



**EN**

**THIS ACTION IS FUNDED BY THE EUROPEAN UNION**

**ANNEX**

to the Commission Implementing Decision on the financing of the individual measure in favour of the Asia-Pacific region for 2024

**Action Document for Support to Disaster Risk Reduction through Earth observation and climate services in South Asia**

**INDIVIDUAL MEASURE**

This document constitutes the annual 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**

<b>1. Title CRIS/OPSYS business reference Basic Act</b>	Support to Disaster Risk Reduction through Earth observation and climate services in South Asia OPSYS number: ACT-62809 Financed under the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe)
<b>2. Team Europe Initiative</b>	No
<b>3. Zone benefiting from the action</b>	The action shall be carried out in the South Asia region
<b>4. Programming document</b>	Regional Multi-Annual Indicative Programme for Asia and the Pacific 2021-2027 (Regional MIP)
<b>5. Link with relevant MIP(s) objectives / expected results</b>	<u>Asia and the Pacific MIP:</u> <u>This Action contributes to Priority Area 1, ‘Regional integration and cooperation in South Asia’ of the Regional MIP, specifically to Sector 1 Sustainable and Resilient Environment, by boosting regional coordination and capacities to tackle climate change impact, environmental and biodiversity protection and promote sustainable natural resource management, contributing to disaster risk reduction, resilience and regional stability.</u>
<b>PRIORITY AREAS AND SECTOR INFORMATION</b>	
<b>6. Priority Area(s), sectors</b>	Priority 1 (regional integration and cooperation) of the Regional MIP for Asia and the Pacific 2021-2027
<b>7. Sustainable Development Goals (SDGs)</b>	Main SDG: SDG13 (Climate Action) Other significant SDGs:

	<ul style="list-style-type: none"> <li>• SDG 2 (Zero Hunger)</li> <li>• SDG 5 (Gender Equality)</li> <li>• SDG 9 (Industry, Innovation and Infrastructure)</li> <li>• SDG 11 (Sustainable Cities and Communities)</li> <li>• SDG 14 (Life Below Water)</li> <li>• SDG 15 (Life on Land)</li> <li>• SDG 17 (Partnerships for the Goals)</li> </ul>			
<b>8 a) DAC code(s)</b>	430 – Other multisectors 43060 – Disaster Risk Reduction (25%) 43081 – Multisector education/training (10%) 220 – Communications 22040 – Information and communication technology (ICT) (25%) 22081 – Education and training in ICT, telecommunications and media (10%) 410 – General Environment Protection 41010 – Environmental policy and administrative management (10%) 740 – Disaster Prevention and Preparedness 74020 – Multi-hazard response preparedness (20%)			
<b>8 b) Main Delivery Channel</b>	40000 – Multilateral organisations			
<b>9. Targets</b>	<input type="checkbox"/> Migration <input checked="" type="checkbox"/> Climate <input 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			
<b>10. Markers (from DAC form)</b>	<b>General policy objective @</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Principal objective</b>
	Participation development/good governance	<input checked="" type="checkbox"/>	<input 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"/>
	<b>RIO Convention markers</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Principal objective</b>
	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 checked="" type="checkbox"/>

	Climate change adaptation @	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>11. Internal markers and Tags:</b>	<b>Policy objectives</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Principal objective</b>
	Digitalisation @	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	digital connectivity	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	/
	digital governance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	digital entrepreneurship	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	NO <input type="checkbox"/>	/	
energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
transport	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
health	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	education and research	<input checked="" type="checkbox"/>	<input checked="" 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"/>
<b>BUDGET INFORMATION</b>				
<b>12. Amounts concerned</b>	Budget line: 14.020131 (South and East Asia) Total estimated cost: EUR 12 000 000 Total amount of EU budget contribution EUR 12 000 000			
<b>MANAGEMENT AND IMPLEMENTATION</b>				
<b>13. Type of financing</b>	<b>Indirect management</b> with the entity(ies) to be selected in accordance with the criteria set out in section 4.4.1			

## 1.2 Summary of the Action

South Asia is exposed to a variety of natural hazards and is particularly prone to disasters related to hydro-meteorological events, with Bangladesh, Pakistan, Nepal, India, and Sri Lanka being cited among the most affected countries in recent years. Many countries in the region share common geological formations and river basins, and natural hazards frequently transcend national boundaries. Extreme weather conditions (excess heat or rainfall) combined with deforestation, and inadequate upstream river-basin management are linked to increasing incidence of floods and landslides in South Asia. The region is home to more than a quarter of the world's population, who are living in increasingly densely populated urban areas, which also increases the vulnerability of populations to extreme events.

This action will support Disaster Risk Reduction (DRR), Climate Change Adaptation (CCA) and environmental management through the development and application of Earth observation (EO) and climate services tailored to the context of South Asian countries. It will ensure added value through the use of internationally recognised European expertise in Earth observation, including Copernicus, and in building national and regional capacities in the development and use of climate services particularly those derived from satellite-based Earth observation. The

action will provide South Asian decision-makers with tools to analyse climate risks and trends, towards the formulation of relevant measures to reduce risks to settlements, infrastructure, productive and environmental areas. Improved analysis and policy action can lead to climate-proofing of investments in energy, transport and communication, and the development of disaster resilient infrastructure.

The action will cover all countries of South Asia. With India being the most advanced, yet still building its EO/DRR coordination efforts, South Asian countries are at various levels of preparation in terms of generation and collection of data, translation to specific needs and users (e.g., early warning systems, agricultural production, water management, coastal management, etc.), transfer (e.g., through capacity building), and potentially finer targeting to be used as a tool for decision-making. The action will address specific country needs and capacities along this value chain. By backing a seamless integration of DRR/CCA/environmental management in country decision-making systems, it intends to pose the basis for future scalability and sustainability of Earth observation systems for DRR/CCA/environmental management action. In addition to the multi-country approach, the regional dimension of the action will be instrumental in strengthening regional cooperation and coordination through the implementation of regular technical exchanges among countries.

The Overall Objective of this action is to reduce the impact of climate change and natural hazard risks in the South Asia region by strengthening capacities and regional coordination and through the generation, delivery and use of Earth observation and climate services applications.

The present action will be implemented through two components:

- Component 1, aimed to strengthen capacities and regional cooperation and coordination, policy dialogue and awareness raising on disaster risk reduction (DRR), climate change adaptation (CCA), including gender-responsive climate-mitigation and climate-adaptation plans, and related environmental management in South Asian countries.
- Component 2, aimed to enhance availability, access and use of spatial information for disaster Risk reduction (DRR), climate change adaptation (CCA), and related environmental management through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries.

### 1.3 Zone benefitting from the Action

The Action shall be carried out in South Asia region which includes – Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, out of which all are all included in the list of ODA recipients.

## 2 RATIONALE

### 2.1 Context

South Asia is exposed to a variety of natural hazards<sup>1</sup> from avalanches and earthquakes to retreating glaciers, glacial lake outburst floods (GLOFs), drought, floods, and cyclones. The region is both a contributor to climate change and one of the regions most vulnerable to climate change. Over the 2000-2019 period, Bangladesh, Nepal and Pakistan were among the 10 countries most affected by climate change impacts. Many countries in the region share common geological formations and river basins, and natural hazards frequently transcend national boundaries.

<sup>1</sup> Pakistan experiences floods and earthquakes. Nepal and Bhutan are also located in seismically active zones and face flood risk from glacial lake outbursts. Bangladesh is one of the most disaster-prone countries and suffers from severe cyclones, storm surges, and flooding. Neighbouring India, with its vast expanse, witnesses a variety of natural disasters in different parts of its territory. Northern India faces extreme temperatures and earthquakes and its eastern coastline framing the Bay of Bengal is vulnerable to cyclones, floods, and sea level rise. The Andaman and Nicobar Islands are prone to cyclones and occasionally encounter tsunamis generated by the Andaman-Sumatra Subduction Zone. Due to Sri Lanka's proximity to the same zone, it is also prone to tsunamis and coastal floods. Maldives, the lowest-lying country in the world, is exposed to sea-level rise.

The South Asia region is home to more than a quarter of the world's population<sup>2</sup>, who are living in increasingly densely populated urban areas, which in turn also increases the vulnerability of populations to extreme events.

The disparities between South Asian countries are, however, significant and multifaceted, reflecting diverse economic, social, and political contexts across the region. GDP per capita, infrastructure development, healthcare systems, and educational outcomes vary widely between South Asian nations. Additionally, geopolitical factors, historical contexts, and governance structures contribute to the disparities observed in the region. Bridging these gaps and fostering greater regional cooperation are crucial steps towards promoting sustainable development and prosperity across South Asia.

South Asia is experiencing significant population growth and, in recent years, the region has seen rapid economic growth. However, the region faces a number of developmental and integration challenges, and its economic outlook has deteriorated due to the COVID-19 pandemic. South Asia remains one of the least integrated regions in the world in terms of trade and overall sectors of cooperation at intra-regional level. In particular, despite the common challenges faced by the South Asian countries and the often transnational nature of threats, regional cooperation for disaster management and climate change adaptation has been limited.

The EU's engagement in South Asia is important for the EU's strategic interests in regional stability and security, irregular migration, increasing trade and investment, climate change & clean energy transition, promotion of multilateralism, human rights and democracy.

To address these challenges, the development and application of climate services derived from Earth observation (EO) data is crucial to improve access to actionable climate intelligence across all levels of governance. Earth observation systems, such as the Copernicus initiative of the EU Space programme, bring reliable information on, inter-alia, environmental status and degradation, climate change and variability, the localisation of risk-prone areas, and the ability to build climate stress tests and forecast scenarios. This accurate GeoInformation is treated to draw instructions for properly informed decision-making since reliable, evidence-based information allows efficient use of resources towards risk avoidance, better planning and improved resilience including at the sub-national level. Empowering decision-makers with such information enables them to formulate more informed and effective policy responses to climate-related challenges, enhancing overall disaster resilience and adaptation efforts in South Asia.

European expertise in Earth observation and climate services is currently benefiting South East Asia (CopPhil<sup>3</sup>), Africa (GMES & Africa<sup>4</sup>) and the Intra-ACP Climate Services and related Applications Programme (ClimSA<sup>5</sup>). This action will support disaster risk reduction and environmental management in the South Asian region through the development and application of Earth observation and climate services aligned to the developmental priorities and assisting existing risk management systems. The action will provide South Asian decision-makers with tools to analyse climate risks and trends, towards the formulation of relevant measures to reduce risks to settlements, infrastructure, productive and environmental areas.

The action will cover all countries of South Asia. With India being the most advanced, yet still building its EO/DRR coordination efforts, South Asian countries are at various levels of preparation in terms of generation and collection of data, translation to specific needs and users (e.g., early warning systems, agricultural production, water management, and coastal management), transfer (e.g. through capacity building), and potentially finer targeting to be used as a tool for decision-making. The action will address specific country needs and capacities along this value chain. By backing a seamless integration of DRR in country decision-making systems, it intends to pose the basis for future scalability and sustainability of Earth observation systems for DRR action. In addition to the multi-country approach, the action will have a regional dimension, e.g. supporting regular technical exchanges among countries. It will bolster connections between South Asian DRR networks and platforms, including space observation and DRR, and build capacities where gaps/needs have been identified. It will also align with disaster management priorities as set in country disaster risk strategies through country risk assessments and the related Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and sector strategies.

---

<sup>2</sup> <https://www.worldometers.info/world-population/southern-asia-population/#>

<sup>3</sup> CopPhil - <https://asti.dost.gov.ph/resources/media-release/first-in-the-region-philippines-eu-join-forces-for-copphil-implementation-strengthens-disaster-response/>

<sup>4</sup> GMES & Africa - <http://gmes.africa-union.org/#discover-the-programme>

<sup>5</sup> ClimSA - <https://www.climsa.org/>

The action will directly contribute to SDG13 on climate action and support other SDGs notably 11 (sustainable cities and communities), 14 (life below water), 15 (life on land) and 17 (partnerships). It is also expected to support SDG 2 (zero hunger), SDG 5 (gender equality), and SDG 9 (industry, innovation and infrastructure). The action will build on experiences of the programme EU-South Asia Capacity building for Disaster Risk Management implemented by the World Bank (2016 – 2023), the EU experience on Earth observation in Africa, and the existing EU experience in supporting regional and national organisations in developing DRR solutions and responses, including those from Joint Research Centre (JRC) and European Centre for Medium-Range Weather Forecasts (ECMWF).

The action will be aligned with the Sendai Framework (SF) for Disaster Risk Reduction 2015-2030, in particular to Target G “Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030”, and to Priorities 1, 2 and 4 of the Sendai Framework<sup>6</sup>, as well as with the UN-Global Framework for Climate Services (GFCS), which proposes a detailed framework with roles and responsibilities to facilitate the implementation of actions to improve climate-related outcomes at national, regional and global levels, and the UN “Early Warnings for All (EW4All)”<sup>7</sup> initiative, a UN led effort to protect all communities from hazardous weather, water, or climate events through life-saving early warning systems by the end of 2027.

The action will be also aligned with relevant national actions in the region and those of other development partners. It will bolster connections between South Asian DRR networks and platforms, including space observation and DRR, and build capacities where gaps/needs have been identified. It will also align with disaster management priorities as set in country disaster risk strategies through country risk assessments and the related Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and sector strategies.

The action is aligned with the priorities of the Global Gateway Strategy notably on climate and energy, the Indo-Pacific Strategy, the EU external energy strategy “EU external energy engagement in a changing world”, the EU-India Connectivity Partnership, the EU-India Strategy, the EU Green Deal, Indo-Pacific Strategy, and the EU Climate Change Adaptation Strategy, which calls for increased support to international climate resilience and preparedness, and exchanges on adaptation. This action is also aligned with the Gender Action Plan III<sup>8</sup> and its key priority “Addressing challenges and harnessing the opportunities offered by the green transition and the digital transformation”.

This regional action will establish synergies with the Team Europe Initiative (TEI) on Green Energy Transition in Bangladesh and TEI Green Recovery in Nepal, TEI Climate Resilient Infrastructure and Green Jobs Creation in Pakistan, and TEI Green Growth in Sri Lanka.

## 2.2 Problem Analysis

Short problem analysis:

South Asia is particularly vulnerable to a variety of natural hazards as well as to the impacts of climate change, with Bangladesh, Pakistan, Nepal, India, and Sri Lanka being cited among the most affected countries in recent years. The diversity of landscapes and inter-connected watersheds and climatic zones in South Asia translates into a complex mosaic of hydro-meteorological and geophysical hazards including floods, droughts, cyclones, glacial lake outburst floods (GLOFs), coastal and riverbank erosion, sea-level rise and coastal degradation, landslides and earthquakes, among others. The impact of climate change on Himalayan glaciers and upstream river-basin management has a cascading effect on countries located downstream - especially the delta and coastal areas of Bangladesh, Pakistan and India. The economic repercussions of disasters in the region are significant and pose major socio-economic challenges to South Asian countries. As more than a quarter of the world’s population resides in this region, natural hazards and climate change take a heavy toll on life and property.

These events disrupt agricultural activities, damage critical infrastructure, and hinder economic growth. Many socio-economic sectors in the South Asian countries, including infrastructure, energy, agriculture, urban and

<sup>6</sup> Priority 1: Understanding disaster risk; Priority 2: Strengthening disaster risk governance to manage disaster risk; Priority 4 Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction.

<sup>7</sup> EW4All - <https://www.un.org/en/climatechange/early-warnings-for-all>

<sup>8</sup> The [Gender Action Plan III](#) is a Joint communication by the Commission and the High Representative of the Union for Foreign Affairs and Security Policy which was welcomed through [EU Presidency Conclusions](#) of 16 December 2020 endorsed by 24 Member States.

coastal development, tourism, health and forestry, are highly sensitive to these extreme weather and climate events and are being increasingly adversely impacted. Vulnerable communities, particularly women and men belonging to marginalised groups, are primarily affected by these disasters, exacerbated by limited access to resources and inadequate infrastructure. Consequently, social vulnerability increases, necessitating targeted interventions. Moreover, the intensification of extreme weather events due to climate change poses significant environmental challenges in the region, leading to degradation and loss of biodiversity. Thus, disaster risk reduction and climate change adaptation are crucial for multiple communities' survival in South Asia.

The region stands out as one of the world's least integrated regions, experiencing significant challenges in both political and economic integration. It is confronted with very low level of collaboration and lack of a singularly strong regional organisation. Factors such as varying sizes and economic strengths hinder cooperation within the region. Despite the common challenges faced by the South Asian countries and the often transnational nature of threats, regional cooperation for disaster management and climate change adaptation has been limited and regional systems for disaster management have remained underdeveloped. Differences in size and economic power also complicate intra-regional cooperation. Furthermore, countries face difficulties in coping with the increasing financing needs associated with disaster risk reduction and climate change adaptation. While each country has established structures dedicated to DRR and CCA, and has implemented national disaster management frameworks emphasizing pre-disaster planning and risk reduction, a lack of resources and training continues to be a challenge in implementing policies to achieve these goals. Consequently, disaster management remains focused on preparedness and emergency response.

The risks associated with natural hazards and climate change and variability in the region, as well as their sectoral impacts, remain poorly understood. Decision-makers often face challenges due to the lack of reliable climate information tailored to their specific needs, and lack of capacity to make effective use of climate information to manage current and future climate risks. These limitations hinder well-informed decision-making on disaster risk reduction and adaptation strategies. Consequently, there is an urgent need for enhanced cooperation within and between countries in the development and use of accurate and timely risk and climate information and analysis, tools and services in the region for a better understanding and forecast of risks and their impacts, and an equally important need for exchange between the providers and users of climate services to ensure that relevant climate information is integrated into planning, policy and practice at all levels and in all sectors.

To address these challenges, the development and application of climate services derived from Earth observation (EO) data is crucial to improve access to actionable climate intelligence across all levels of governance. Earth observation (EO) systems, such as the Copernicus initiative of the EU Space programme, provide reliable information on, inter-alia, environmental status and degradation, the localisation of risk-prone areas, and the ability to build climate stress tests and forecast scenarios. In addition, capacities at regional and national levels to develop and use EO data and climate services and applications are yet limited, and therefore, need to be developed. Empowering decision-makers with such information enables them to formulate more informed and effective policy responses to climate-related challenges, enhancing overall disaster resilience and adaptation efforts in South Asia.

Through the generation, delivery and use of Earth observation and climate services and applications, this action is designed to address the interconnected economic, social, and environmental aspects of disaster risk reduction and climate change adaptation in South Asia, with the overarching goal of bolstering resilience, safeguarding vulnerable populations, and fostering sustainable development as well as an inclusive and just transition in the face of climate-related adversities.

The main stakeholders of the action include:

Duty bearers:

- (i) South Asia governments. The relevant Ministries, national organisations and specialised agencies in charge of disaster risk reduction and management, climate change and meteorology, and environmental protection, as well as other relevant ministries, such as:
  - National Disaster Risk Management Agencies. These agencies are responsible for coordinating disaster risk reduction efforts at the national level. Their role involves implementing policies and programs to reduce the impact of disasters and enhance resilience. They will be involved in defining national disaster risk reduction priorities and integrating Earth observation and climate services into national strategies.
  - Environmental Protection Authorities: These authorities play a crucial role in environmental management and biodiversity protection. They will be involved in utilising Earth observation data to

monitor environmental status, assess degradation, and develop strategies for sustainable natural resource management. Their involvement is essential for addressing environmental dimensions of disaster risk reduction and climate change adaptation.

- National Meteorological Agencies provide weather and climate information essential for disaster risk reduction and climate adaptation planning. They will play a key role in utilising Earth observation data and climate services to improve early warning systems and provide accurate climate information to decision-makers. Their involvement ensures the availability of reliable climate information for effective decision-making.
  - Ministries and national specialised agencies responsible for infrastructure (digital, energy, transport), agriculture, environmental protection, disaster management, etc.
- (ii) Regional institutions. The relevant regional organisations and institutions dealing with disaster risk reduction and management, climate change and meteorology, and environmental protection, such as the Regional Climate Centres and Regional Specialized Meteorological Centres such as the International Centre for Integrated Mountain Development (ICIMOD<sup>9</sup>), SAARC Meteorological Research Centre (SMRC), Bangladesh, and Regional Integrated Multi-Hazard Early Warning System (RIMES), Space Research and Remote Sensing Organization (SPARRCO) that are responsible for providing climate information and services at a regional level. These organisations facilitate cooperation and coordination among countries in the region and support the development and implementation of regional and national climate resilience strategies. As such, their involvement is crucial for promoting regional cooperation and exchange of experiences in disaster risk reduction and climate adaptation.
- (iii) The relevant international organisations and institutions, involved in disaster risk reduction,
- Coalition for Disaster Resilient Infrastructure (CDRI)
  - United Nations Office for Disaster Risk Reduction (UNDRR)
  - United Nations Development Programme (UNDP)<sup>10</sup>
  - United Nations Economic and Social Commission for Asia and the Pacific: Sub regional Office for South and South-West Asia (ESCAP-SSWA)
- (iv) South Asian and European space agencies, research centres, research and development (R&D) institutions and think-tanks, networks, non-governmental organisations and universities, with expertise in Earth observation and climate services, who can contribute to the provision of technical expertise, data, and support to build national and regional capacities in Earth observation and climate services generation and delivery, such as:
- Center for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)
  - Indian Institute of Space Science and Technology (IIST)
  - Joint Research Centre (JRC), European Commission
  - European Centre for Medium-Range Weather Forecasts (ECMWF)
  - Indian Space Research Organisation (ISRO) and National Remote Sensing Centre (NRSC)
  - Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)
  - Bangladesh Space Research and Remote Sensing Organization (SPARRSO)
  - GovTech, Bhutan
  - European Space Agency (ESA)<sup>11</sup>.
  - European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)
  - The International Union for Conservation of Nature (IUCN)
  - Wildlife Conservation Society (WCS),
  - International Centre for Climate Change and Development (ICCCAD).

<sup>9</sup> ICIMOD (<https://www.icimod.org/>) - is a regional intergovernmental learning and knowledge sharing centre serves eight regional member countries of the Hindu Kush Himalaya region – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan

<sup>10</sup> EU is one of the contributors to Infrastructure Resilience Accelerator Fund (IRAF), a Multi-Partner Trust Fund established by UNDP, UNDRR, and the Coalition for Disaster Resilient Infrastructure (CDRI). IRAF offers customized technical assistance, capacity building, research and knowledge management, and advocacy to countries at all stages of development.

<sup>11</sup> ESA expertise in Earth observation and climate services is currently benefiting South East Asia (CopPhil), Africa (GMES & Africa) and the Intra-ACP Climate Services and related Applications Programme (ClimSA)

- (v) Civil society, including representatives of women's rights organisations. Local Authorities and Civil Society Organisations representing grassroots communities and men, women and communities in situations of vulnerability who are directly affected by disasters. Their involvement is crucial for ensuring that disaster risk reduction measures are inclusive, participatory, and responsive to the needs of women and men in situations of vulnerability. They will contribute to the localisation of disaster risk reduction efforts, ensuring that interventions are tailored to the specific contexts and vulnerabilities of local communities.

Right holders:

This action will have a positive impact on women and people in the most vulnerable situations, facing recurrent crisis. As the impacts of climate change and natural hazard related disasters are more pronounced and disproportionate for those most at risk such as children, elderly, girls and women, persons living with disabilities, as well as minorities. A significant programme objective will be to tailor the instruments to be developed to the needs of these groups.

### 3 DESCRIPTION OF THE ACTION

#### 3.1 Objectives and Expected Outputs

The Overall Objective (Impact) of this action is to reduce the impact of climate change and natural hazard risks in the South Asia region by strengthening capacities and regional coordination and through the generation, delivery and use of Earth observation and climate services applications.

The **Specific(s) Objective(s) (Outcomes)** of this action:

**SO1:** Strengthen capacities and regional cooperation and coordination, policy dialogue and awareness raising on disaster risk reduction (DRR), climate change adaptation (CCA), including gender-responsive climate-mitigation and climate-adaptation plans, and related environmental management in South Asian countries.

**SO2:** Enhance availability, access and use of spatial information for disaster risk reduction (DRR), climate change adaptation (CCA), and related environmental management through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries.

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

Contributing to Outcome 1 (or Specific Objective 1):

- 1.1. Roadmaps for the generation, delivery and use of science-based risk knowledge (including EO) data and tools for DRR and CCA are developed and promoted in South Asian countries.
- 1.2. Capacity building and regional exchanges for DRR and CCA are conducted in and among South Asian countries for enhanced partnership and coordination.
- 1.3. Knowledge dissemination and advocacy on the importance of science-based risk knowledge, including Earth observation, are enhanced to support the design, update and implementation of DRR and CCA policies and strengthen evidence-based decision making for sustainable development in South Asia.

Contributing to Outcome 2 (or Specific Objective 2):

- 2.1. Access to, generation and use of EU EO systems, tools and expertise throughout the DRR and CCA value chains are promoted to specific needs and sectors of the South Asian countries to reduce natural hazards and climate change risks.
- 2.2. Capacities of South Asian countries for the use and application of nationally and locally relevant EO data and tools on priority sectors along the EO-DRR-CCA value chain are strengthened.

#### 3.2 Indicative Activities

Activities relating to Specific Objective 1 include:

Activities relating to Output 1.1:

- Develop and apply an analytical framework to assess the needs and priorities for the enhancement of risk understanding in South Asian countries, with a focus on the benefits of strengthened access and use of EO.
- Undertake consultations with a broad range of stakeholders on their access and use of science-based disaster risk and climate information to identify and reduce barriers, including structural barriers prevent women's equal and meaningful participation and leadership in climate decision-making.
- Reinforce policy advisory services to identify and strengthen science-to-policy inputs and avenues to achieve DRR and CCA policy objectives in South Asian countries, including for the integration of EO data and applications into the value chains of DRR and CCA policies (as identified and developed under Outcome 2).

Activities relating to Output 1.2:

- Develop and implement a capacity building plan on strategic and thematic issues at South Asia regional, sub-regional and national levels to increase the capacity of stakeholders in every step of EO-DRR-CCA value chain.
- Facilitate thematic multi-country peer learning exchanges on needs and priorities for the enhancement of risk understanding, on access and use of EO-derived risk information and risk analytics, etc.
- Facilitate multi-country peer learning exchanges to take stock of the implementation of relevant policies for DRR, CCA and environmental management, including gender-responsive climate-mitigation and climate-adaptation plans, and identify the most pressing needs in terms of risk knowledge to accelerate implementation of priority policy objectives (regional and national).
- Organise events making use of existing fora to promote the application of disaster risk data, risk assessments, EO to accelerate implementation of DRR and CCA policies.
- Set up and/or strengthen a dedicated information platform/portal to exchange best practices, make information available for specific needs and encourage cooperation between the South Asian countries.
- Establish a "*community of practice*" in the South Asia region for the use of Earth observations in DRR, CCA and related environmental management.

Activities relating to Output 1.3:

- Promote awareness and use of science-based information (data and applications) throughout the EO-DRR-CCA value chain, to accelerate implementation of DRR and CCA policies.
- Promote the creation and dissemination of knowledge products, key messages and multimedia content on the importance of EO and science-based approaches to DRR and CCA in South Asian countries, and improve understanding of their relevance for the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the achievement of the Sustainable Development Goals.
- Co-design with South Asian countries regional guidelines and protocols to inform national gender-responsive strategies and plans (e.g., Climate National Adaptation Plans (NAP) with climate smart geospatial information based on satellite Earth observation (EO), building on existing frameworks (e.g., the World Bank Country Climate and Development Reports(CCDRs)).
- Management and exchange of knowledge, information, best practices and lessons learnt between sectors at national level to improve cross-fertilisation.

Activities relating to Output 2.1 include:

- Create baselines and trends at regional and national scale based on existing satellite derived Essential Climate Variables (ECV) as provided by the ESA Climate Change Initiative and Copernicus services.
- Develop analytical digital tools to extract and visualize geospatial statistics and trends from the ECV supporting national strategies and plans (e.g., NAPs), to be implemented in a cloud environment and transferred to the mandated stakeholders in the selected countries.
- Strengthen data protocols, including disaggregated data collection, for the collection and use of EO data with a view to reinforce existing risk portals and structure EO data usage. Utilise EU EO tools and resources (e.g., Copernicus Emergency Management System (EMS) components) to support risk reduction and climate change adaptation of priority sectors (e.g., infrastructure, agriculture, coastal resilience, disaster risk finance and insurance, etc.) in South Asian countries.

Activities relating to Output 2.2 include:

- Conduct an assessment of existing capacities and identification of needs for capacity building of South Asian countries for EO utilisation, along the EO-DRR-CCA value chain (including the use of EO tools during disasters, such as focusing on hazard management and data integration, with a special focus on ESA's Smart-Connect project system).
- Conduct training workshops (e.g., on Copernicus EMS rapid mapping), at regional and national levels, emphasising the utilisation of EU EO tools.
- Facilitate knowledge transfer to the mandated organisations in the South Asian countries to effectively use and exploit the EO information and digital tools supporting their national strategies and plans.

It should be noted that SO1 and SO2 are highly interconnected. As such, the implementation of activities under SO1 and SO2 are interlinked and should be operated seamlessly in collaboration and coordination with multiple stakeholders within each country and across the region.

Existing institutional modalities could be utilised for implementing this project. One of these is the Infrastructure Resilience Accelerator Fund (IRAF), a UN-administered multi-donor trust-fund through which EU is contributing EUR 5 million to an ongoing project - Infrastructure for Resilience Island States (IRIS). The Pillar Assessed UN agencies that have signed the IRAF Contribution Agreement with EU are - UNDP, UNDRR and UNOPS. Linkage with EU's ongoing EO projects such as CopPhil in South East Asia may also offer valuable lessons for this project.

### 3.3 Mainstreaming

#### **Environmental Protection & Climate Change**

By design, crosscutting themes such as environmental protection and climate change are at the core of this action, therefore, no negative impact on the environment is expected. In fact, through the generation, use and wide dissemination of climate information and services based on Earth observation data, this action represents a major positive contribution to environmental protection and sustainable natural resources management in the South Asia region.

The action specifically focuses on climate change adaptation. It will aim to reduce the impact of climate change and natural hazard risks in the South Asia region by increasing resilience, strengthening local capacities and regional coordination and through the generation, delivery and use of Earth observation and climate services and applications. A climate conflict sensitive approach will be ensured.

The screening for SEA (Strategic Environmental Assessment), EIA (Environmental Impact Assessment) and CRA (Climate Risk Assessment) concluded that no further action was required.

#### **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 equality is a significant objective. Given the unequal impact of climate change and natural hazard events on women and the unequal access by women to protection and decision-making against the impacts of climate change and natural hazards, this action brings an opportunity for developing appropriate communication and delivery systems to facilitate access to decision making related to DRR, CCA and environmental management and protection to vulnerable groups, young people, older persons and women.

#### **Human Rights**

Access to a safe environment is a human right (United Nations Human Rights Council 48 session, October 2021). This action will improve the access to climate information and services, which will enable persons in vulnerable situations to have increased awareness and information, and therefore, reduce the impact of climate change and natural hazard events, thus, enabling people amongst the poorest in the world better access to this human right. The action will engage as much as possible all relevant stakeholders at regional, national and sub-national levels in order to achieve a broad and comprehensive understanding of the countries' needs and encourage their contribution to tailor Earth observations services and systems, with a focus on women but also on minority communities, those living in the most vulnerable situations, persons with disabilities and displaced persons. A human rights-based approach and its key principles (participation, non-discrimination, accountability and transparency) will be integrated throughout the action, by devoting efforts and resources to identify potential beneficiaries, climate information end users in different priority sectors, especially sensitive to climate change impacts during implementation.

**Disability**

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D0. This implies that working on disability-related issues is not a main objective in this action. However, climate change and natural hazards have a direct impact on the rights of people with disabilities according to the Office of the High Commissioner for Human Rights. Moreover, the EU has ratified the Convention on the Rights of the People with Disabilities. Although no specific action is foreseen directly targeting persons with disabilities, the action will ensure that the specific needs of persons with disabilities are taken into account in its training, dissemination and awareness-raising activities. To this end, two key elements will be taken into account: consultation and participation of persons with disabilities and/or their representatives.

Communication, alert systems, awareness-raising and training materials developed with the support of the action will place accessibility at the heart of their activities.

**Reduction of inequalities**

The action will contribute to greater transparency, access to and availability of higher quality climate and environmental data to South Asian countries and communities. The action will promote the integration of indigenous and local knowledge for equitable adaptation strategies.

**Democracy**

The action will support the development of evidence-based information, services and tools for decision making in South Asia through inclusive and gender-sensitive approaches. It will seek strong involvement of all relevant authorities at regional, national and sub-national levels to foster ownership and sustainability. The action will further promote the participation of civil society whenever possible, in particular in the dissemination and awareness raising activities, ensuring the involvement of girls and women.

**Conflict sensitivity, peace and resilience**

The action directly affects resilience, as it aims at protecting vulnerable populations from recurrent crisis and shocks caused by the impact of climate change and natural hazard events, while increasing local capacities to withstand and overcome them. It focuses on anticipation and preparedness, lifting vulnerabilities towards a resilience pathway. Finally, it supports regional cooperation and integration and, by consequence, promotes conflict prevention.

**Disaster Risk Reduction**

By design, disaster risk reduction is at the core of this action. The action has a primary focus on climate change adaptation and disaster risk reduction. It will aim to reduce the impact of climate change and natural hazard risks in the South Asia region by strengthening capacities and regional coordination and through the generation, delivery and use of Earth observation and climate services and applications. The action will also foster the exchange of good practices among South Asian countries.

### 3.4 Risks and Lessons Learnt

Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
Policy and legal	Risk 1: Lack of ownership by national stakeholders and/or absence of political will for using and sharing climate information, tools and services in the	Medium	Medium	Conduct a needs and capacity assessment of institutional planning processes and systems at national level, based on which necessary technical support would be provided to overcome institutional lacunae. Continuous advocacy and policy dialogue in order to highlight and promote the benefits of the use of climate

	policy decision-making process.			information and tools for inclusive evidence-based decision-making.
Governance (people and organisation)	Risk 2: Lack of capacities in particular human resources, to develop and use Earth observation data and tools for DRR, CCA and environmental management.	Medium	Medium	The action will aim at providing capacity building to different levels of government.
Governance (people and organisation)	Risk 3: Limited institutional commitment to use and integrate EU data and tools in national systems.	Medium	High	The action will engage actively with governance-related institutions in the South Asian region to encourage the adoption and use of proven EU tools in national systems
Institutional (Planning, processes and systems)	Risk 4: Limited institutional commitment at regional level to exchange best practices and establish coordination mechanisms for DRR and CCA, and to develop scientific decision-support systems.	Medium	Medium	Engage with relevant organisations / processes at regional level. Strengthen engagement with and among regional and national institutions.
Institutional (Planning, processes and systems)	Risk 5: Difficulty to reconcile fragmented information	High	Medium	Initial needs and capacity assessments will be conducted at national level. This can lead to an independent assessment to determine possible ways to reconcile fragmented information.
Operations	Risk 6: Duplication of efforts in the use of EO data and services from other IOs	Medium	Medium	Setting up a structure that coordinates regional and national efforts

**Lessons Learnt:**

The action will build on the lessons learnt from previous initiatives making use of Earth observation data, services and applications at continental, multi-country, regional and national levels with the objective to support disaster risk and environmental management.

Specific attention will be paid to lessons learnt from the programme EU-South Asia Capacity building for Disaster Risk Management (EU-SAR DRM Programme), implemented by the World Bank (2016 – 2023). This programme has shown the relevance of knowledge sharing among regional bodies, national DRM agencies, and other counterparts in the South Asian Region.

The action will also build on lessons from the EU programmes National Copernicus Capacity Support Action Programme for the Philippines (CopPhil), Global Monitoring for Environment and Security & Africa (GMES &

Africa) and the Intra-ACP Climate Services and related Applications Programme (ClimSA), as well as the new Comprehensive approach to Climate Mobility in South Asia.

### 3.5 The Intervention Logic

The underlying intervention logic for this action is that the action will help reduce the impact of climate change and natural hazard risks in the South Asia region by strengthening capacities and regional coordination, policy dialogue and awareness raising on DRR, CCA and related environmental management in South Asian countries, and by enhancing availability, access and use of spatial information for CCA, DRR and related environmental management through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries.

Indeed, if roadmaps for the generation, delivery and use of science-based risk knowledge (including EO) data and tools for DRR and CCA are developed and promoted, capacity building and regional exchanges for DRR and CCA are conducted, and knowledge dissemination and advocacy on the importance of science-based risk knowledge (including EO), are enhanced in South Asian countries, then capacities and regional coordination, policy dialogue and awareness raising on DRR, CCA and related environmental management in South Asian countries would be strengthened. And if access to, generation and use of EU EO systems, tools and expertise throughout the DRR and CCA value chains are promoted to specific needs and sectors of the South Asian countries, and their capacities for the use and application of EO data and tools on priority sectors along the EO-DRR-CCA value chain are strengthened, then the availability, access and use of spatial information for CCA, DRR and related environmental management would be enhanced through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries.

The present action will help leverage the visibility of the EU as an enabler and active contributor of increased climate adaptation and disaster risk reduction, as well as regional cooperation in South Asia, contributing to the implementation the Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018–2030) and the UNDRR Asia-Pacific Action Plan 2021-2024 for Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030.

### 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.

Results	Results chain (a): Main expected results (maximum 10)	Indicators (a): (at least one indicator per expected result)	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
<b>Impact</b>	To reduce the impact of climate change and natural hazard risks in the South Asia region , through the generation, delivery and use of Earth observation and climate services applications	<p>1. Progress towards SDG13 and other relevant SDG targets: SDG2, 5, 9, 11, 14, 15, 17</p> <p>2. Number of countries that have accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels (SF G-5)</p>	<p>1 tbd</p> <p>2.1 India (2024) - tbc</p>	<p>1 tbd</p> <p>2 7 (Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka) - tbc</p>	<p>1 JRC Inform Risk Website, Global Europe Results Framework (GERF) European Commission Joint Research Centre (JRC) INFORM Risk Index (for all South Asia countries under the programme)</p> <p>2 UNDRR reports, respective National Disaster Management Centre reports</p>	<i>Not applicable</i>
<b>Outcome 1</b>	1. The capacities and regional cooperation and coordination, policy dialogue and awareness raising on disaster risk reduction (DRR), climate change adaptation (CCA), including gender-responsive climate-mitigation and climate-adaptation plans, and related environmental management in South Asian countries are strengthened.	<p>1.1 Number of South Asian countries with high-level participation (presidential, ministerial or similar level) in the regional events taking place with the support of the action (Number of participants by country and sex)</p> <p>1.2 Number of South Asian countries with new or updated national DRR, CCA and/or environmental management policies/strategies enhanced through the regional/cross-border exchanges implemented with support of the action</p> <p>1.3 Number of regional coordination/cooperation agreements on DRR, CCA and/or environmental</p>	<p>1.1 3 (tbc)</p> <p>1.2 0 (tbc)</p> <p>1.3 0 (tbc)</p>	<p>1.1 7 (tbc)</p> <p>1.2 7</p> <p>1.3 2</p>	<p>1.1 UNDRR reports</p> <p>1.2 UNDRR / NDM reports</p> <p>1.3 UNDRR / NDM reports</p>	

		management established with the support of the action  1.4. Number of regional events taking place with the support of the action that focus on the gender-specific impact of climate change and on good practice of gender-responsive climate-mitigation and adaptation plans and measures.				
<b>Outcome 2</b>	2. The availability, access and use of spatial information for disaster risk reduction (DRR), climate change adaptation (CCA), and related environmental management through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries is enhanced.	2.1 Increase in the incorporation of spatial information from EU EO systems and tools in national and subnational decision-making processes for DRR/CCA/environmental management with the support of the action  2.2 Number of South Asian countries with improved access to and utilising tailored EU EO systems and tools for DRR/CCA/environmental management with EU support	2.1 1  2.2 1  2.3 1	2.1 7  2.2 7  2.3 7	2.1 JRC/ UNDRR/ NDM reports (tbc)  2.2 JRC/ UNDRR / NDM reports (tbc)  2.3 JRC/ UNDRR / NDM reports (tbc)	
<b>Output 1 relating to Outcome 1</b>	1.1 Roadmaps for the generation, delivery and use of science-based risk knowledge (including EO) data and tools for DRR and CCA are developed and promoted in South Asian countries.	1.1.1 # of gaps and needs assessment reports on EO for DRR/CCA undertaken in South Asian countries with the support of the action  1.1.2 Number of stakeholder consultations on DRR/CCA/Environmental management undertaken per year with the support of the action  1.1.3 Number of multi-country collaborative initiatives on DRR, CCA and/or environmental management led by at least 3 South Asian countries put in place with the support of the action  1.1.4 Number of national DRR, CCA and/or environmental management policies, including gender-responsive policies, that integrate EU information enhanced/developed with the support of the action	1.1.1 0  1.1.2 0  1.1.3 0	1.1.1 3 (tbc)  1.1.2 2 (tbc)  1.1.3 2 (tbc)	1.1.1 UNDRR / NDM reports (tbc)  1.1.2 UNDRR / NDM reports (tbc)  1.1.3 UNDRR / ESA / NDM reports (tbc)	

<p><b>Output 2</b> <b>relating to Outcome 1</b></p>	<p>1.2 Capacity building and regional exchanges for DRR and CCA are conducted in and among South Asian countries for enhanced partnership and coordination.</p>	<p>1.2.1 Number of persons (government officials) trained (disaggregated by sector and sex) on DRR/CCA competences with the support of the action (GAP III)</p> <p>1.2.2 Number of regional/multi-country fora, events, workshops organised for regional exchanges on DRR/CCA/ environmental management between South Asian countries (with participation of more than 3 countries from the region) with the support of the action</p> <p>1.2.3 Number of South Asian stakeholders (disaggregated by sector and sex) accessing the DRR/CCA community of practice established with the support of the action</p>	<p>1.2.1 0</p> <p>1.2.2 0</p> <p>1.2.3 0</p>	<p>1.2.1 50 (tbc)</p> <p>1.2.2 4 (tbc)</p> <p>1.2.3 20 (tbc)</p>	<p>1.2.1 UNDRR / ESA / NDM reports (tbc)</p> <p>1.2.2 UNDRR / NDM reports (tbc)</p> <p>1.2.3 UNDRR / ESA / NDM reports (tbc)</p>	
<p><b>Output 3</b> <b>Relating to Outcome 1</b></p>	<p>1.3 Knowledge dissemination and advocacy on the importance of science-based risk knowledge, including Earth observation, are enhanced to support the design, update and implementation of DRR and CCA policies and strengthen evidence-based decision making for sustainable development in South Asia.</p>	<p>1.3.1. Number of knowledge products on the use of EO in DRR/CCA published with the support of the action</p> <p>1.3.2 Number of policy-making decision support tools, including in support of gender-responsive policies and measures, developed in South Asian countries with the support of the action</p> <p>1.3.3 Number of cross-border guidelines/ protocols co-developed by South Asian stakeholders with the support of the action</p>	<p>1.3.1 0</p> <p>1.3.2 0</p> <p>1.3.3 0</p>	<p>1.3.1 10 (tbc)</p> <p>1.3.2 10 (tbc)</p> <p>1.3.3 4 (tbc)</p>	<p>1.3.1 ESA / UNDRR / NDM reports (tbc)</p> <p>1.3.2 Parliamentary reports / NDM reports</p> <p>1.3.3 JRC/UNDRR / NDM reports (tbc)</p>	
<p><b>Output 1</b> <b>relating to Outcome 2</b></p>	<p>2.1 Access to, generation and use of EU EO systems, tools and expertise throughout the DRR and CCA value chains are promoted to specific needs and sectors of the South Asian countries to reduce natural hazard and climate change risks.</p>	<p>2.1.1 # of EO tools for DRR/CCA/environmental management developed/transferred/upgraded in South Asian countries with the support of the action</p> <p>2.1.2 Number of stakeholders from South Asian countries (disaggregated by sector and sex) accessing EO data and tools for DRR/CCA with the support of the action</p>	<p>2.1.1 0</p> <p>2.1.2 0</p>	<p>2.1.1 7 (at least one for each country in SAR) - tbc</p> <p>2.1.2 14 (at least two national-level institutions from each SAR country)</p>	<p>2.1.1 JRC/ESA / UNDRR / NDM reports (tbc)</p> <p>2.1.2 JRC/ESA / UNDRR / NDM reports (tbc)</p>	

<b>Output 2 relating to Outcome 2</b>	2.2 Capacities of South Asian countries for the use and application of EO data and tools on priority sectors along the EO-DRR-CCA value chain are strengthened.	2.2.1 Number of persons (government officials) trained (disaggregated by sector and sex) in South Asian countries to produce, collect, access, process and share EO data and tools for DRR/CCA with the support of the action (GAP III)	2.2.1 0	2.2.1 70 – tbc	2.2.1 JRC/ESA / UNDRR / NDM reports (tbc)	
		2.2.2 Number of open-access EO-based databases/platforms established/improved and made accessible to South Asian stakeholders with the support of the action	2.2.2 0	2.2.2 7 - tbc	2.2.2 JRC/ESA / UNDRR / NDM reports (tbc)	

## 4 IMPLEMENTATION ARRANGEMENTS

### 4.1 Financing Agreement

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

### 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 48 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 [For Budget Support only]

N/A

### 4.4 Implementation Modalities

The Commission will ensure that the EU 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<sup>12</sup>.

#### 4.4.1 Indirect Management with an entrusted entity

This action may be implemented in indirect management with an entity, which will be selected by the Commission's services using the following criteria:

##### SO 1

- Experience in managing/implementing actions at a multi-country / regional level,
- Experience in implementing and managing DRR actions, preferably in the South Asian context, with established engagement with senior-level government counterparts in South Asian countries,
- South Asia regional experience in policy advisory/design, capacity building and technical assistance in the field of DRR,
- Ability and experience in facilitating capacity building and knowledge sharing in DRR among government officials, policy makers and other relevant stakeholders,
- Demonstrated institutional commitment to mainstreaming gender, human rights, environmental and governance standards,
- Thematic and regional expertise in the implementation of actions to strengthen DRR and CCA and enhance regional coordination.
- Preference would be given to entities that are familiar with EU policies on DRR as well as Team Europe initiatives in the South Asia region.

##### SO 2

- Expertise and experience in providing European Earth observation data and related services at a global level, such as Copernicus,

<sup>12</sup> [www.sanctionsmap.eu](http://www.sanctionsmap.eu). Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

- Deep knowledge and expertise of best practices and successful approaches to utilising EO data for DRR,
- Existing portfolio of similar actions providing technical capacity building and fostering international cooperation's between developed and developing countries, to promote the use of EO data and services, especially for DRR,
- Ability and experience in facilitating capacity building and knowledge sharing (also through peer-to-peer knowledge transfer) among EO-related technical personnel, policy makers and other relevant stakeholders,
- Have the capacity to support South Asian countries and relevant stakeholders along the EO-DRR-CCA value chain.

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

For both Components 1 and 2, where indirect management as described in section 4.4.1 cannot be implemented due to circumstances outside of the Commission's control, the implementation modality could be changed from indirect management with a pillar assessed entity/entities, to direct management through grants for the full amount indicated in section 4.6.

- Grants (direct management):

(a) purpose of the grant(s) -

To support the partner countries in South Asia in promoting European EO data and related services for DRR and CCA. Grants would contribute to the achievement of outcome 1 and outcome 2 (all outputs).

(b) Type of applicants targeted -

Public bodies, civil society organisations (CSOs), pillar and non-pillar assessed national and international organisations with experience and capacities in the sectors targeted by this action.

#### 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 realization 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)
<b>Implementation modalities</b> – cf. section 4.4	
<b>Specific objective 1:</b> Strengthen capacities and regional cooperation and coordination, policy dialogue and awareness raising on disaster risk reduction (DRR), climate change adaptation (CCA), including gender-responsive climate-mitigation and climate-adaptation plans, and related environmental management in South Asian countries	5 000 000
Indirect management with an entrusted entity – cf. section 4.4.1	5 000 000
<b>Specific Objective 2:</b> Enhance availability, access and use of spatial information for disaster risk reduction (DRR), climate change adaptation,	7 000 000

(CCA), and related environmental management through existing EU Earth observation systems and tools tailored to the contexts of South Asian countries	
Indirect management with an entrusted entity – cf. section 4.4.1	7 000 000
<b>Evaluation</b> – cf. section 5.2 <b>Audit</b> – cf. section 5.3	may be covered by another Decision
<b>Contingencies</b>	NA
<b>Totals</b>	12 000 000

#### 4.7 Organisational Set-up and Responsibilities

The Programme governance will include the setting up of a Programme Steering Committee (PSC). The PSC will be set up, to ensure an overall coordination, steering and monitoring of the implementation of the two components. It will provide policy and strategic orientations to the Programme as well as monitor overall performance and coherence. The PSC is the key policy driver and will ensure coordination among the various stakeholders in order to facilitate the delivery of the expected results of the programme.

Detailed composition of the programme steering committee will be defined at inception stage.

Project implementation working groups will be established for components. 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 PSC. The implementing partners will also report on their respective work contributing to the implementation of the action.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission will 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. Each implementing partner will have specific responsibilities for monitoring and reporting under this action. The existing results framework outcomes and associated outputs for programmes being supported which are tracked and reported annually, will be the key reference documents for this purpose. Indicator values will be measured at regional or on a country-by-country basis depending on the nature of the activities. 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. Indicators shall be disaggregated at least by sex.

All monitoring and reporting shall assess how the action is taking into account the human rights based approach and gender equality.

## 5.2 Evaluation

Having regard to the nature of the action, evaluation(s) will be carried out for this action or its components via independent consultants or through a joint mission.

A mid-term evaluation will be carried out for problem solving and learning purposes, in particular with respect to sharing lessons learnt with other components of the action.

A final or ex-post evaluation 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 EU programme focusing in the EO-DRR-CCA value chain in South Asia and may serve as a first building block for future more comprehensive EU support to EO/DRR, CCA and environment management at regional level.

The Commission shall inform the implementing partner at least 2 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.

In addition, all evaluations shall assess to what extent the action is taking into account the human rights-based approach, as well as how it contributes to gender equality and women's empowerment and disability inclusion. Expertise on human rights, gender equality and disability will be ensured in the evaluation teams.

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

## 5.3 Audit and Verifications

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 programs are in principle no longer required to include a provision for communication and visibility actions promoting the programs 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.