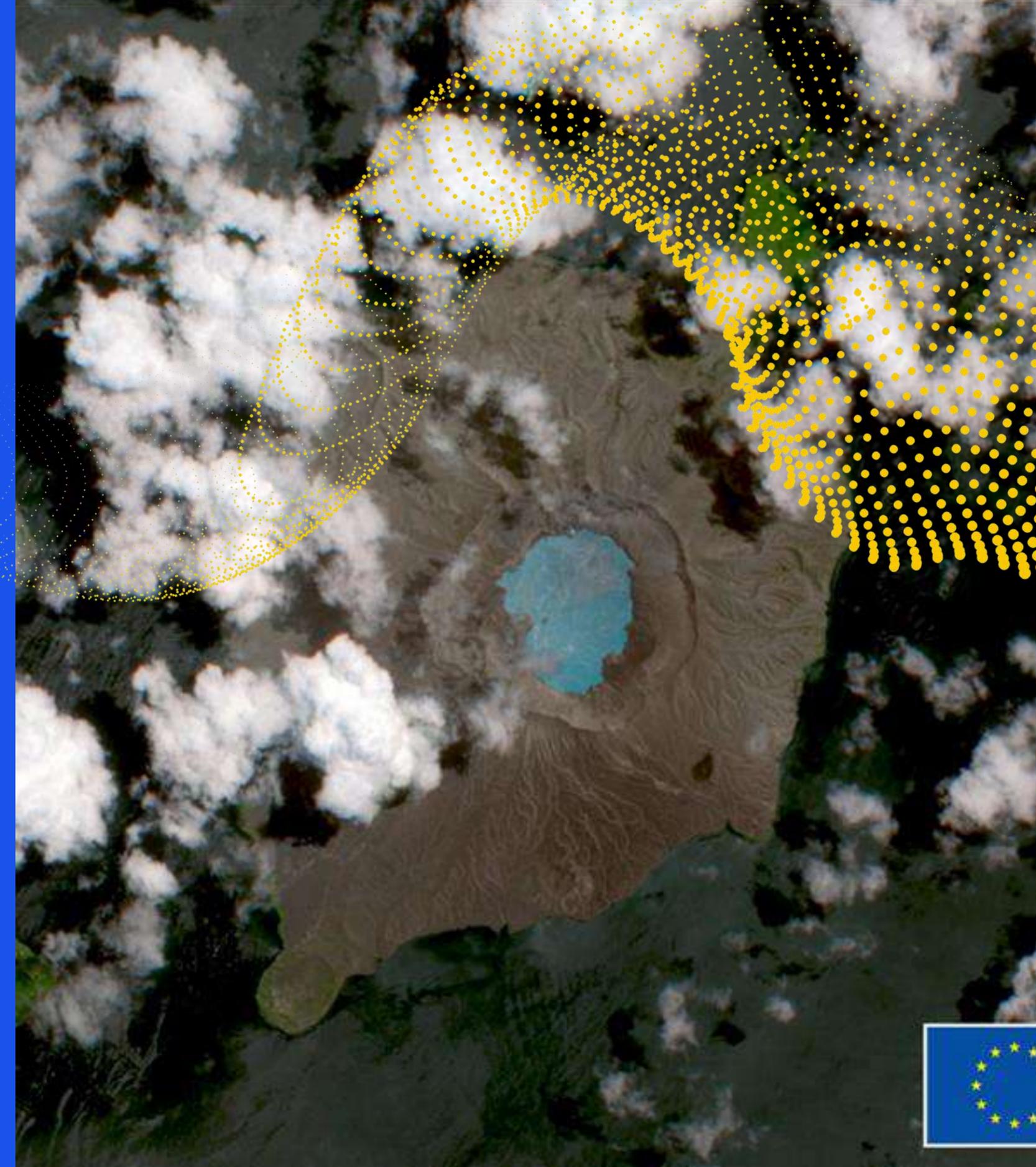
Focus on environment (SDGs, green deal, climate target)

## 3. Space & Private Sector

Focus on data driven economy (innovation, sustainable growth, NewSpace)

# Implementation of the flagship: a two steps phase

First Action Document– EUR 45 M



# Key data – AD 1

**Title: Africa – EU Space partnership programme**

**EU contribution: EUR 45M**

**Duration: 4 years, starting 2025**

**EU programming: NDICI Global Europe – Multi-annual Indicative Programme for Sub-Saharan Africa 2021-2027– priority area 4: Science Technology and Innovation and Digital (AAP 2023)**





## Action Document: AAP 2023

**Overall objective is to contribute to sustainable development, a green transition and digitalisation in Africa through an enhanced strategic EU-African space partnership**

- **S01: Enhance the African institutional and innovation space cooperation framework including a gender-sensitive outreach on the benefits of space**
- **S02: Enhanced the capacity to produce and deliver space-based services and applications, data and information, for early warning systems related to hazardous weather or climate events**
- **S03: Strengthen African space private sector ecosystem and industrial cooperation**



## **S01: Enhance the African institutional and innovation space cooperation framework**

- 1.1 Contribute to EU-AU Space dialogue**
- 1.2 Increased African Union Commission capacities to build-up and operationalise the recently created African Space Agency (AfSA)**
- 1.3 Enhanced Africa – Europe New Space industrial partnership**
- 1.4 Facilitated development and use of EGNOS-based SBAS and Galileo services in Africa**
- 1.5 Enhanced gender-sensitive outreach on the benefits of space, in particular satellite navigation and earth observation**



## **S02: Enhance the capacity to produce and deliver space-based services and applications, data and information, for early warning systems related to hazardous weather or climate event**

- 2.1 Improved access, processing, applicability and use of Earth Observation (EO) data, with a focus on meteorological data, and Numerical Weather Prediction (NWP) products and services for Early Warning**
- 2.2 Established and operated African Meteorological Satellite Application Facility (AMSAF), including possible support for forecasting capabilities at different ranges led**
- 2.3 Co-designed and delivered Impact Based Forecast services & tools**
- 2.4 Enhanced coordination with institutional framework for hazardous weather & climate Early Warning and shared knowledge across regions**
- 2.5 Strengthened human capacities, knowledge and community shaping across the Early Warning value chain with a focus on space-based data and technologies**



## **S03: Strengthen African space private sector ecosystem and industrial cooperation**

- 3.1 Strengthened capacity and skills for effective involvement of the private sector in the space economy including through a gender-sensitive approach**
  
- 3.2 Established and operational EU-AU joint space business support schemes with a focus on women empowerment**



# Space partners programme: the partners

## Component 1 EU-Africa Space & Partnership

- AUC / AFSA
- ESA
- ASECNA

## Component 2 Space for Early Warning

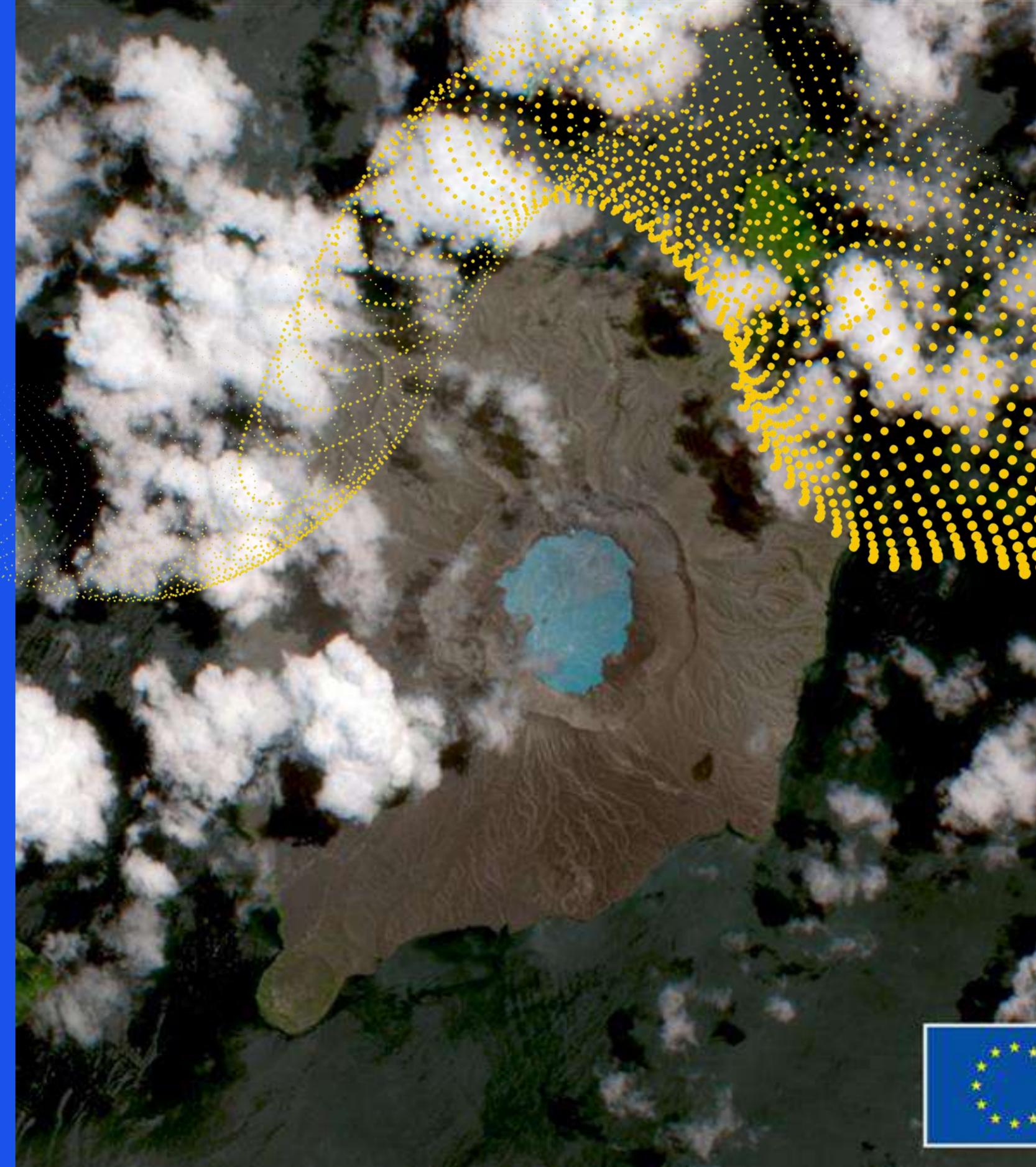
- AUC
- ECMWF
- EUMETSAT

## Component 3 Space & Private Sector

- AUC / AFSA
- ESA

# Implementation of the flagship: a two steps phase

Second Action Document – indicative EUR  
55 M





# Action Document 2025

- The focus of the second Action Document will :
  - ✓ Complement activities of the first Action Document (2023), if any;
  - ✓ Focus on space-based services in support to green transition;
  - ✓ Possible demo project to showcase the benefit of integrated application in key areas as precision agriculture, urban development and others.

# Timeline

2023

2025

2026

2027

2028

Action Document 1  
Commission Decision

Contracts preparation

Programme implementation .....

Action Document 2  
Commission Decision

Contracts preparation

Programme implementation .....



# Thank you



# ESA Earth Observation in Africa

**Alex Chunet**

*Earth Observation Applications Engineer, ESA  
Long Term Action Section*





# ESA's Earth Observation Vision

Taking the Pulse of our Planet





# EO Supports Actions for Global Societal Challenges



## UN SDG for 2030

## Paris Agreement on Climate Change

## The EU Green Deal



# Strong Africa-Europe EO Partnership & Ecosystem



Long-standing AUC partnership



Facilitation of Copernicus data access

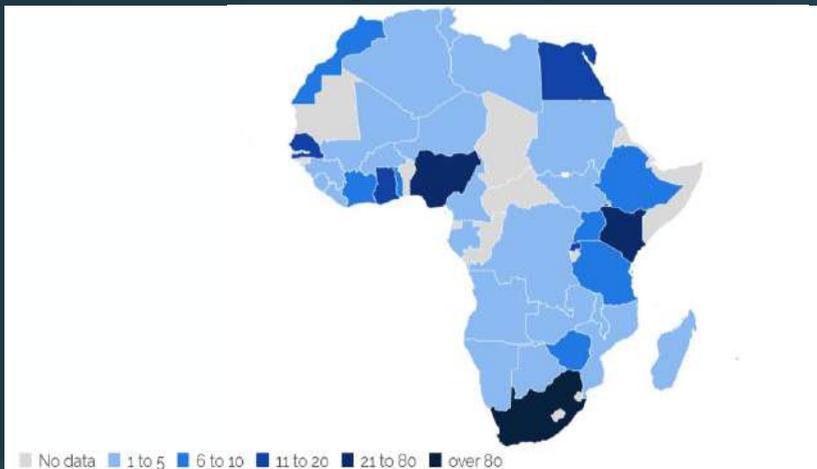


TOA Signature

Supporting cloud computing uptake



Strong support across data access to capacity development



Continuous community interaction





## Global community

- Africa - 28 countries
- Europe - 20 countries
- North & South America - 4 countries
- Middle East/Asia - 4 countries



# EO for Africa Symposium 2024

23-26 September, ESRIN – Frascati, Italy

## Participants:

- over **300** in person
- **500** online participants

## High-level representation

- 5 African Space Council members
- 5 Directors of African Space Agencies
- Directors of ESA, NASA, DEFIS, JRC



ESA

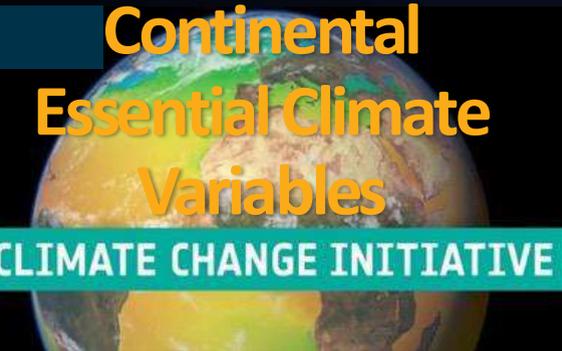


# African-European EO Partnership: ESA's contribution



EO African Framework for Research,  
Innovation, Communities & Applications

GDA  
Global Development Assistance



## EO AFRICA



From Research to EO mainstreaming  
In Partnership: AUC, EC, IFI, African stakeholders



# Africa-EU Space Partnership Programme



Global Gateway flagship for the Next Stage in African-European Space Partnership



**Africa and Europe:**  
a joint vision for 2030



AUC & ESA joint implementation partners

- total budget 21M euros (AUC&ESA)
- Start January 2025, 48 months

## Global Gateway



# African-European Institutional Cooperation

## Preparing the African Space Agency

- 4 European-African Joint Task Forces – identification of AfSA priorities
  - Earth Observation
  - Navigation
  - Telecommunication
  - Space Science
- Technical Assistance – analytical reports, assessments
  - Design studies for CDF and Cubesat Test Facilities
- Training in 4 space sectors – for future AfSA or national agencies staff
- Innovative user engagement tools – African EO News Room



- New Space Preparatory Program for EO
  - African-European Engineering Training
  - Cubesat Hands-on training
  - Annual courses for joint African-European young experts
- African-European Co-design for EO Smallsat
  - Joint design from instrument, operation to business plan



- Capacity program for African EO private sector
  - Trainings, challenges & hackathons
- Africa-Europe business development
  - Calls for grants, mentoring open to African start-ups
  - African-European companies match-making
- One pilot national African Business Innovation Lab following the ESA  $\Phi$ -lab model
- Nigeria: National cooperation with NASDRA on new EO applications, focus on AI innovation



# Angles of collaboration with other European and African projects

- Coordinated capacity building activities for public officials
- Coordinated training for private sector entities in Africa
- Sequential support to start up financing and scaling
- Links to New Space activities for students and researchers
- ...



- Public tenders will be published on esa-star over the next few months?



- The formation of joint Europe-Africa consortium is strongly encouraged.



- esa-match function to find potential partners



# MAKING SPACE TOGETHER

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



# Opportunities for Africa

Vincent Gabaglio  
*International relations officer*

*Copernicus & Training for Trainers in Africa*  
*8<sup>th</sup> April 2025*





## Primary objective:

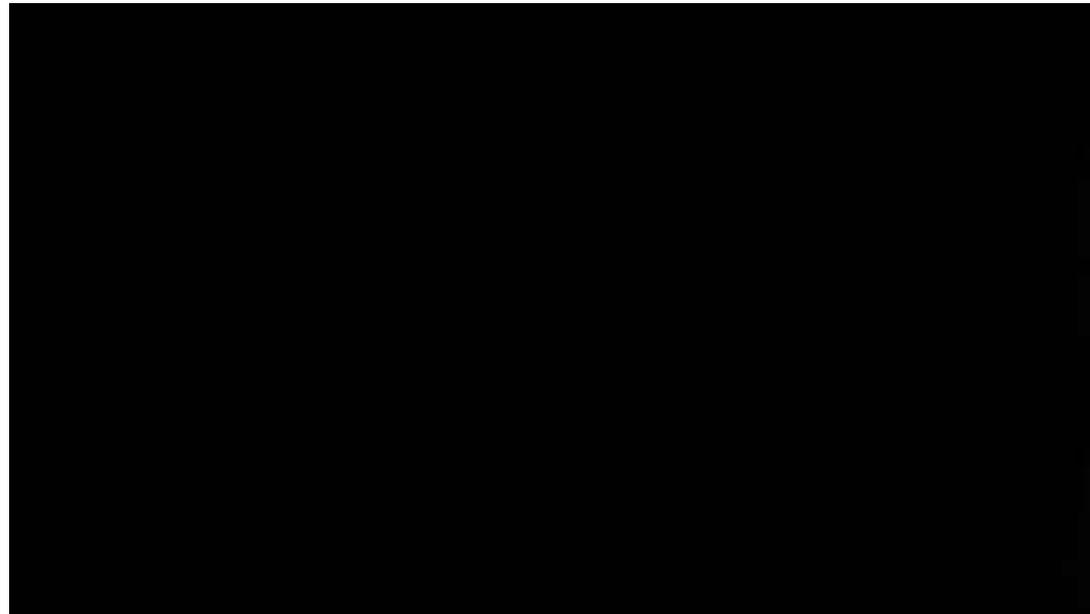
Establish, maintain and exploit European systems of meteorological satellites.

## Further objective:

Contribute to the operational monitoring of the climate and the detection of global climatic changes.



- 6 March 2025: release on EUMETCast Africa the customized pre-operational MTG FCI data service for Africa with RGBs

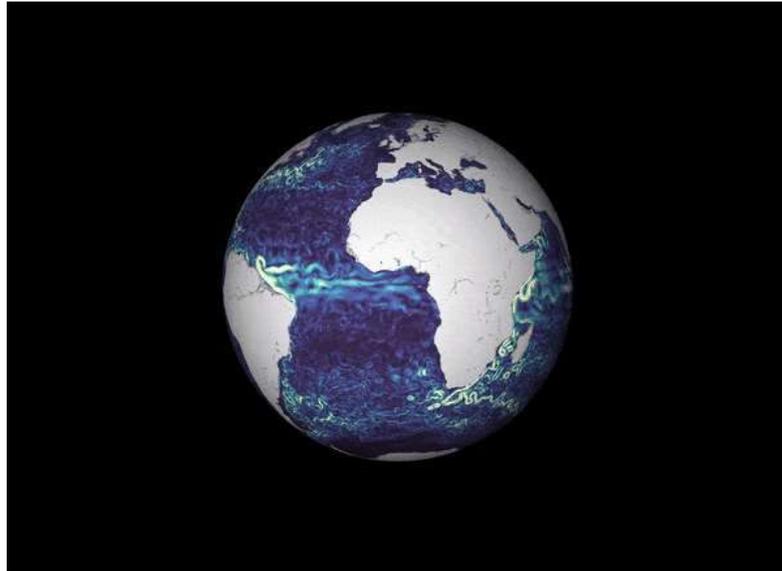


- PUMA-2025 stations are being deployed (by AUC/ClimSA) and tested with new MTG data
- MTG and EPS-SG until beyond 2040

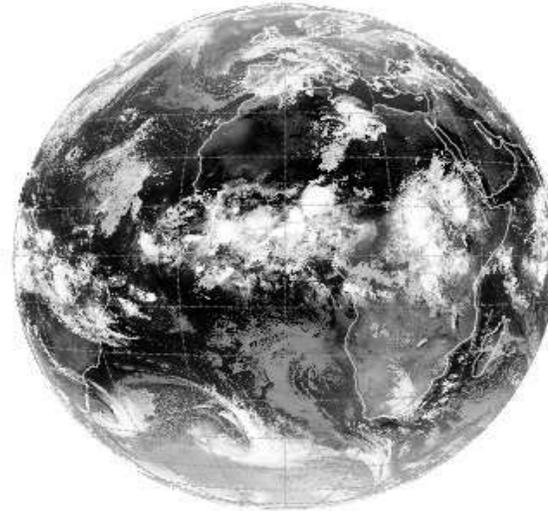




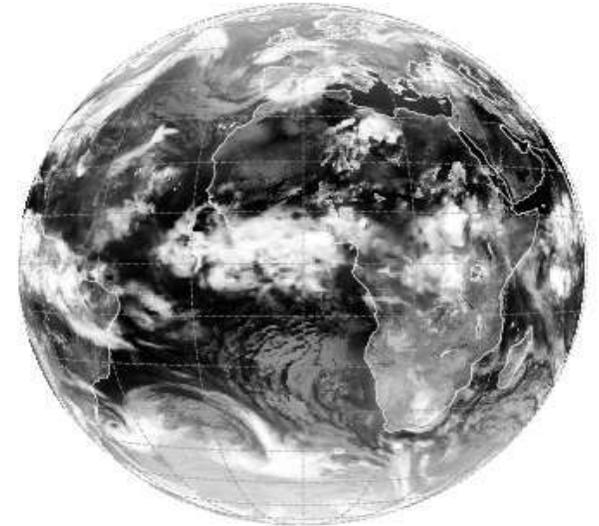
# From weather to environment forecasting



Meteosat 9 IR10.8 20080525 0 UTC



ECMWF Fc 20080525 00 UTC+0h:



Long term commitment to cooperate with Africa  
=> **Ease access and exploitation of the satellite data**

## COOPERATION

*Institutional framework for cooperation with EU, AUC & WMO*

### EUMETSAT assets for Africa

#### Data coverage

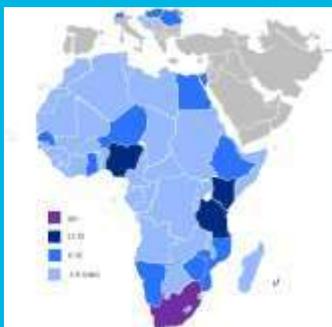
Long term perspectives  
-> 2040

#### Data policy

Free for African NMHS

#### Data access

#### EUMETCast-Africa



#### Training

4 training centres:

- IMTR, Nairobi
- EAMAC, Niger
- SAWS, South Africa
- DMN, Morocco

#### User engagement

- Help Desk
- User Forum
- RAIDEG - WMO RA-I Expert group

#### Contribution to Capacity Building initiatives/projects

Support African weather, climate and environment services in response to African needs and policies

Concrete projects:  
PUMA, AMESD, MESA, SAWIDRA, GMES&Africa, ClimSA



- EUMETCast-Africa: a data push system (no internet)
- Every NMHS in Africa is equipped with a EUMETCast-Africa reception station since 2005 -> **PUMA station**
- MTG and EPS-SG “big data” challenges for Africa, our solution:
  1. Data processing at EUMETSAT for Africa:
    - Priority products set by African experts (via RAIDEG)
  2. Data processing in African regional centres to serve NMHS:  
**African Meteorological Satellite Application Facility - AMSAF**
  3. Supplement data access mechanism:
    - EUMETCast-Terrestrial – Data push through National R&E network
    - Cloud-based processing



- Training on meteorology and climate
  - Training of trainers with 4 regional training centres: Morocco, Niger, Kenya, South Africa
  - Training material regularly update as part of the ASMET programme
- Training on marine application
  - Partnership with the GMES Marine Centre (Ghana, South Africa)
- User engagement:
  - EUMETSAT User Forum in Africa (biennial)
  - Support to WMO RA-I Expert Group (RAIDEG)
  - Help Desk





# Space for Early Warning in Africa (SEWA)



www.eumetsat.int

- Part of the **Africa-EU Space Partnership Programme**
- Funded by DG INTPA under the EU Neighbourhood, Development and International Cooperation Instrument (NDICI)
- Implementation partners: **African Union Commission, EUMETSAT, ECMWF**



## Objective

Strengthen Africa's capacity to access and utilize space-based meteorological data for early warning and disaster risk reduction

## Main activities

- **Infrastructure for Data access.** Enhance Africa local and cloud-based infrastructure for operational access to new meteorological satellites (MTG, EPS-SG) and Copernicus
- **Establish the AMSAF.** African Meteorological Satellite Application Facility (AMSAF) will develop and operate African space-based products to track severe weather events and enhance Early Warning systems.
- **Training.** Large training efforts for meteorologists and DRR staff on use of space products for Early Warning.
- Building on 20-years of EU-investments in Africa supported by EUMETSAT:  
PUMA (2001-2006), AMESD (2006-2013), MESA (2012-2018), SAWIDRA (2016-2020)  
GMES&Africa and ClimSA (on-going)

Implementation period:  
2025-2029

Overall budget:  
20M€ (+5M€)

### Key principles:

- *Build on existing assets*
- *Involve European expertise*
- *Ensure African ownership*

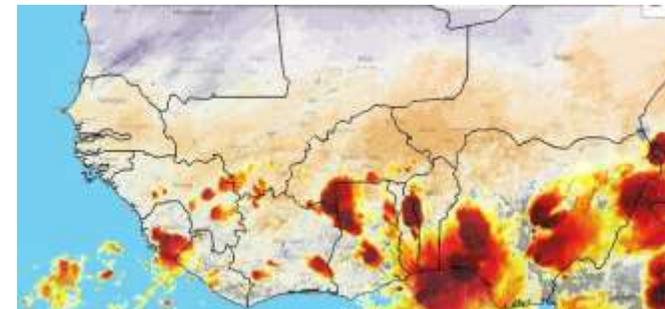


- African Meteorological Satellite Application Facility (AMSAF)



2018: Abidjan Declaration  
2022: Dar es Salaam high level statement

- Initial focus: AMSAF-Nowcasting for Early Warning in four Regional Specialized Meteorological Centre (RSMC) with products for all NMHS
- AMSAF roadmap and initial studies for new AMSAF products



- EUMETSAT main opportunities arise from operation long-term data provision -> allow long-term return on investments
- Training: focus on strengthening “training infrastructure” (human and regional centre) focus on user communities (Meteo, Climate, Marine, etc)
- Funding:
  - backbone via EUMETSAT member states, Copernicus DA (Data access, basic training), and
  - mostly via funding agencies and partners (DG INTPA)



**Thank you!**  
Questions are welcome.

#EUSpace



# Space downstream applications and potential in Africa

Fiammetta Diani, Head of Market Downstream & Innovation

8<sup>th</sup> April 2025



# How EU Space can actively contribute to tackle the SDGs and several challenges related to a 8 billion world



EGNSS and Copernicus Supporting the Sustainable Development Goals



In collaboration with UNOOSA



EU Space Supporting a World of 8 Billion People



In collaboration with UNOOSA

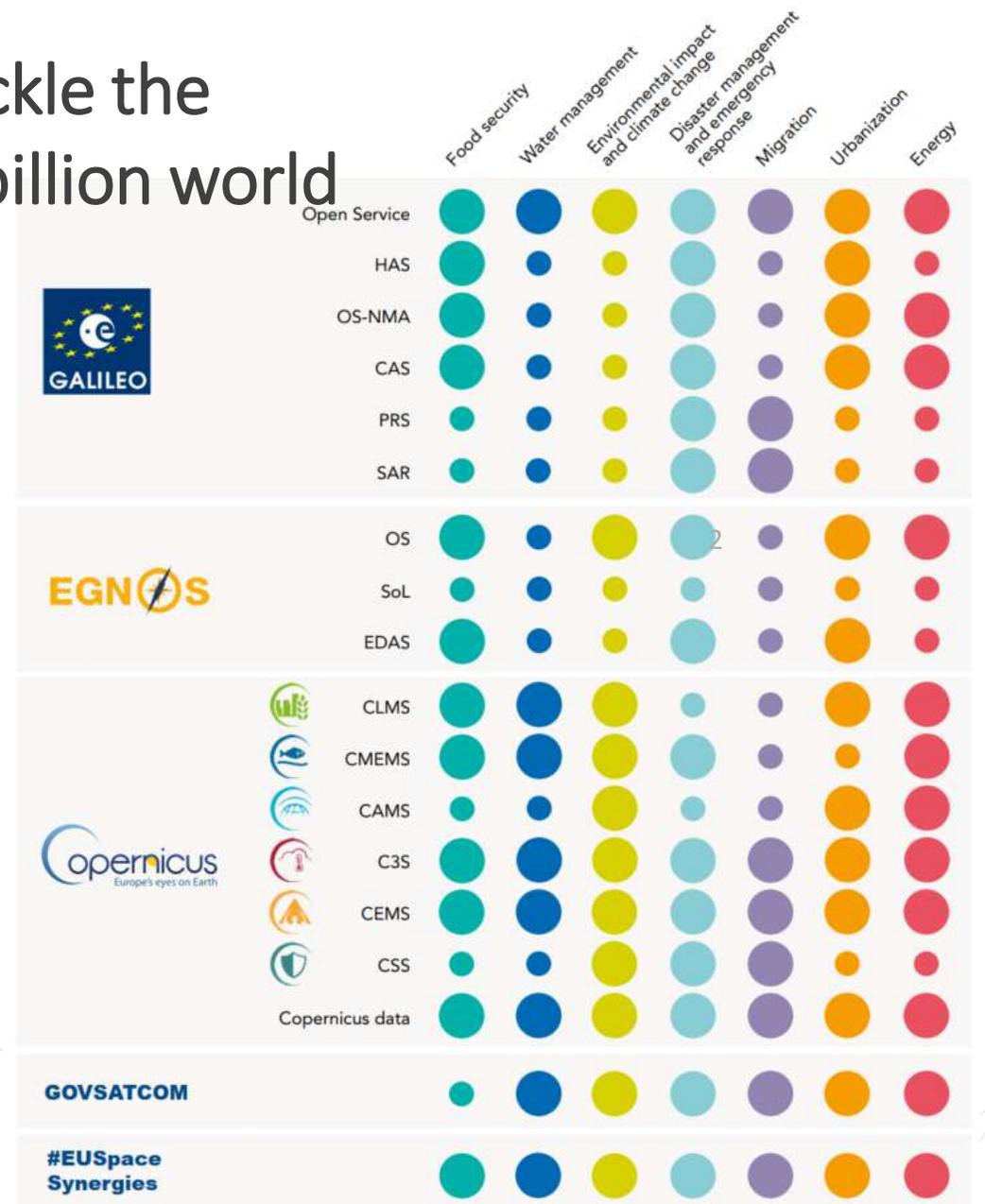
United Nations



General Assembly

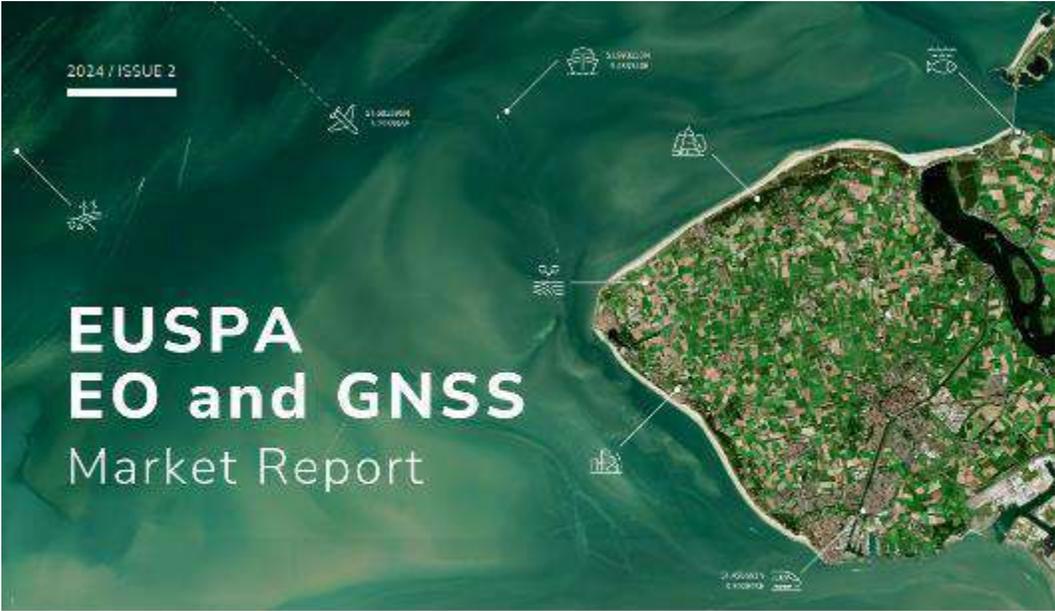
“Space2030” Agenda

**Objective 2:** Advance the societal benefits of space-related activities and making the best use of space technologies and space-based services and applications for improving the quality of life



● Limited relevance/contribution    ● Significant relevance/contribution

# Space Navigation and Earth Observation: a growing global market that will almost double in the next decade



EDITOR'S SPECIAL  
Resilient societies



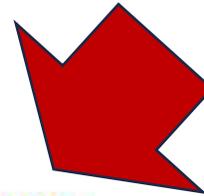
#EUSpace 



# Horizon Europe for the uptake of EU space data: a tool for cooperation



## WHO IS ELIGIBLE FOR FUNDING?



### EU COUNTRIES

- Member States (MS) including their outermost regions
- The Overseas Countries and Territories (OCTs) linked to the MS.



### NON-EU COUNTRIES

- Countries associated to Horizon Europe (AC)
- Low and middle income countries: See [HE Programme Guide](#).
- Other countries when announced in the call or exceptionally if their participation is essential



### SPECIFIC CASES

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO)

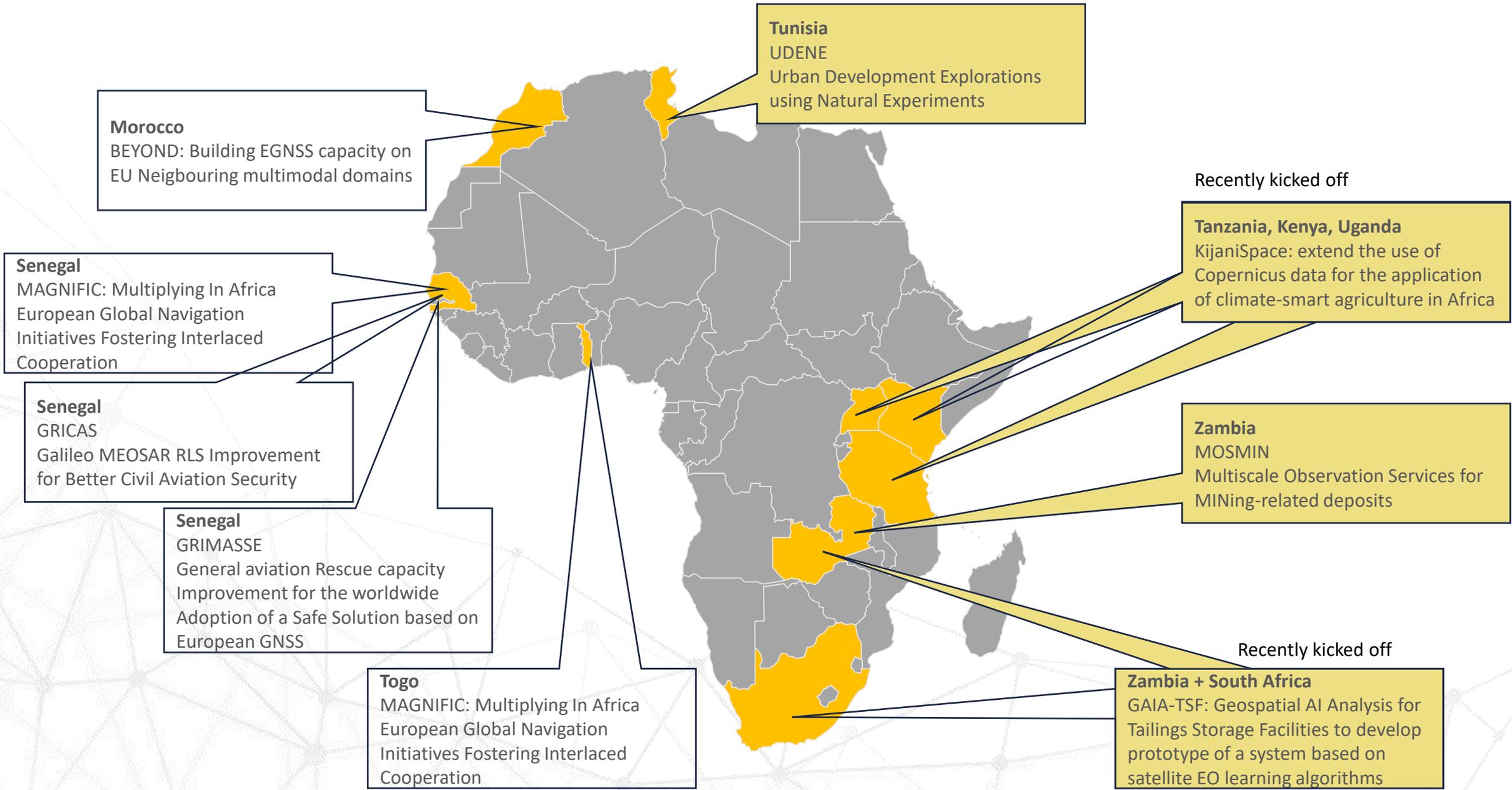
List of eligible countries



When dealing with Copernicus-based applications, participation of at least one partner from a country that has signed a Copernicus Cooperation Arrangement is required.



# EUSPA Horizon projects involving African countries





# MOSMIN

Multiscale observation services for mining-related deposits

Example  
Horizon Europe

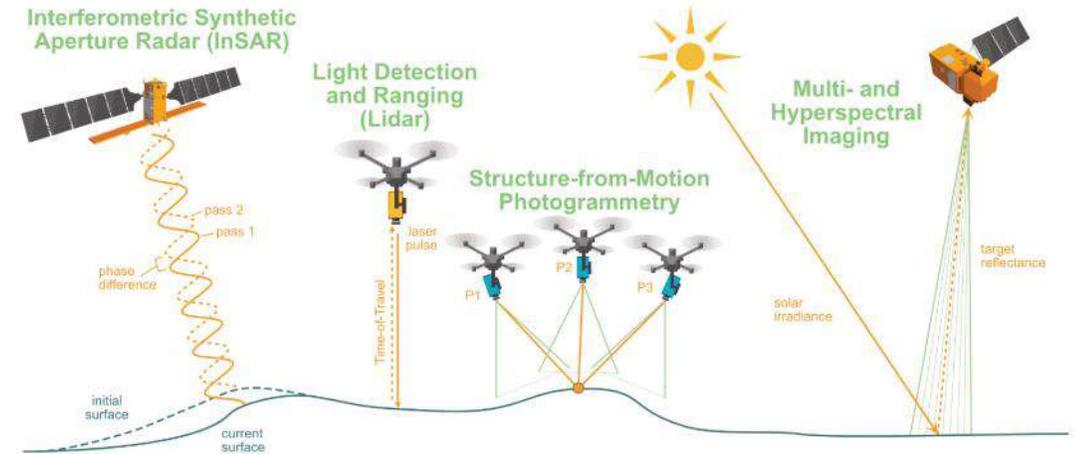
## Objective:

Addressing environmental and safety risks of raw materials mining.

Development of services for geotechnical and environmental monitoring as well as valorisation of mining-related deposits based on a combination of EO and in situ geophysical data.

## Key technologies:

Copernicus, in-situ sensors, machine learning, fibre-optic sensing



- Duration: 36 months
- Consortium: 12 participants
- Budget: 2,929,673 EUR



# UDENE

## Urban Development Explorations using Natural Experiments

Example  
Horizon Europe

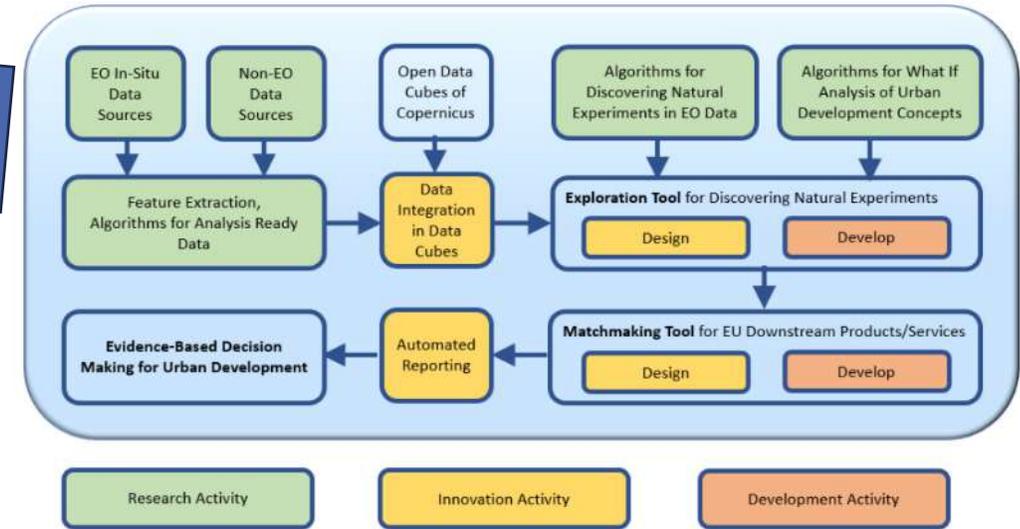
### Objective:

Making cities safe, resilient, and sustainable.

Data usage from Copernicus and local sources to support evidence-based decision making for urban development, especially in international partner countries, by creating a virtual laboratory for urban planners to test their development ideas. Project activities include cooperations for data acquisition and partnership building that will be facilitated by Open (FSTP) Calls.

### Key technologies:

Copernicus



- Duration: 24 months
- Consortium: 9 participants
- Budget: 1,056,912 EUR



# KijaniSpace

## Climate-Smart Agriculture/Aquaculture in AFRICA

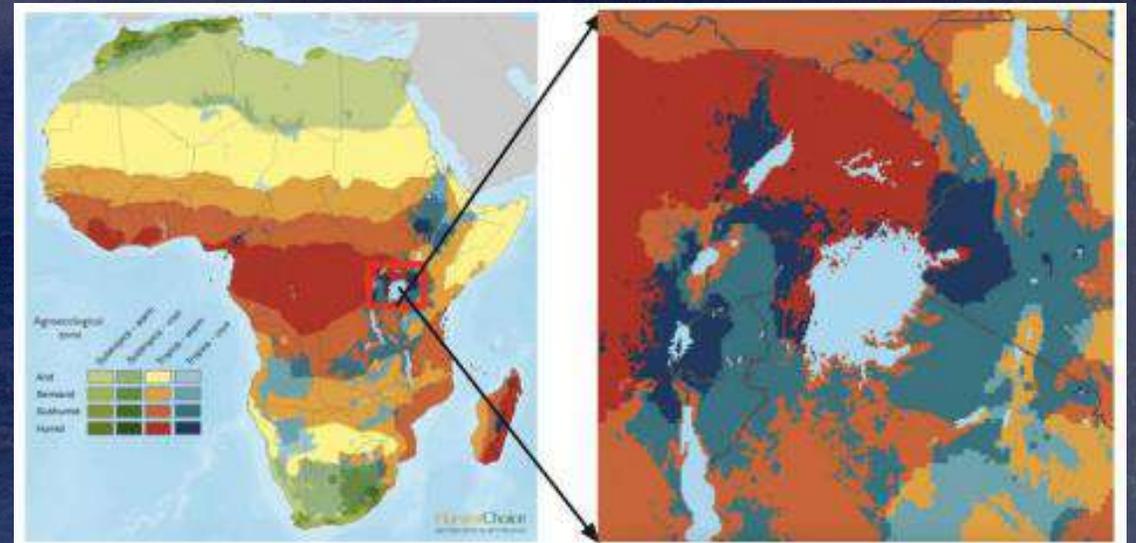
### Objective:

Objective: Integrate Copernicus Earth observation data in a IoT connected network for the implementation of smart agriculture (crop farming) and aquaculture (fish farming) concepts in Lake Victoria basin (Africa).

- 10 pilot farms demonstrations
- Innovation Program for SMEs
- Talent Program

### Key technologies:

Copernicus EO



Started: October 2024

Duration: 36 months

Coordinator: Innotech21 GMBH

Consortium: 12 participants

Budget: 993,581 EUR



# GAIA-TSF

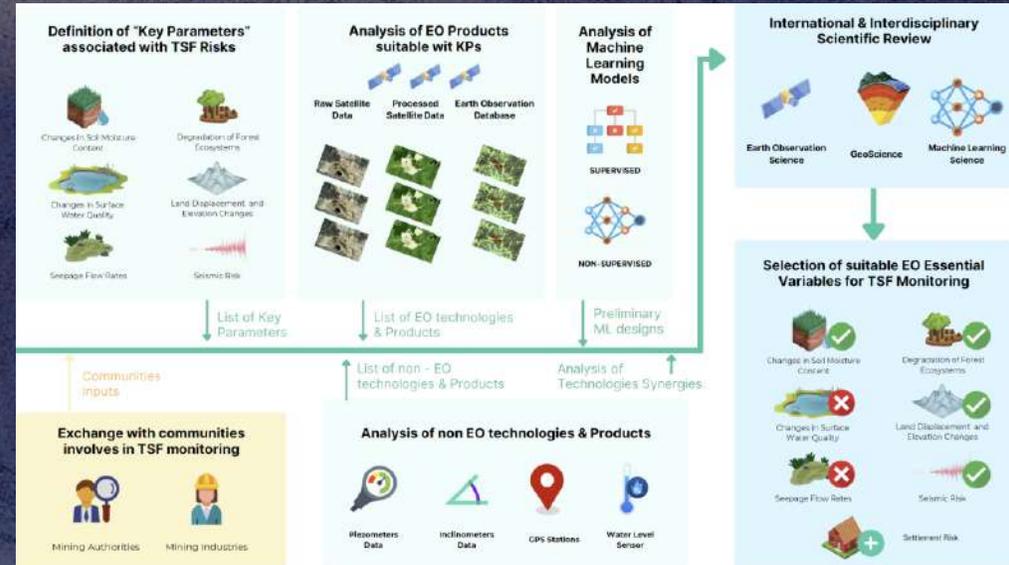
## Geospatial Artificial Intelligence Analysis for Tailings Storage Facilities

### Objective:

Develop a prototype system for continuous monitoring and risk detection in Tailings Storage Facilities (TSFs) by integrating satellite EO and Machine Learning technologies. In partnership with mining authorities and industries, the project seeks to define user-specific requirements and establish key variables for effective TSF monitoring. This will enable the design of advanced algorithms and a functional prototype to detect and predict anomalies.

### Key technologies:

Copernicus

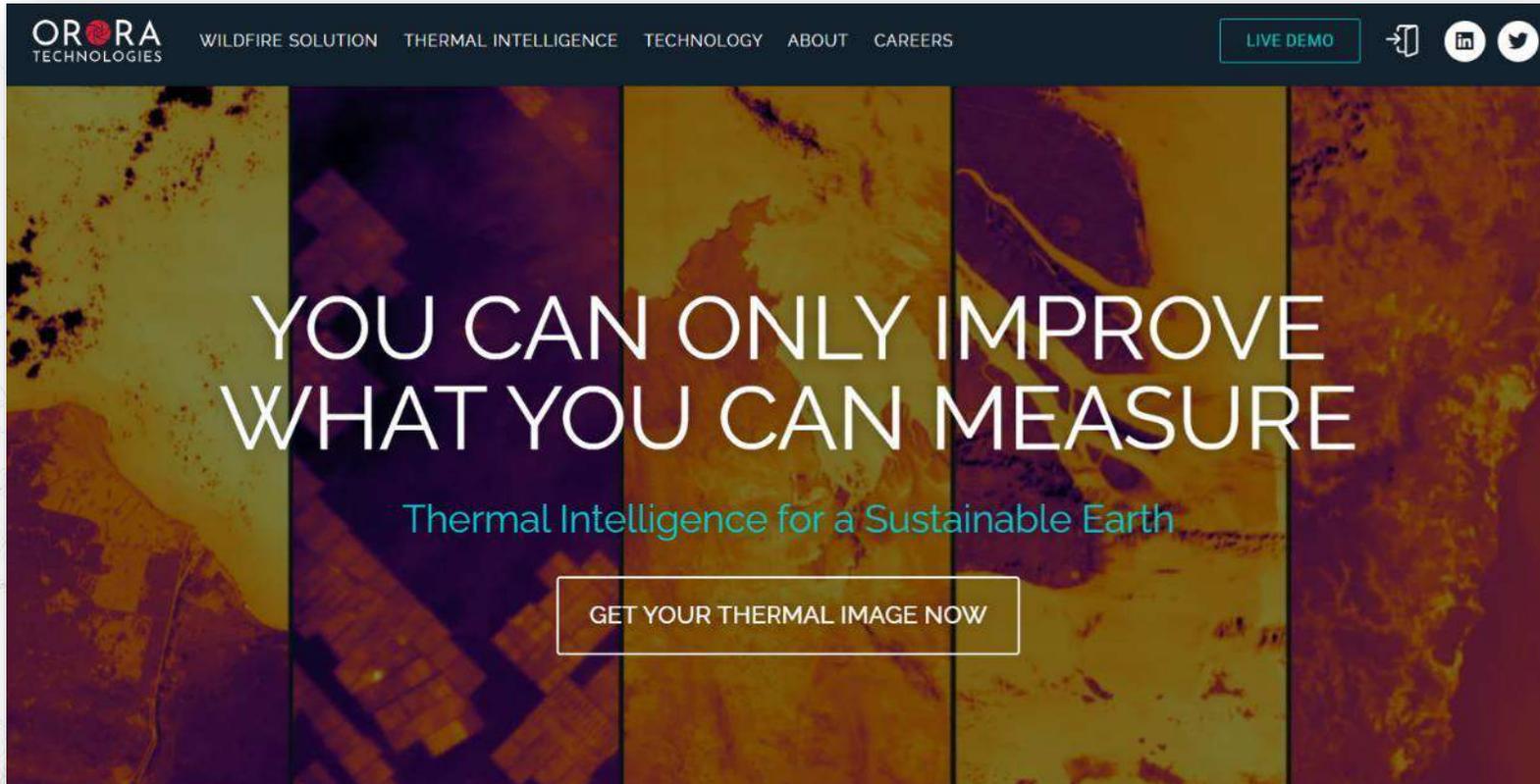


Duration: 28 months

Consortium: 7 participants

Budget: 998,041.74 EUR

# CASSINI Space Entrepreneurship Initiative: start-ups innovative solutions



ORORA TECHNOLOGIES WILDFIRE SOLUTION THERMAL INTELLIGENCE TECHNOLOGY ABOUT CAREERS LIVE DEMO

## YOU CAN ONLY IMPROVE WHAT YOU CAN MEASURE

Thermal Intelligence for a Sustainable Earth

GET YOUR THERMAL IMAGE NOW

Wildfire protection and monitoring from Space leveraging Copernicus and thermal infrared data

 **CASSINI** #EUSpace

More information about CASSINI [Here](#)



# EU Space Academy

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450+ subscribers to the dedicated newsletter



50+ recognised lecturers & mentors



300+ hours tailored 1-to-1 mentoring sessions



86% satisfaction rate for the programme

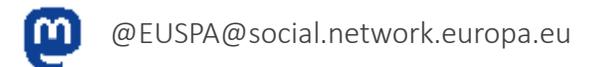
*#EUSpace*



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# Horizon Europe R&I Programme | Cooperation with Africa

Dimitra Tsoutsou  
PRAXI Network/FORTH

April 2025



WORKING  
GROUP  
**AFRICA**



## Overview

### Horizon Europe – General Overview

#### Horizon Europe - Examples of funding opportunities for African participants

- Thematic Clusters on Global Challenges and European Industrial Competitiveness (Pillar II)
- Marie Skłodowska-Curie Actions (MSCA) (Pillar I)
- European Research Council (ERC) (Pillar I)

#### Horizon Europe - Africa Initiative

- Africa Initiative I
- Africa Initiative II
- Towards Africa Initiative III

#### Other EU-Africa collaboration schemes

- Intra-Africa Academic Mobility Scheme
- ERASMUS+

#### Useful Links and Contact details

# Horizon Europe – General Overview



# What is Horizon Europe?

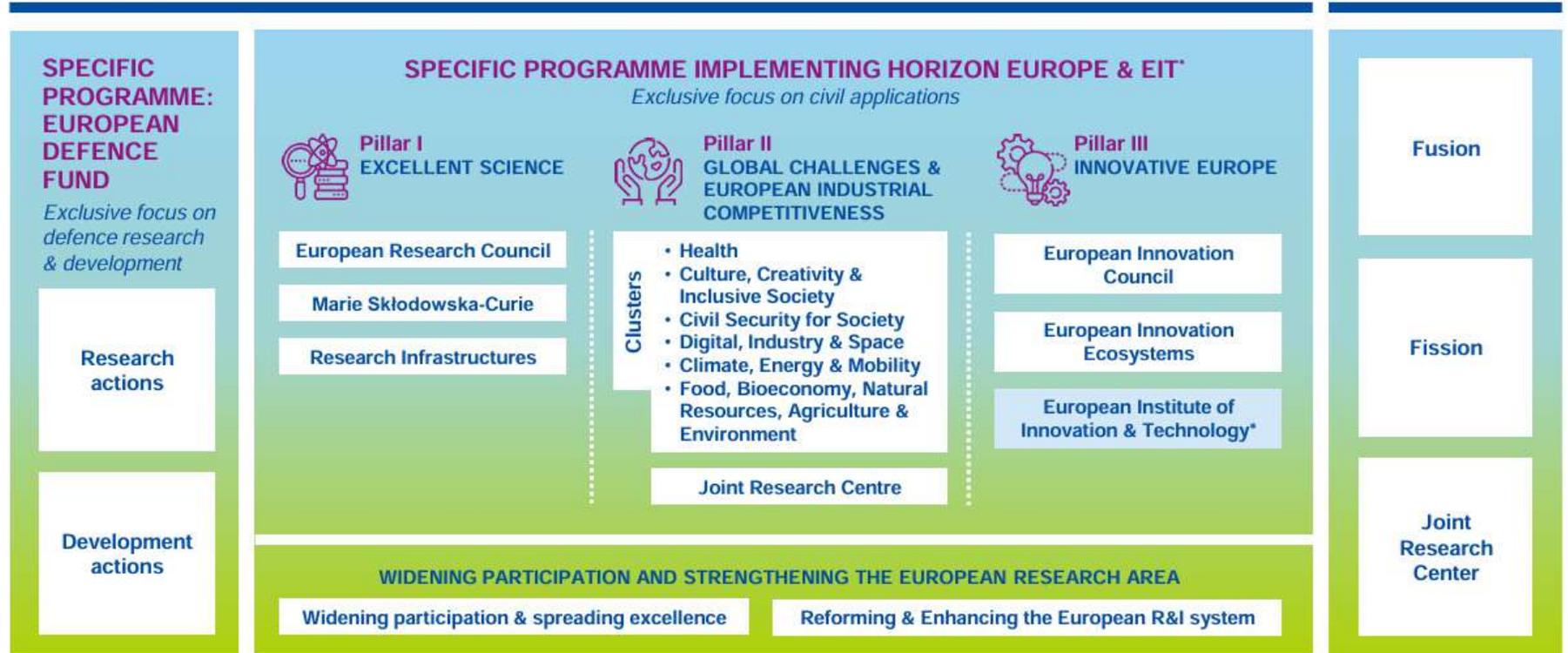


**Horizon Europe**  
2021-2027

# Horizon Europe

## HORIZON EUROPE

## EURATOM

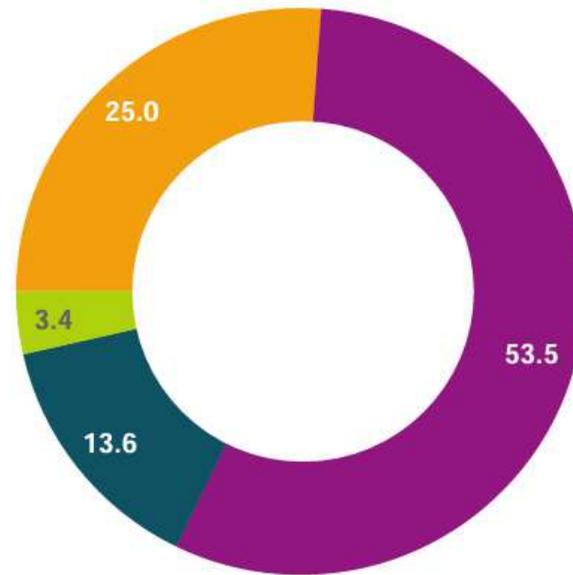


\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme





## Horizon Europe Budget: €95.5 billion (2021-2027)



€ billion in current prices

- Excellent Science
- Global challenges and European ind. comp.
- Innovative Europe
- Widening Part and ERA



# International Cooperation in Horizon Europe



## Global Approach to Research & Innovation

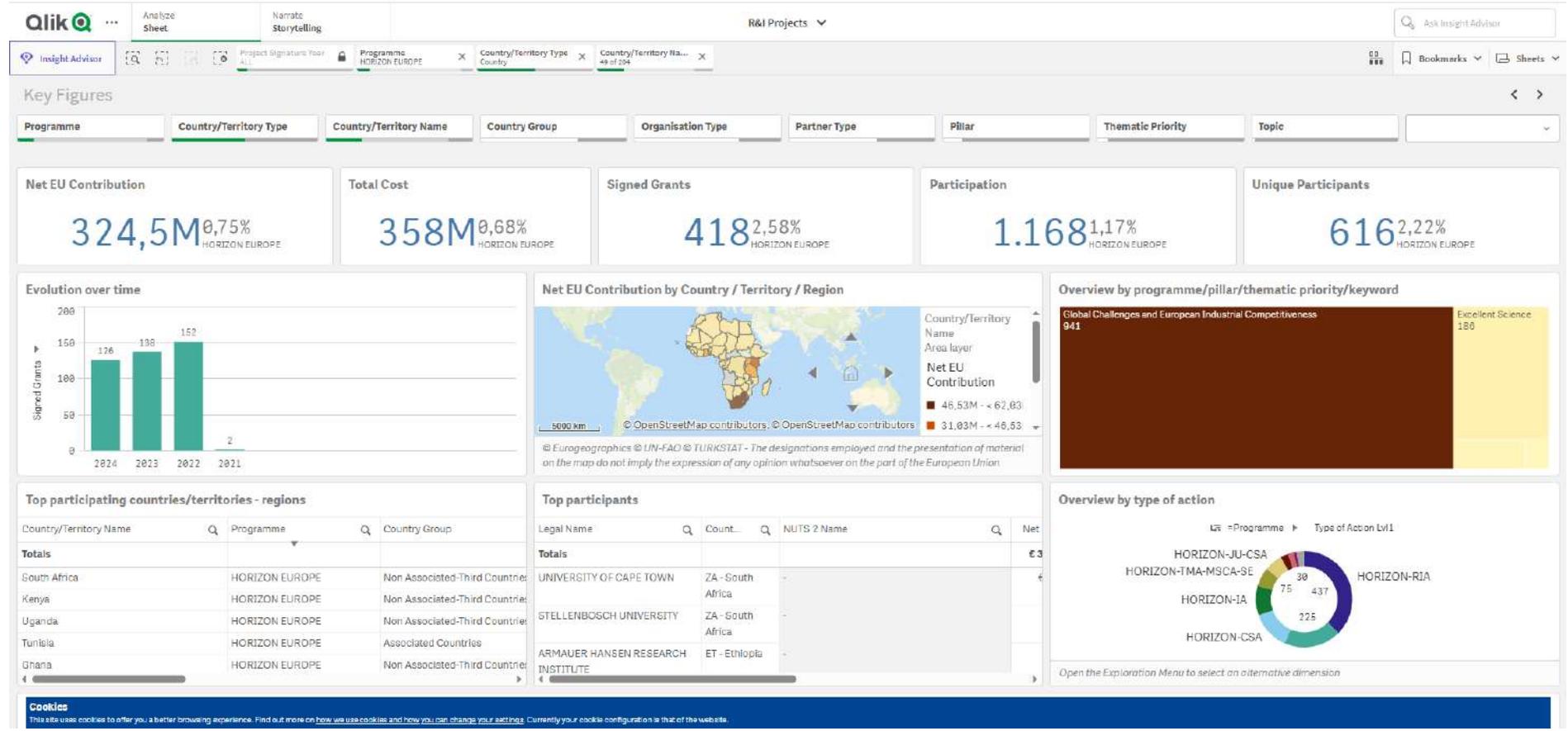
### General Openness of Horizon Europe to international participation

- Entities from all over the world can take part in Horizon Europe collaborative projects
- Researchers and innovators of any nationality can apply for grants
- Examples of Funding Schemes: Consortia projects, Marie Curie, ERC

### Targeted international cooperation actions

- Cooperation with Africa under the Horizon Europe 'Africa Initiative'

# Horizon Europe participations | Africa

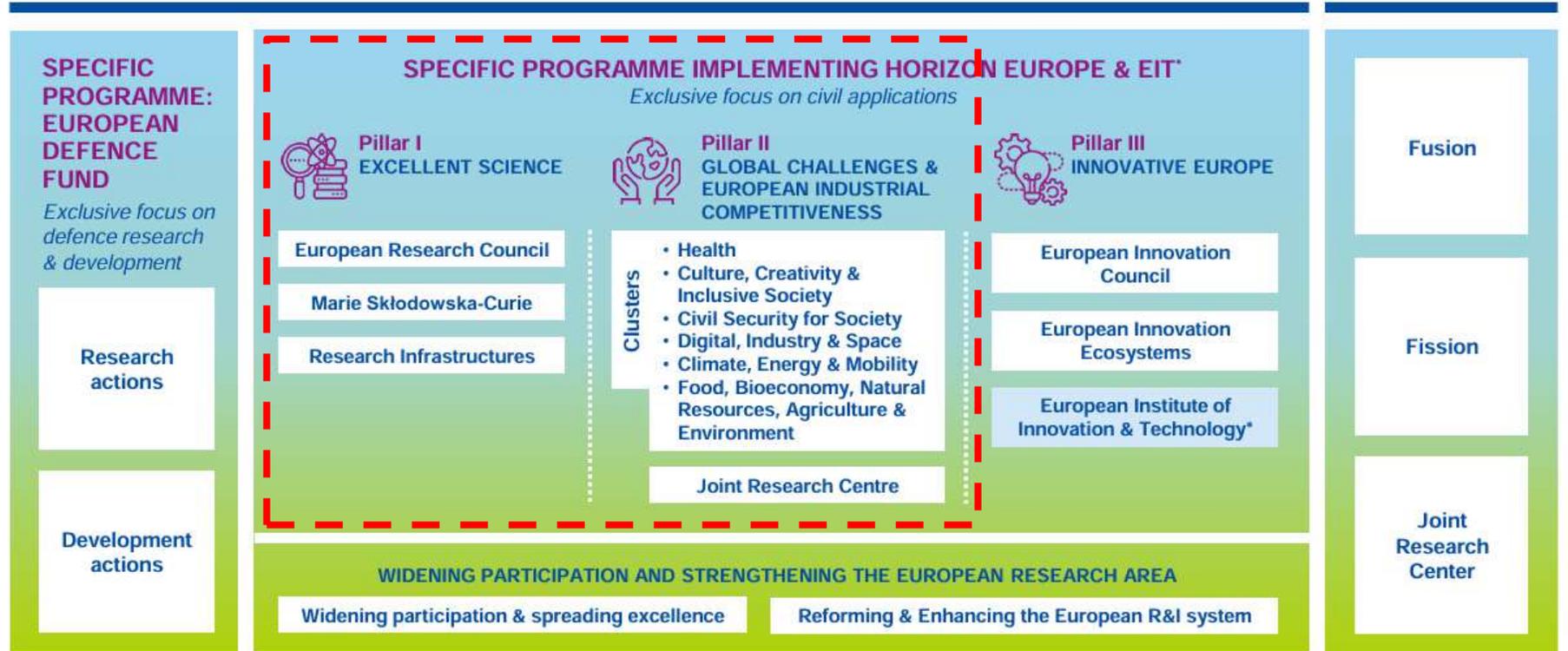


## Horizon Europe – Examples of funding opportunities for African participants

# Horizon Europe

## HORIZON EUROPE

## EURATOM



\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme





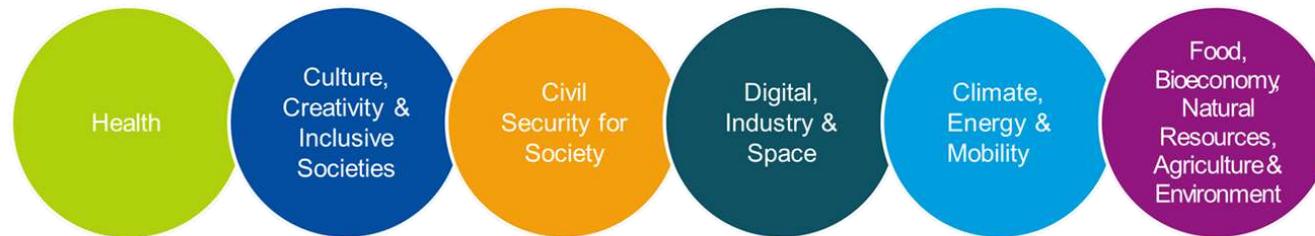
## What are the Thematic Clusters?

The actions in the Pillar II are divided to six different clusters: Each cluster has specific call topics defined in the Work Programme of Horizon Europe. The calls are open **for consortia** of research organisations, universities, SMEs and industry.

Pillar II - Clusters

### GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS:

boosting **key technologies** and solutions underpinning **EU policies & Sustainable Development Goals** (6 clusters and JRC – non-nuclear direct actions)



€53.5 billion



# Horizon Europe consortia | Eligible countries

The EU can fund the participation in Horizon Europe collaborative research actions of entities established in:

- EU Member States and the Overseas Countries and Territories (OCT) linked to the Member States.
- countries Associated to Horizon Europe.
- Other third countries like low- and middle-income countries. **Most African countries are included in this latter category.**

Participants from the following low- to middle-income countries are **automatically eligible** for funding<sup>7</sup>:

- Afghanistan, Algeria, Angola, Argentina, Azerbaijan
- Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi
- Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Colombia, Comoros, Congo (Democratic Republic), Congo (Republic), Costa Rica, Côte d'Ivoire, Cuba
- Djibouti, Dominica, Dominican Republic
- Ecuador, Egypt (Arab Republic), El Salvador, Equatorial Guinea, Eritrea, Eswatini, Ethiopia
- Fiji
- Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana
- Haiti, Honduras
- Indonesia, Iran (Islamic Republic), Iraq
- Jamaica, Jordan
- Kazakhstan, Kenya, Kiribati, Korea (Democratic People's Republic), Kyrgyz Republic
- Lao (People's Democratic Republic), Lebanon, Lesotho, Liberia, Libya
- Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia (Federated States), Mongolia, Morocco, Mozambique, Myanmar
- Namibia, Nepal, Nicaragua, Niger, Nigeria
- Pakistan, Palestine<sup>8</sup>, Papua New Guinea, Paraguay, Peru, Philippines
- Rwanda
- Samoa, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Syrian Arab Republic
- Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, , Turkmenistan, Tuvalu
- Uganda, , Uzbekistan
- Vanuatu, Venezuela (Bolivarian Republic), Vietnam
- Yemen Republic
- Zambia, Zimbabwe.





# What are the Marie Skłodowska-Curie Actions (MSCA) ?

A European Union funded programme for structuring researcher training, mobility and career development.

**(Pillar I)**

**Excellent Science**





## Marie Skłodowska-Curie Actions (MSCA)

### Guiding principles:

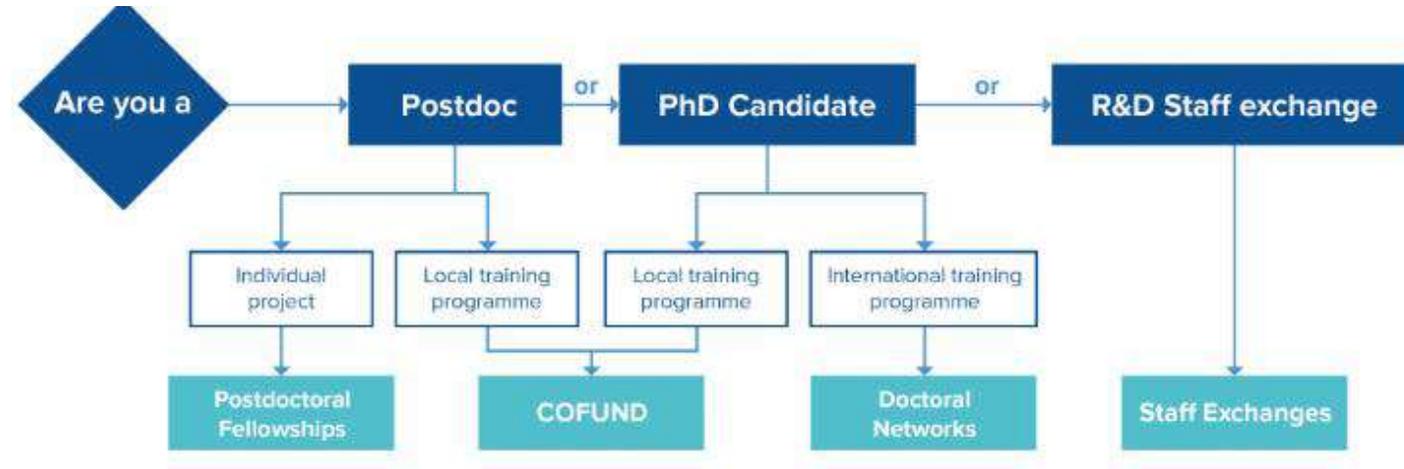
- Career development
- Bottom-up approach
- Mobility
- Enhanced business-academia collaboration and staff exchange
- Excellent employment and working conditions

**Who:** All levels of research experience from PhD researcher upwards – there are actions for different levels of experience.

**What:** All areas of research are supported: bottom-up approach

**Where:** Anywhere: any research performing organization, public or private worldwide - there are actions for European and international mobility.

# Marie Skłodowska-Curie Actions (MSCA)



Marie Skłodowska Curie Actions offer fellowships for post-doctoral researchers from African countries to spend up to 2 years in a European group – or for European researchers to spend up to 2 years in African Countries. Also offers opportunities for African institutions to participate in Doctoral Training Networks and Staff Exchange consortia.



## What is the European Research Council (ERC)?

The ERC is the premier European funding organisation for excellent frontier research. It funds creative researchers of any nationality and age, to run projects based across Europe.

**(Pillar I)**  
**Excellent Science**



European Research Council

# European Research Council (ERC)

- Supports the best 'Independent Investigators' in Europe
- Supports 'Frontier Research'

## ERC funding Schemes

### ERC Starting Grant

Grant up to 1.5€ million for 5 years  
For promising early-career researchers with 2 to 7 years experience after PhD

[View more >](#)

### ERC Consolidator Grant

Grant up to 2€ million for 5 years  
For promising early-career researchers with 7 to 12 years experience after PhD

[View more >](#)

### ERC Advanced Grant

Grant up to 2.5€ million for 5 years  
For established research leaders with a recognised track record of research achievements

[View more >](#)

### ERC Proof of Concept

Lump Sum Grant of 150,000€  
For ERC grant holders to explore the commercial or societal potential innovation of their ERC frontier research project

[View more >](#)

### ERC Synergy Grant

Grant up to 10€ million for 6 years  
To address ambitious research questions that can only be answered by the coordinated work of a small group of 2-4 principal investigators

[View more >](#)

### Additional opportunities

For researchers wishing to work or gain experience in an ERC grantee's team

[View more >](#)

→ Researchers from African countries are welcome to apply and if selected are eligible for funding to establish a research group in Europe.



## What is the Africa Initiative?

The work programme of Horizon Europe for 2021-2022 adopted on 16 June 2021 and included targeted actions with key non-EU partners, including the first ever ambitious and comprehensive 'Africa Initiative'.

### Targeted international cooperation actions

June 2021



*"The Africa Initiative under Horizon Europe is an immediate result of the first ever EU-AU Research & Innovation Ministerial meeting that took place in July 2020. It will further strengthen long-term cooperation in finding solutions to the human health and socio-economic impacts of the COVID-19 crisis".*

**Mariya Gabriel** Commissioner for Innovation, Research, Culture, Education and Youth



## Africa Initiative

### The Implementation of 2 Phases has been completed:

- **Africa Initiative I:** Horizon Europe WP: 2021-2022, budget of ~350 MEUR
- **Africa Initiative II:** Horizon Europe WP: 2023-2024, budget of ~300 MEUR



## Africa Initiatives I, II

**Both initiatives, through open calls for proposals, reflect the EU-AU joint priorities on Research and Innovation (R&I):**

1. Public Health 
2. Green Transition 
3. Innovation and Technology 
4. Capacities for Science 

→ **The calls for proposals require or encourage participation of African entities**



## Towards Africa Initiative III

- The EC is currently working to secure the continuation of the Africa Initiative for **Horizon Europe Work Programme 2025**.
- The launch of the Work Programme 2025, and thus the **Africa Initiative III**, is expected to happen within **2025**.



## Other EU-Africa collaboration schemes

### **Intra-Africa Academic Mobility Scheme (2022-2027):**

- The EU's programme to encourage international learning mobility across the African continent.
- Contributes to the economic, social, and human development of Africa by improving the skills and competences of individuals in different areas.
- Extends scholarship opportunities to African students and trainees pursuing Master and Doctoral degrees, as well as to university staff members.

### **ERASMUS+:**

- Erasmus+ is the EU's programme to support education, training, youth and sport in Europe.
- Offers mobility and cooperation opportunities in higher education, vocational education and training, adult and school education, youth and sport staff.
- Organisations from most countries in the world, including most African countries, can take part in the Programme. Eligibility varies from opportunity to opportunity.



Erasmus+



## Useful links

- [Horizon Europe website](#)
- [Horizon Europe Funding & Tenders' Portal](#)
- [National Contact Points \(NCPs\) Portal](#)
- [Marie Skłodowska-Curie Actions-MSCA](#)
- [European Research Council-ERC](#)
- [EU-AU Cooperation in Research and Innovation](#)
- [Africa Initiative I Factsheet](#)
- [Africa Initiative II Factsheet](#)
- [Intra-Africa Academic Mobility Scheme](#)
- [ERASMUS+](#)
- [EURAXESS Africa](#)
- [AU-EU Innovation Interface](#)



**Thank you!**