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ANNEX 20

to the Commission Implementing Decision on the financing of the multiannual action plan in favour of Sub-Saharan Africa for 2023-2025

Action Document for ‘Africa – EU Space partnership programme’

MULTIANNUAL PLAN

This document constitutes the multiannual work programme within the meaning of Article 110(2) of the Financial Regulation, within the meaning of Article 23 of the NDICI-Global Europe Regulation.

1 SYNOPSIS

1.1 Action Summary Table

1. Title CRIS/OPSYS business reference Basic Act	Africa- EU Space partnership programme OPSYS number: ACT-62053 Financed under the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe)/ Overseas Association Decision/European Instrument for International Nuclear Safety Cooperation Regulation
2. Team Europe Initiative	No
3. Zone benefiting from the action	The action shall be carried out in Sub-Saharan Africa
4. Programming document	Multi-annual Indicative Programme for Sub-Saharan Africa 2021-2027 (Regional MIP)
5. Link with relevant MIP(s) objectives / expected results	The Action contributes to the <u>Priority area 4</u> on Digital and Science, Technology and Innovation (STI) of the Regional MIP by boosting Africa’s STI capacity for risk-informed, evidence-based and inclusive development in the green transition sectors/areas. <u>Specific Objective 2</u> : Enhance the effective use of Science, Technology and Innovation (STI) for sustainable development in Africa. Result 2.1: A scientific knowledge-based and innovation-led society is enhanced in Africa. Result 2.2: Africa cross-sectoral development is improved by making effective use of STI and data driven services Result 2.3: Effective STI governance in Africa is promoted.
PRIORITY AREAS AND SECTOR INFORMATION	
6. Priority Area(s), sectors	Sub-Saharan Africa Regional MIP: Priority area 4 - Digital and Science, Technology and Innovation DAC Sectors: 220 - Communications

	430 - Other Multisector			
7. Sustainable Development Goals (SDGs)	Main SDG (1 only): SDG 9 (Industry, innovation and infrastructure) Other significant SDGs (up to 9) and where appropriate, targets: <ul style="list-style-type: none"> • SDG 2 (End Hunger) • SDG 5 (Gender Equality) • SDG 6 (Water and Sanitation) • SDG 11 (Sustainable Cities and Communities) • SDG 12 (Sustainable Production and Consumption) • SDG 13 (Climate Action) • SDG 14 (Life below Water) • SDG 15 (Life on Land) • SDG 17 (Partnerships for the Goals) 			
8 a) DAC code(s)	22020 - Telephone networks, telecommunication satellites, earth stations (40%) 43040 – Rural development (10%) 43060 – Disaster risk reduction (40%) 43071 – Food security policy and administrative management (10%)			
8 b) Main Delivery Channel	Other multilateral institution - 47000 European Commission – development share of budget – 42001 Other public entities in donor country - 11004			
9. Targets	<input type="checkbox"/> Migration <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Social inclusion and Human Development <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity <input type="checkbox"/> Education <input type="checkbox"/> Human Rights, Democracy and Governance			
10. Markers (from DAC form)	General policy objective @	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Aid to environment @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality and women's and girl's empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, maternal, new-born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Inclusion of persons with Disabilities @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nutrition @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Climate change mitigation @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Internal markers and Tags	Policy objectives	Not targeted	Significant objective	Principal objective
	Digitalisation @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	digital connectivity	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
	digital governance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	digital entrepreneurship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	digital skills/literacy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	digital services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Connectivity @	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	digital connectivity	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	
energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
health	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
education and research	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Migration @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reduction of Inequalities @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Covid-19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
BUDGET INFORMATION				
12. Amounts concerned	Budget line(s) (article, item): 14.020120: EUR 15 750 000 (West Africa) 14.020121: EUR 15 750 000 (East and Central Africa) 14.020122: EUR 13 500 000 (Southern Africa) Total amount of EU budget contribution EUR 45 000 000			
MANAGEMENT AND IMPLEMENTATION				
13. Type of financing	Direct management through: <ul style="list-style-type: none"> Grants Indirect management with the entity(ies) to be selected in accordance with the criteria set out in section 4.4.2			

1.2 Summary of the Action

Africa faces numerous societal and environmental challenges, which can be addressed through space¹ technologies, in particular those linked to the green transition and the digital transformation.

The Action will enhance the strategic EU-African partnership in the field of Space and related services and applications. It strives to facilitate sustainable growth in line with partners' needs and expectations as well as with the Agenda 2030 targets. It aligns with the African Space Policy and Strategy,² supporting the achievement of its stated goals including a well-coordinated and integrated African space programme, a positive regulatory framework, the development of space-derived products and services and the growth of an indigenous space capability in both public and private sectors. In addition, it supports the achievement of the international dimensions of the EU Space Strategy and Programme³, Green Deal⁴ and Digital agenda⁵, Horizon Europe⁶ as well as the climate action targets set in the NDICI-Global Europe. Moreover, it will contribute to the activities of global initiatives such as the Group on Earth Observations (GEO), the Committee on Earth Observation Satellites (CEOS), and others.

Based on a long-lasting cooperation on Earth Observation and Satellite Navigation between Africa and the EU, the Action will have three components:

Component 1 (Specific Objective 1) **EU-Africa Space & Partnership**: support to institutional partnership and decision-making processes

Component 2/ (Specific Objective 2) **Space & Green Transition – Focus on Early Warning**: develop space-based services and applications/tools to strengthen Early Warning Systems of hazardous weather and climate-related events.

Component 3 (Specific Objective 3) **Space & Private Sector**: increase capacity and skills of the private sector, boost the space industry and data economy

The Action will ultimately contribute to advancing Africa's capability for risk-informed, evidence-based and inclusive development in the green transition. The initiative will support African stakeholders to create a vast array of opportunities for their citizens and societies, providing them with locally tailored and fit-for-purpose solutions. The action will directly contribute to the African owned and African designed Multi-Hazard Early Warning and Early Action System (AMHEWAS) coordinated by the African Union Commission (AUC) with the participation of Regional Economic Communities (RECs) and their Regional Climate Centres as well as National Disaster Management Offices (NDMOs), National Meteorological and Hydrological Services (NMHSs), and other stakeholders. It will also support the UN-Secretary General Initiative 'Early Warnings for All', aiming to cover every person on Earth with early warning systems by 2027.

The Action contributes to the Priority area 4 on Digital and STI of the Multi-annual Indicative Programme for Sub-Saharan Africa (SSA) 2021-2027 (Regional MIP), leveraging both space-based technologies, data and products and in-situ data as drivers/inputs to achieve risk-informed, evidence-based and inclusive development, supporting the green transition sectors/areas, in particular with regard to Specific Objective 2 'Enhance the effective use of STI for sustainable development in Africa'.

¹ Throughout the document, 'Space' is used expansively, covering all space-related applications and technologies, including Earth Observation and Satellite Navigation. It includes observations from space as well as in situ/surface-based observations.

² https://au.int/sites/default/files/documents/37434-doc-au_space_strategy_isbn-electronic.pdf

³ https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-programme_en

⁴ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

⁵ <https://digital-strategy.ec.europa.eu/en>

⁶ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

2 RATIONALE

2.1 Context

Africa is confronted with multiple challenges including climate change, natural hazards such as extreme weather events, environmental degradation and more. The region is particularly affected by climate variability and change, as stated in the 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)⁷. These challenges negatively impact food production, natural resources management, disaster risk reduction (DRR), and relief efforts, and economic productivity, in a region that has insufficient early warning capabilities and lacks access to adequate climate information services⁸. Such challenges require action to **ensure a green transition in Africa, supported by a digital transformation** that would benefit more than two billion people expected to live in Africa by 2050⁹.

Space technologies, both related to EO and satellite navigation, are continuously improving and are increasingly able to make a vital contribution in addressing many of African challenges. Space-based data and services can be leveraged to monitor and mitigate the effects of climate change, support increased food production, better manage natural resources (in particular water), support the development and uptake of digitalisation and technology for economic growth, help monitor and protect biodiversity, etc. Space-based solutions can support decision-making in the continent and help progress towards their SDGs. EO and Global Navigation Satellite System (GNSS)-related services have indeed the potential to contribute to all 17 SDGs, most notably fostering industry, innovation, and infrastructure (SDG 9); but also taking action to combat climate change and its impacts (SDG 13), achieving food security (SDG 2), ensuring sustainable management of water (SDG 6), and use of marine resources (SDG 14), terrestrial ecosystems (SDG 15), as well as production patterns (SDG 12), etc.

The Action builds on a comprehensive analysis of the Space landscape in Africa, which identified specific challenges, highlighting notably the lack of awareness of space applications benefits; the low level of maturity of technical skills in the access and use of space data; the insufficient technical, entrepreneurial and financial support of the space private sector, among others.

The Action consists of implementing an **Africa-EU Space partnership programme**, aiming to facilitate sustainable growth and accelerate the green transition and technological transformation in SSA, with a focus on institutional and innovation space partnership, the support of the space-based industry and ecosystems, and the development of capacities to access meteorological and climate satellite data. It will deliver – through know-how for designing and developing innovative satellite-based tools, products and services – adequate information to decision-makers in various socio-economic sectors, in particular for early warning systems, DRR, climate change adaptation, and other space-based green transition services for risk-informed, evidence-based and inclusive development in the green transition.

The programme is in line with ongoing African and European space policies and strategies. The Action responds to the joint priorities of the African Union (AU)-EU High Level Policy Dialogue on STI, which are Public Health, Green Transition, Innovation and Technology, and Capacities for Science. At the African level, space activities are driven by the African Space Policy and Strategy, established by the African Union Commission (AUC) and supported by the EC. Guidelines included in the African Space Policy and Strategy are in line with the AU Agenda 2063's priorities for « The Africa We Want », and drive the future of the African Space Industry through the creation of the African Space Agency (AfSA). Overall, the Agenda recognises Africa's basic needs and the importance of developing space applications to address identified issues. African countries can also rely on their Regional Economic Communities (RECs) which increasingly use space technologies to achieve economic cooperation and integration. Considering the strong links to Green transition and Digitalisation, the development of space-based products and services supported by this action will also contribute to the goals of the African Strategy for Disaster Risk Reduction (DRR) and Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa, the AU Strategy on Climate Change and Resilient Development

⁷ IPCC. 2021. 6th Assessment Report.

⁸ UNDRR. 2022. Early warnings for all of Africa.

⁹ IMF. 2021. The African Century - Finance & Development.

Strategy and Action Plan (2022-2032), the Abidjan Declaration on Next Generation of Satellites Products for Weather and Climate Services in Africa, the Integrated African Strategy for Meteorology (Weather and Climate Services) 2021-2030 of the African Ministerial Conference on Meteorology (AMCOMET) and the Digital Transformation Strategy for Africa.

The Action complies with the European Green Deal setting a climate neutral target for 2050, the Paris Agreement, the Global Biodiversity Framework, and the European Space Agency (ESA) 2025 Agenda. The Action also contributes to the Global Gateway Africa-Europe Investment Package, which aims to support Africa for a strong, inclusive, green and digital recovery and, transformation by accelerating the green transition; digital transition; sustainable growth and decent job creation and by strengthening health systems and improving education and training.

The Action has clear political prominence, as highlighted at the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP27) held in Sharm-el-Sheikh (Egypt) in November 2022, where a major breakthrough was the decision to establish new funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change in responding to loss and damage. During COP27, the Executive-Vice President (EVP) Timmermans announced EUR 60 million for loss and damage from the overall EU contribution to the Team Europe Initiative on Climate Change Adaptation and Resilience in Africa. The present action will contribute with EUR 20 million (Specific Objective 2) towards this pledge.

Moreover, it capitalises on a long history of EU-Africa cooperation, which have introduced a number of partnership agreements over the years. The AUC and the EC have developed common political strategies, policy documents and roadmaps as a basis for cooperation, involving public (e.g. ESA, the European Organisation for the Exploitation of Meteorological Satellites - EUMETSAT) and private actors as partners. The cooperation between Africa and the EU has been strengthened through the joint communication ‘Towards a comprehensive Strategy with Africa’ in 2020, reaffirming the importance of green transition as well as space data and technology.

The Africa-EU Space partnership programme builds on a long-standing cooperation on EO and satellite navigation through programmes supporting development of space applications for natural resources monitoring, the impact of human activities, DRR and climate change mitigation, such as the Global Monitoring for Environment and Security and Africa (GMES&Africa) programme and its predecessors, the 11th European Development Fund (EDF) Intra-ACP Climate Services and Related Applications (ClimSA) programme, and on the projects supporting satellite navigation such as Satellite Navigation phase 3 and its predecessors.

The action will synergise with regional Team Europe Initiatives (TEIs) in Africa such as the TEI Green and Digital, TEI on Data Governance and its Data Centre component and will contribute to the TEI on Climate Change Adaptation and Resilience in Africa, and relevant regional actions like the Scientific and Technological Support to Regional Centres of Excellence.

Importantly, the action will fit within and into the existing EU space programme and its components, notably Copernicus and Galileo/ European Geostationary Navigation Overlay Service EGNOS, as well as Infrastructure for Resilience, Interconnectivity and Security by Satellite (IRIS²), increasing synergies, avoiding duplication and seeking for complementarities when appropriate. The action will also build on the EO Data Exchange Cooperation Arrangement signed between AUC and European Commission in June 2018. Finally, activities in relation to user uptake, private sector and market development will be done in close synergies with EU initiatives like Cassini, whenever possible.

2.2 Problem Analysis

Africa faces several challenges which negatively impact its climate and disaster resilience, the sustainability of its agro-ecological and agri-food systems, the biodiversity of its environment, as well as its water and oceans. It has warmed more than the global average since pre-industrial times¹⁰, leading to more frequent and severe natural hazards too often resulting in disasters, jeopardising food security and natural habitats, as well as damaging socioeconomic development.

The region is particularly impacted due to low coping/adaptive capacity and insufficient capability for African countries to mitigate the impacts of climate change and anticipate them. It faces technological and digital shortages undermining its capacity to process and store data, as well as to develop space applications and services tackling environmental and sustainable issues. Such shortages result notably from insufficient i) institutional collaborations and data-driven decision-making; ii) space-based solutions; and iii) skills and access to capital to boost innovation. Together, decision makers, academia and the industry need to strengthen governance, promote green measures and risk-informed decisions, support climate risk data collection and analysis, reinforce early warning systems to improve relevant decision-making processes and protect vulnerable populations.

The space sector is continuously expanding and fulfilling Africa's potential in a fast-growing segment that can make a vital contribution in addressing the continent's challenges. In this regard, space can be used as a mechanism to increase resilience for climate change, food production, management of water and energy resources, digitalisation, technology, etc. It can help the continent grow socio-economically through the use and uptake of satellite-based EO, positioning and navigation services.

However, the increased usage of space by policymakers to tackle the green transition is hampered by the fact that the benefits of space are not properly understood or communicated to them. As such, political support in Africa is relatively low to assist the development and use of space-related services and applications to achieve sustainable development goals. This lack of political support translates to decreased budgets and fundings, which exacerbates the problem further.

The two European flagship components of the EU space programme, Copernicus and Galileo/EGNOS, can serve as catalysers in the management of long-term and significant challenges faced by the African society. The EU Agency for the Space Programme (EUSPA) linking space technology and user needs as well as being responsible for the management of Galileo/EGNOS satellite navigation programmes, can also support Africa in addressing specific space challenges. While benefiting from geospatial data of EO and Global Navigation Satellite System (GNSS), Africa has been developing solutions that help manage natural resources and better assess the impact of human activities on natural habitats.

Space Technologies and data/services from Earth Observation (EO) are a sine qua-non for tackling today's major societal and environmental challenges. Evidence based policies, decision-making and ensuing measures and investments rely on EO data/services in many areas. Emergency services, land use and agriculture, water and oceans monitoring, climate change adaptation and disaster risk reduction/management, biodiversity monitoring, urban planning and smart transport systems are only some examples of areas that heavily rely on space technologies and EO data and services.

The potential of satellite navigation in Africa remains hugely untapped. Satellite-Based Augmentation System (SBAS) can address many of the challenges the African aviation sector is facing today, by improving flight safety and efficiency, also leading to the reduction of fuel consumption and CO2 emissions. More broadly, there is a need to continue to promote the use of satellite navigation, especially based on SBAS but also other EU GNSS related services, in the various economic sectors beyond aviation, starting with transport (maritime, rail, road), sustainable agriculture and land management.

This action aims to maximise the potential of both earth observation and satellite navigation techniques to tackle some of the green transition challenges, tapping on the huge potential of space data as major source and resource of the data driven economy, providing the basic ingredients for the development of locally adapted applications and

¹⁰ WMO. 2021. State of climate in Africa highlights water stress and hazards.

products.

Slowed down by border and national divisions, the role of coordination and cooperation between governments and regional organisations has become pivotal to create a unified response, but still lacks partnership and dialogue, especially on innovation. Policy reforms and institutional enhancements are needed to support the green transition and digital transformation of the region.

With regards to digitalisation in the space sector, African public and private stakeholders face persistent problems across the value chain, in particular due to a broad coverage and connectivity issues. They would need to access and use local in-situ data to target specific geographical areas and to find alternatives to data gaps in order to meet local stakeholders' needs, combining different technologies and building on existing EU investment like Data Access Service (DAS). These connectivity and data issues are accompanied by a lack of equipment to properly use advanced technologies (e.g. artificial intelligence, machine learning, information from satellite data, imagery, optical data, labs, etc.). Furthermore, the accumulation of data requires efficient storage and standardisation solutions which could enable data sharing and collaboration between actors.

The intensification of environmental and sustainable challenges, along with technological progress presupposes to acquire new skills and a trained workforce composed of students, academics and professionals. Actors ought to gain skills that would allow them to understand and adequately identify the specific challenges that arise in their territories and regions, read the data, use the tools and develop applications which would help them monitor the targeted areas. This shortage is mainly due to non-existent space curricula in the educational system. In addition, African countries have been facing difficulties to keep a skilled workforce on their territories and some companies know a high turnover, which tends to have negative repercussions on the monitoring and sustainability of projects. The region could arouse the interest of younger generations to work in space-related fields and provide trainings to a wide audience, from both public and private sectors. Indeed, young digital natives have the potential to create a groundswell of digital innovations to solve many development challenges.

Moreover, the private sector is not sufficiently developed and supported in the region, slowing down innovation and technological progress. The three most prominent obstacles include a low level of technical and entrepreneurial capacity-building, a lack of funding dedicated specifically to space start-ups, and insufficient capacity of end users to sustain business operations. In addition, private players need a sustainable business ecosystem to transform pilot projects and applications into commercially viable products.

Identification of main stakeholders and corresponding institutional and/or organisational issues (mandates, potential roles, and capacities) to be covered by the action:

The Action will variably involve institutions and organisations from the following stakeholder list:

- (i) The relevant bodies of the African Union (e.g. AU Commission (AUC), African Union Development Agency AUDA-NEPAD, the African Risk capacity (ARC)), Regional Economic Communities (RECs) and Regional Climate Centres (RCCs), national ministries and specialised centres (eg. National Meteorological and Hydrological Services - NMHSs) and some of them with regional functions (e.g. Regional Specialised Meteorological Centres (RSMCs), as direct beneficiaries when relevant and according to their sectoral experience and capacity (see also below),
- (ii) Among those, other direct beneficiaries of the Action such as the Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar (ASECNA), the African Centre for Meteorological Applications for Development (ACMAD), the IGAD Climate Predictions and Applications Centre (ICPAC), the « Centre Climatique Régional pour l'Afrique de l'Ouest et le Sahel » (AGRHYMET), the « Centre d'Application et de Prévision Climatologique de l'Afrique centrale » (CAPC-AC) and the Southern African Development Community – Climate Services Centre (SADC-CSC),
- (iii) The implementing partners and / or partners directly involved in the implementation of the action such as the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for Medium-Range Weather Forecasts (ECMWF),
- (iv) The relevant bodies of the EU (e.g. Commission services, European Delegations in Africa (EUDs)),
- (v) The relevant space agencies from both Africa and the EU at the continental, regional and national levels,
- (vi) The relevant research centres, research and development (R&D) institutions, networks, universities from

both Africa and the EU,

- (vii) The relevant international organisations, space agencies and institutions,
- (viii) Private enterprises, SMEs and entrepreneurs,
- (ix) Civil society, including women representatives.

3 DESCRIPTION OF THE ACTION

3.1 Objectives and Expected Outputs

The Overall Objective of this action is to contribute to sustainable development, a green transition and digitalisation in Africa through an enhanced strategic EU-Africa Space partnership.

The Specific Objectives of this action are to:

1. Enhance the African institutional and innovation space cooperation framework including gender-sensitive outreach on the benefits of Space
2. 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 events
3. Strengthen African space private sector ecosystem and industrial cooperation.

The Outputs to be delivered by this action contributing to the corresponding Specific Objectives are:

Contributing to Specific Objective (or Outcome) 1:

- 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

Contributing to Specific Objective (or Outcome) 2:

- 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 (AMSAT), including possible support for forecasting capabilities at different ranges
- 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

Contributing to Specific Objective (or Outcome) 3:

- 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

3.2 Indicative Activities

Activities relating to Output 1.1

- Organise one meeting between the AU and EU per year alternatively in Africa and in the European Union;
- Technical assistance to the AUC and the EC to carry out preparatory work.

Activities relating to Output 1.2

-
- Setting Joint Task Force Groups (relevant European and African stakeholders) to provide support in areas such as: developing programmatic activities including identifying possible joint space related actions and enhancing the overall governance framework of the African space ecosystem.
- Provide Technical Assistance to the AUC inception team for the AfSA to carry out studies, and dedicated reports/designs driven by the Task Forces priorities (e.g. space law, international space standards, space cooperation) and to support the scoping or strengthening of AfSA technical facilities (e.g. concurrent design facility, Test Facilities (e.g. radar, optical), Exerts Lab, 5G Lab);
- Carry out training activities to potential future AfSA staff (candidates to be identified by AUC in coordination with national African space agency) and later to the actual AfSA staff. Dedicated training courses will be built on ESA internal courses and/or new courses will be developed to address specific needs.

Activities relating to Output 1.3

- Co-develop an EO New Space mission concept responding to African needs, including concept of operation and business plan, as a contribution mission to the Copernicus component of the EU space programme;
- Co-design an African-European satellite possibly exploiting the ESA Concurrent Design Facility – CDF at ESA-ESTEC;
- Setting up a joint industrial consortium involving African & European Union space sector and co-lead by AfSA/AUC & ESA;
- Implementation of payload (instrument), satellite platform, Flight Operational Segment, Ground Segment;
- Launch of the mission on a rideshare launch vehicle dedicated to smallsats;
- In-orbit demonstration of the EO smallsat contributing to Copernicus – including the space and ground segment with transfer to African ownership.

Activities relating to Output 1.4

- Support further extension of use of the EGNOS-based SBAS service in Africa;
- Provide technical assistance to facilitate the deployment and operations of ANGA, the EGNOS-based SBAS system currently under development by ASECNA;
- Support market developments: development of business cases, contribution to demonstrations of the SBAS service in aviation and other priority sectors;
- Promote development and adoption of Galileo-enabled downstream services including its most recent service, the High Accuracy Service.

Activities relating to Output 1.5

- Contribute to innovative space communication tools e.g. an African Space Newsroom for regular online video reporting;
- Develop joint African-European use cases and impact stories on space activities in Africa with special focus on women and youth
- Organise information / training sessions targeting policymakers and users focusing on the benefits of space-derived data and solutions, through a gender-sensitive approach;
- Increase space cooperation with the academic sector (e.g. developing support plans).

Activities relating to Output 2.1:

- Update existing facilities and promote cloud computing to enhance access and use of: New generation

of meteorological satellite data, services and products (i.e. METEOSAT Third Generation - MTG and EUMETSAT Polar System Second Generation – EPS-SG); New generation of Global and Regional Numerical Weather Prediction models, data & products and Copernicus data, products & services of importance to Multi-Hazards Early Warning

- Support, when possible, gathering and registering post-disaster damage and meteorological data for improvement of Global and Regional Numerical Weather and Disaster Prediction models.

Activities relating to Output 2.2:

- Establish and operate a first AMSAF for nowcasting and possibly other ranges as relevant for Early Warning leveraging on existing capacities at regional and national level;
- Based on the experience on the first AMSAF-Nowcasting, assess the potential of developing further AMSAFs in key sectors;
- Develop, through R&I networks, African domestic and fit for purpose innovative space-based meteorological and early warning products and an assessment for the development of further AMSAFs.

Activities relating to Output 2.3:

- Co-design Impact Based Forecast (IBF) and warning tools for hazardous Weather and Climate events in each African region, as part of the Africa Multi-Hazard Early Warning and Early Action System (AMHEWAS) in line with relevant user community needs;
- Implement and operate gender-sensitive IBF for selected countries and communities.

Activities relating to Output 2.4:

- Facilitate and exchange knowledge between regions through African and European partners and stakeholders;
- Ensure coordination with the AMHEWAS programme and with international relevant bodies related to EO data needs and decision-making processes for Early Warning,
- Increase awareness and co-create applications in policy sectors related to Early Warning.

Activities relating to Output 2.5:

- Strengthen existing training framework on satellite, numerical weather prediction, climate and environmental monitoring data products and services, incl. Impact Based Forecast services, with curriculum related to space-based Early Warning;
- Co-design training plans, co-organise trainings and capacity building events for practitioners (through a gender balanced approach) in the entire space-based early warning value chain (from access to space data to delivery of impact-based forecasts);
- Engage with regional training centers, universities and other education providers for gender-sensitive education on space-based Early Warning.

Activities relating to Output 3.1:

- Training for private sector on EU-space enabled applications (e.g. EO), downstream & upstream, empowering young entrepreneurs and researchers with a gender sensitive approach;
- Competitions / Challenges (Hackathons, Awards) contributing to relevant Start-up Development program.

Activities relating to Output 3.2:

- Setup and operation of Business Innovation / Acceleration Labs in selected African countries, hosted by African partners,
- Calls providing grants & mentoring for Start-ups (technical, industrial and business) - calls within the national Business Innovation Labs and dedicated calls up to continental scale,
- European Union-African innovators, industry and private investors matchmaking within the Business Innovation Labs and events open to continental scale.

3.3 Mainstreaming

Environmental Protection & Climate Change

This Action will contribute to SSA's green transition, thereby promoting sustainable development. In that sense, the Action fully considers environmental protection and climate change challenges in its activities, in particular it contributes to enhancing service delivery and applications, leveraging space technologies, data and information for climate change adaptation, disaster risk reduction and early warning systems.

Outcomes of the SEA screening

The Strategic Environmental Assessment (SEA) screening concluded that no further action was required.

Outcomes of the EIA (Environmental Impact Assessment) screening

The EIA (Environment Impact Assessment) screening classified the action as Category C (no need for further assessment).

Outcome of the CRA (Climate Risk Assessment) screening

The Climate Risk Assessment (CRA) screening concluded that this action is at no or low risk (no need for further assessment).

Gender equality and empowerment of women and girls

As per the OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that gender targets will be mainstreamed in the implementation of this Action. The Action will contribute specifically to the objective of promoting girls' and women's participation and leadership in STI in order to ensure gender-responsive strategies to climate change mitigation and adaptation, disaster risk reduction (including early warning systems).

Human Rights

The Africa – EU Space partnership programme will provide concrete tools to strengthen the rights of the vulnerable people whose livelihoods are most affected by climate variability. Improving the uptake of space-based evidence in decision-making, promoting partnerships with academia and the private sector are guiding principles that will allow a better handling of people's security and rights, and a better protection of vulnerable populations.

Disability

As per OECD Disability DAC codes identified in section 1.1, this Action is labelled as D0. While disability has not been identified as a significant objective, the Action will promote an inclusive approach towards people with disabilities in its communication and participatory activities.

Reduction of inequalities

The Action has not been identified as directly targeting the reduction of inequalities. However, it will contribute to reduce social and environmental inequalities by developing tools to address and reduce the vulnerability of fragile populations to climate variability.

Democracy

The Action support the development of evidence-based knowledge for decision making in SSA. It further addresses the inclusion of women, and youth in the use of space technologies, advances digitalisation, and it promotes the participation and skills-development of society in tackling climate-related challenges.

Conflict sensitivity, peace and resilience

The Action strengthens the capacity of the society in SSA to strengthen its climate and disaster resilience, the sustainability of its agro-ecological and agri-food systems, the biodiversity of its environment, as well as to increase its socioeconomic development. As such it reduces the underlying drivers of conflict and migration/displacement.

Disaster Risk Reduction

The Action will empower decision makers, academia and the industry to jointly manage and reduce climate and

disaster risks through data collection and analysis, risk assessments and reinforcing monitoring and forecasting capabilities as a key component of early warning systems. This is expected to improve relevant decision-making processes and decisions that will lead to reduced disaster risks and impacts.

Other considerations if relevant

NA

3.4 Risks and Lessons Learnt

Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
Planning, processes and systems)	Limited institutional capacity related to delays in operationalisation of the African Space Agency	Medium	Medium	Engage with relevant entity at continental level – AUC inception team. Strengthen engagement with regional and national institutions (National space agencies)
Planning, processes and systems	Lack of coordination between the three project components	Medium	Medium	Setting up of a governance structure that will bring all components stakeholders together, with the Overall Coordination and Steering Group (OCSG) (see 4.7 organisational set up and responsibilities)
Policy and legal	Absence of political support/will for using evidence in the policy decision-making process	Medium	Medium	Continuous advocacy and policy dialogue in order to highlight the benefits of space-based technologies for socio-economic development.
Capacity and skills	Lack of capacities, in particular human and technical capacities, to implement and operate space-based tools	Low	Medium	Training/capacity building and accompanying measures will be provided to develop technical skills (data analysis/management) through combined support to the public, academic and to the private sectors (grants, mentorship schemes, etc..)
Technical/infrastructure	Weak infrastructure and equipment for good access, storage, and distribution of data.	Medium	Medium	Synergies will be developed with digital initiatives such as Africa Connect to address issues related to connectivity and IT infrastructure.
Industry	Insufficient funding supporting the private sector, lack of technical and entrepreneurial	Medium	High	Support the growth of the private sector through technical and business support to local digital and innovation incubation centres, capacity-building efforts, improvement of skills and increase of

	support and limited linkages with institutional programmes			interlinkages and partnerships with institutional initiatives and programmes
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Lessons Learnt:

The Action will build on the lessons learnt from previous initiatives and joint EU-African programmes making use of space-related data, services and applications at continental, multi-country, regional and national levels with the objective to support the green transition in Sub-Saharan Africa.

Several programmes have proven the relevance of space-related data, information and capacity building for environmental monitoring, innovation in transition strategies, policy information and support to decision making. The international and European communities (including the EU and UN entities such as WMO) have been supporting space and EO-related services in SSA through programmes and dedicated projects supporting all the segments of the value chain, whether allowing access to systems (e.g. WMO Integrated Global Observing System – WIGOS, WMO Global Data-Processing and Forecasting System – GDPFS, European Global Navigation Space System, EGNOS, and the Global Earth Observation System of Systems – GEOSS); or providing funding mechanisms (e.g. the Climate Risk and Early Warning Systems initiative – CREWS, Systemic Observations Financing Facility – SOFF, the Global Facility for Disaster Reduction and Recovery – GFDRR, the Global Environment Facility – GEF, Climate for Development in Africa Programme Special Fund – ClimDev Special Fund, GMES&Africa, ClimSA, the TEI on Climate Change Adaptation and Resilience in Africa, and Horizon Europe). Each supportive approach is completed with infrastructure investments, capacity building and knowledge sharing activities (e.g. Digital for Development Hub, EO Africa Research and Development Facility, or the African GEO). Lessons learned from these programmes and initiatives recommend strengthening activities to tackle pressing climate early warning challenges, notably by developing more robust data cubes, service delivery systems and related applications to enhance climate information services (CIS) and disaster risk reduction (DRR). The Action will therefore develop several activities to enhance stakeholders' capacity to produce and deliver space-based services and applications, data and information, for early warning systems related to hazardous weather or climate events.

Moreover, the experience developed within GMES & Africa and ClimSA has shown the importance of ensuring EO data access and strengthening private sectors' capacities to generate EO-based information and develop applications. The programme developed several outreach activities, on which it is possible to capitalise, to better engage with policy makers, entrepreneurs, scientists and civil society at all levels, disseminating the benefits of EO and geospatial data and information to support policy-making decisions. GMES & Africa also shows the extent to which promoting cross-fertilisation among sectors / partners and enhancing complementarities between initiatives requires a strong network coordination and knowledge management system. The Action will therefore dedicate sufficient resources to this aspect through the implementation of a cross-cutting dialogue with African and European Union stakeholders.

Additionally, conclusions of assessment reports provide recommendations for seizing market opportunities. A cost-benefit assessment on the SBAS implementation in Africa has shown that Satellite Navigation technology is highly suitable to other sectors outside of aviation, transposing and extending lessons learned from this sector to support sustainable development in agricultural and maritime markets. In this regard, this Action will support the operationalisation of the SBAS service in Africa, notably through the extension of services for other priority areas. Moreover, an assessment on private sector companies' inventory in Earth Observation and Geospatial fields in Africa have demonstrated the lack of awareness and barriers to entry within the African private companies. Lessons learnt imply that the AUC should inform the African private sector about major political development and initiatives on the continent and the EC should strengthen its dissemination efforts on Copernicus services and Sentinel data to the African EO private sector. This Action responds to this concern by implementing actions which will enhance industrial partnerships, strengthen private actors' capacity and skills and provide business support schemes, with a focus on women empowerment.

The existing initiatives of EU-AU and the Pan-African Network could also represent an effective instrument to share good practices and capacity building between the two continents on evidence-based policies definition.

3.5 The Intervention Logic

The underlying intervention logic for this action is to build a comprehensive and integrated programme that will fully implement the strategic directions identified in the renewed EU – Africa space partnership.

Building on the ongoing initiatives, this action aims to bring Africa - EU space cooperation to a more strategic level, in a consolidated and integrated manner. Space programmes have been so far focusing mainly on the use of space-based technologies to develop services responding to users' needs in various sectors (climate change/disaster and risk management, transport, etc..). Continuity and scaling up of this approach will be ensured (in SO 2), whilst also being complemented by a stronger partnership at institutional and policy level (SO 1), and at the level of the private sector (SO 3). The programme will be framed in the relaunched EU-AU space dialogue and will complement each other to build a comprehensive approach to space capacity building.

At the institutional level (Specific Objective 1), space-related projects and activities will be developed and strengthened through a continuous policy and innovation space coordination framework between European and African stakeholders at multiple levels and with cross-cutting sectors, focusing on reinforcing African Space institutional capacity, governance and mandates, as well as transparent communication on the benefits of space/EO, using a gender-sensitive

At the service and application level (Specific objective 2), the support provided to SSA stakeholders will enable them to leverage space technologies and EO data and information to solve the region's most pressing climate events and hazardous weather related to the green transition. New solutions should be developed or expanded to help strengthen climate and disaster resilience, therefore SSA stakeholders' ability to develop and implement existing and new applications and services improving early warning systems will be reinforced. The ability to produce and deliver space-based solutions for early warning systems will be enhanced by supporting the establishment of facilities and initiatives, notably by improving the access to meteorological satellite data, operating the African Meteorological Satellite Application Facility (AMSAF), and delivering impact-based forecast services and tools. Additionally, it is necessary to develop an institutional framework for hazardous weather and strengthen human capacities to facilitate knowledge transfers and coordination, leading to the provision of in-kind services and technical expertise.

At the industrial level (Specific objective 3), the private sector ecosystem of the SSA region will be strengthened. The Action will boost industrial capacities and cooperation among SSA's actors, supporting start-ups, promoting entrepreneurship and digital innovation, and linking African and European Space/EO stakeholders, in close synergies with EU initiatives like Cassini. The rise of the private sector in Africa generates socioeconomic benefits including the accelerated use and development of technologies, generating innovative local solutions to solve local problems, creating employment and entrepreneurship opportunities, etc. Private stakeholders should play a crucial role in bridging the gap between services providers and users, developing solutions responding to specific needs expressed on the market. In this regard, the Action will support private actors through funds and capacity-building activities, empowering young entrepreneurs and researchers through a gender-sensitive approach.

By addressing the three dimensions – governance and institutions (SO 1), space-based services and tools for green transition (SO 2), and space private sector ecosystem (SO 3), cooperation on EO and satellite navigation will support the AUC and partner countries to design their policies as well as support their decision-making, give a boost to space industry, data economy, contribute to advance Africa's capability for risk-informed, evidence-based and inclusive development in the green transition.

3.6 Logical Framework Matrix

This indicative logframe constitutes the basis for the monitoring, reporting and evaluation of the intervention. On the basis of this logframe matrix, a more detailed logframe (or several) may be developed at contracting stage. In case baselines and targets are not available for the action, they should be informed for each indicator at signature of the contract(s) linked to this AD, or in the first progress report at the latest. New columns may be added to set intermediary targets (milestones) for the Output and Outcome indicators whenever it is relevant.

- At inception, the first progress report should include the complete logframe (e.g. including baselines/targets).
- Progress reports should provide an updated logframe with current values for each indicator.
- The final report should enclose the logframe with baseline and final values for each indicator.

The indicative logical framework matrix may evolve during the lifetime of the action depending on the different implementation modalities of this action. The activities, the expected Outputs and related indicators, targets and baselines included in the logframe matrix may be updated during the implementation of the action, no amendment being required to the Financing Decision.

PROJECT MODALITY (3 levels of results / indicators / Source of Data / Assumptions - no activities)

Results	Results chain (@): Main expected results (maximum 10)	Indicators (@): (at least one indicator per expected result)	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
Impact	To contribute to sustainable development, a green transition and digitalisation in Africa through an enhanced strategic EU-Africa Space partnership.	1. Progress towards relevant SDG targets 2. Progress towards the aspirations of the Agenda 2063	tbd	tbd	https://dashboards.sdgindex.org/profiles https://www.nepad.org/agenda-dashboard	<i>Not applicable</i>
Outcome 1	1. Enhanced African institutional and innovation space cooperation framework including gender-sensitive outreach on the benefits of Space	1.1 Progress towards the implementation of the African Outer Space Flagship	tbd	tbd	https://www.nepad.org/agenda-dashboard https://www.nepad.org/agenda-2063/flagship-project/african-outer-space-programme	African governments continue to pursue the objectives of the African Space Policy and Strategy
Outcome 2	2. Enhanced capacity to produce and deliver space-based services and applications, data and information, for early warning systems related to hazardous weather or climate events	2. # of early warning products (services, applications, etc..) delivered	tbd	tbd	Progress reports, programme M&E System	Institutions willing to share data & information
Outcome 3	3. Strengthened African space private sector ecosystem and industrial cooperation	3.1 Annual increase in African Space market	tbd	tbd	https://africanews.space/reports/ AUC business reports	African and European private sector companies are willing to engage

Output 1 relating to Outcome 1	1.1 Reinforced / increased contributions to EU-AU space dialogue	1.1.1 # of space dialogue meeting per year	tbd	tbd	Progress reports, programme M&E System Policy briefs and documentation on AUC and EC websites	Relevant stakeholders in AU and EU are willing to contribute to the dialogue
Output 2 relating to Outcome 1	1.2 Increased AUC capacities to build-up and operationalise the recently created African Space Agency (AfSA)	1.2.1 # of dedicated technical assistance to AUC / AfSA 1.2.2 # of staff members trained in specific priority areas	tbd	tbd	Progress reports, programme M&E System Annual progress reports by Task Force Groups	African Member states are supporting the build-up of AfSA including adequate personnel
Output 3 relating to Outcome 1	1.3 Enhanced Africa – Europe New Space industrial partnership	1.3.1 Co-design of African-European satellite or other space systems issued 1.3.2 Joint industrial consortium involving African & European space sector to build the satellite established	tbd	tbd	Progress reports, programme M&E system	Companies on both continents are willing to cooperate
Output 4 relating to Outcome 1	1.4 Facilitated development and use of SBAS and GNSS services in Africa	1.4.1 # of demonstrations, events dedicated to services ‘development 1.4.2 # of new business cases for application	tbd	tbd	Events Reports ASECNA/JPO Annual Report	The SatNav Africa Joint Programme Office is operationalised
Output 5 relating to Outcome 1	1.5 Enhanced gender-sensitive outreach on the benefits of space including in particular satellite navigation and earth observation	1.5.1 # of use cases and impact stories published 1.5.2 # of information & training sessions for users per year 1.5.3 Dedicated curricula for space applications established	tbd	tbd	Progress reports, programme M&E System	Institutions are willing to share information and release suitable candidates for training measures
Output 1 relating to Outcome 2	2.1 Improved access to meteorological satellite and global data & products for Early Warning	2.1.1 # of upgraded facilities	tbd	tbd	Progress reports, programme M&E System	Institutions support the enhancement of their facilities in the form of funding and personnel
Output 2 relating to Outcome 2	2.2 Established and operated African Meteorological Satellite Application Facility (AMSAF)	2.2.1 # of innovative space-based products per year	tbd	tbd	Progress reports, programme M&E System	African Member States continue to support the formation of AMSAF

Output 3 relating to Outcome 2	2.3 Designed and delivered Impact Based Forecast services & tools	2.3.1 # of IBF services designed 2.3.2 # of IBF services operational	tbd	tbd	Progress reports, programme M&E System	Upgraded facilities are in place and operational
Output 4 relating to Outcome 2	2.4 Enhanced coordination institutional framework for hazardous weather & climate Early Warning and shared knowledge across regions	2.4.1 # of tools for knowledge exchange developed 2.4.2 # of users of the knowledge exchange tools developed 2.4.3 # of coordination meetings with related initiatives per year	tbd	tbd	Progress reports, programme M&E System	Regional institutions are willing to cooperate
Output 5 relating to Outcome 2	2.5 Strengthened human capacities across the space-based Early Warning value chain	2.5.1 # of practitioners trained in space-based early warning disaggregated by region and gender	tbd	tbd	Progress reports, programme M&E System	Suitable candidates are released by their institutions
Output 1 relating to Outcome 3	3.1 Strengthened capacity and skills for effective involvement in the space economy through a gender-sensitive approach	3.1.1 # of young entrepreneurs and researchers, disaggregated by gender, trained in downstream applications 3.1.2 # of young entrepreneurs and researchers, disaggregated by gender, trained in upstream applications 3.1.3 # of space application competition per year	tbd	tbd	Progress reports, programme M&E System	African Member States ascertain a conducive political environment for SMEs and Start-ups
Output 2 relating to Outcome 3	3.2 Established and operational EU-AU joint space business support schemes with a focus on women empowerment	3.2.1 # number of Business Innovation Labs operational 3.2.2 # of African-European Union B2B per year alternating between Africa and the European Union	tbd	tbd	Progress reports, programme M&E System	African and European companies continue to engage in common undertakings

4 IMPLEMENTATION ARRANGEMENTS

4.1 Financing Agreement

In order to implement this action, it is not envisaged to conclude a financing agreement with the territory.

4.2 Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 72 months from the date of adoption by the Commission of this Financing Decision.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Financing Decision and the relevant contracts and agreements.

4.3 Implementation of the Budget Support Component

NA

4.4 Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures.

4.4.1 Direct Management (Grants)

(a) Purpose of the grants

The grant(s) will carry out the activities related to Output 1.4 'Facilitated development and use of EGNOS-based SBAS and Galileo services in Africa'.

(b) Justification of a direct grant

Under the responsibility of the Commission's authorising officer responsible, the grant may be awarded without a call for proposals to the Agency for the Air Navigation Safety in Africa and Madagascar (ASECNA).

Under the responsibility of the Commission's authorising officer responsible, the recourse to an award of a grant without a call for proposals is justified because the beneficiary is in a de jure monopoly situation (Article 195 c) of the Financial Regulation 2018), based on the EU ASECNA international cooperation agreement on the development of EGNOS-based SBAS system in Africa by ASECNA, entered into force in November 2018.

4.4.2 Indirect Management with an entrusted entity

A part of this action may be implemented in indirect management with an entrusted entity, which will be selected by the Commission's services using the following criteria: i) experienced in managing EU funding of space support programmes; ii) experienced in interventions in line with EU space programmes (e.g. Copernicus, Galileo); iii) experienced in operations with specific attention to space-related institutional strengthening, advisory services and coordination activities in Africa.

This implementation entails Output 1.1 Contributed to EU-AU space dialogue and overall coordination.

4.4.3 Indirect Management with an entrusted entity

A part of this action may be implemented in indirect management by an entrusted entity, which will be selected by the Commission's services using the following criteria: i) experienced in managing EU funding of space support programmes; ii) experienced in interventions in line with EU space programmes (e.g. Copernicus, Galileo); iii) experienced in operations with specific attention to space-related advisory and capacity building services in Africa; iv) experienced in activities with specific attention to the space-based Early Warning value chain

This implementation entails Specific Objective 2 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 events.

4.4.4 Indirect Management with an entrusted entity

A part of this action may be implemented in indirect management with an entrusted entity, which will be selected by the Commission's services using the following criteria: i) experienced in managing EU funding of space support programmes; ii) experienced in interventions in line with EU space programmes (e.g. Copernicus, Galileo); iii) experienced in operations with specific attention to space-related advisory and capacity building services in Africa; iv) experienced in space industrial partnership, space economy, space business support schemes and outreach on the benefits of space.

This implementation entails Outputs 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 and 1.5 Enhanced gender-sensitive outreach on the benefits of space, in particular satellite navigation and earth observation, and Specific Objective 3 Strengthen African space private sector ecosystem and industrial cooperation.

4.4.5 Changes from indirect to direct management mode (and vice versa) due to exceptional circumstances (one alternative second option)

Should the implementation of specific objective 2 through indirect management as described in section 4.4.3 reveal not be possible due to circumstances outside of the Commission's control, the Commission will revert to direct management grants:

(a) Purpose of the grant:

SO2 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 events

(b) type of applicants:

Africa led and Africa based organisations working on green transition topics.

Should the implementation of outputs 1.1, 1.2, 1.3, 1.5 and specific objective 3 through indirect management reveal not be possible due to circumstances outside of the Commission's control as describes in sections 4.4.2 and 4.4.4, the Commission will revert to direct management - procurement.

4.5 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply subject to the following provisions.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other duly substantiated cases where application of the eligibility rules would make the carrying out of this action

impossible or exceedingly difficult (Article 28(10) NDICI-Global Europe Regulation).

4.6 Indicative Budget

Indicative Budget components	EU contribution (amount in EUR)
Implementation modalities – cf. section 4	
Objective/Output 1: Institutional and innovation space cooperation framework, including space dialogue and outreach composed of	17 000 000
Indirect management with entrusted entities- cf. section 4.4.2 and 4.4.4	13 000 000
Grants (direct management) – cf. section 4.4.1	4 000 000
Objective/Output 2: Space for Early Warning composed of	20 000 000
Indirect management with an entrusted entity - cf. section 4.4.3	20 000 000
Objective/Output 3: Space private sector ecosystem and industrial cooperation composed of	8 000 000
Indirect management with an entrusted entity- cf. section 4.4.4	8 000 000
Grants – total envelope under section 4.4.1	4 000 000
Evaluation – cf. section 5.2 Audit – cf. section 5.3	<i>may be covered by another Decision</i>
Contingencies	N.A.
Totals	45 000 000

4.7 Organisational Set-up and Responsibilities

An Overall Coordination and Steering Group (OCSG) will be set up, to ensure an overall coordination, steering and monitoring of the implementation of the different components. The annual events could take place back-to-back with meetings of the African Union – European Union Space Dialogue.

The OCSG will provide general strategic orientations to the programme as well as monitor overall performance and coherence. It will ensure coordination among the various key stakeholders in order to facilitate the delivery of the expected results of the programme.

The OCSG will be co-chaired by the AUC and the European Commission. It will be composed of representatives from AUC relevant Departments (ESTI, ARBE), AUDA-NEPAD as relevant, relevant European Commission services and the EU Delegation to the AUC and of the implementing partners.

Other organisations (to be jointly defined at a later stage) such as African Regional Economic Communities (RECs), representatives of national African organisations with a space mandate (e.g. African national space agencies), international organisations, associations, will participate as observers in the OCSG on a need basis. The rules of procedure of the OCSG will be adopted by the first OCSG meeting. The main tasks of the OCSG will be supported by Technical Assistance provided by one of the implementing partners.

In addition, there will be coordination/steering groups at the level of components or contracts. Each group will provide strategic, operational and technical advice to the respective component activities, discuss the programme implementation challenges and issues and will report to the OCSG. The implementing partners will also report on their respective work contributing to the implementation of the Action.

Additional aspects of Programme governance will be assessed and defined at a later stage: possibility to coordinate at the level of thematic/working areas (Policy/Scientific-technical/Adoption and uptake of

services); level of representation; formal channels of communication; and additional criteria for selection of ad-hoc observers (e.g. youth, women, UN, private sector, other initiatives, etc.).

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action and may sign or enter into joint declarations or statements, for the purpose of enhancing the visibility of the EU and its contribution to this action and ensuring effective coordination.

5 PERFORMANCE MEASUREMENT

5.1 Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (Outputs and direct Outcomes) as measured by corresponding indicators, using as reference the logframe matrix (for project modality) and the partner's strategy, policy or reform action plan list (for budget support).

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Roles and responsibilities for data collection, analysis and monitoring:

With regard to the nature of the Action, data collection, performance monitoring and reporting will be carried out at the level of each contract. Specific modalities for each of them (indicators, targets and assumptions) will be defined in the respective contracts/agreements and during the inception phases, in a way that will provide inputs for the performance monitoring of the Action globally.

5.2 Evaluation

Having regard to the nature of the action, evaluation(s) will be carried out for this action or its components.

In case a mid-term evaluation is envisaged: it will be carried out for problem solving and learning purposes, in particular with respect to share lessons learnt with other components of the Action and to assess the needs to launch a second phase of the Action.

In case a final or ex-post evaluation is envisaged: It will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the fact that it is the first comprehensive and integrated EU Space programme building on different separate programmes.

Where an evaluation is planned and is to be contracted by the Commission: The Commission shall inform the implementing partner at least two months in advance of the dates envisaged for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports may be shared with the partners and other key stakeholders following the best practice of evaluation dissemination. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, apply the necessary adjustments.

The financing of the evaluation may be covered by another measure constituting a Financing Decision.

5.3 Audit and Verifications

Given the nature of the action, provision for Audit and Verifications for this action or its components is not necessary.

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

6 STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

The 2021-2027 programming cycle will adopt a new approach to pooling, programming and deploying strategic communication and public diplomacy resources.

In line with the 2022 ‘[Communicating and Raising EU Visibility: Guidance for External Actions](#)’, it will remain a contractual obligation for all entities implementing EU-funded external actions to inform the relevant audiences of the Union’s support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. This obligation will continue to apply equally, regardless of whether the actions concerned are implemented by the Commission, partner countries, service providers, grant beneficiaries or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU member states.

However, action documents for specific sector programmes are in principle no longer required to include a provision for communication and visibility actions promoting the programmes concerned. These resources will instead be consolidated in Cooperation Facilities established by support measure action documents, allowing Delegations to plan and execute multiannual strategic communication and public diplomacy actions with sufficient critical mass to be effective on a national scale.

Appendix 1 REPORTING IN OPSYS

A Primary Intervention (project/programme) is a coherent set of activities and results structured in a logical framework aiming at delivering development change or progress. Identifying the level of the primary intervention will allow for:

Articulating Actions or Contracts according to an expected chain of results and therefore allowing them to ensure efficient monitoring and reporting of performance;

Differentiating these Actions or Contracts from those that do not produce direct reportable development results, defined as support entities (i.e. audits, evaluations);

Having a complete and exhaustive mapping of all results-bearing Actions and Contracts.

Primary Interventions are identified during the design of each action by the responsible service (Delegation or Headquarters operational Unit).

The level of the Primary Intervention chosen can be modified (directly in OPSYS) and the modification does not constitute an amendment of the action document.

The intervention level for the present Action identifies as (tick one of the 4 following options);

Action level (i.e. Budget Support, blending)		
<input type="checkbox"/>	Single action	Present action: all contracts in the present action
Group of actions level (i.e. top-up cases, different phases of a single programme)		
<input type="checkbox"/>	Group of actions	Actions reference (CRIS#/OPSYS#):
Contract level		
<input checked="" type="checkbox"/>	Single Contract 1	Foreseen contribution agreement with entrusted entity for part of component 1 and component 3
<input checked="" type="checkbox"/>	Single Contract 2	Grant agreement with ASECNA
<input checked="" type="checkbox"/>	Single Contract 2	Foreseen contribution agreement with entrusted entity for part of component 1
<input checked="" type="checkbox"/>	Single Contract 2	Foreseen contribution agreement with entrusted entity for component 2
Group of contracts level (i.e. series of programme estimates, cases in which an Action includes for example four contracts and two of them, a technical assistance contract and a contribution agreement, aim at the same objectives and complement each other)		
<input type="checkbox"/>	Group of contracts 1	