

TEMPLATE A

RESPONSE FOR SOLUTIONS: “Space2030” Agenda Mid-term Review

For Member States

NOTE BY SECRETARIAT: the following template is designed to allow Member States of the United Nations and permanent observer organizations with COPUOS to provide standardized responses to any of the 4 Overarching Objectives, and showcase their space solutions

Overarching objective [1]	Actions [e.g. 1.1]
Country/Observer Organization	Tunisia
Project partners	Ministry of National Defence (National Centre of Cartography and Remote Sensing) Ministry of High Education and Scientific Research
Short Project summary and goals	<p>CNCT is conducting a Research Program Contract that includes four research projects which are focused on the use of remote sensing techniques and advanced approaches in image processing to manage and extract information on natural resources (forest, soil and minerals) as an overarching objective.</p> <p>The fourth project deals with big data for smart cities. Its main objectives are:</p> <ul style="list-style-type: none"> • Developing a methodology for semi-automatic extraction of satellite data for large-scale and 3D urban mapping, • Developing and implementing a geographic information system on the web that will serve as a tool for the observation and monitoring of urban extension dynamics (2D and 3D). <p>Moreover, CNCT tries to elaborate spectral libraries for soils and minerals as national references, in order to support research development and applications in various sectors such as agriculture, mining, environmental monitoring and resource management. These spectral libraries would serve as a standardized tool for identifying and characterizing the different types of soils and minerals in Tunisia, permitting more accurate analyses and decision-making processes for both public and private stakeholders involved in these industries.</p>
Relevant SDGs	<p>[2] Zero hunger</p> <p>[6] Water and Sanitation</p> <p>[11] Cities</p> <p>[15] Biodiversity, Forests and desertification</p>
Space/Satellite solution:	The projects mentioned above are based on the use of multi sources geospatial data from different sensors especially those delivered freely . CNCT helps socio economic partners by offering them a new creative approach and methodologies based on the use of geospatial data in different sectors (Forest, Agriculture, Water, Mineral Resources Inventory and urban extensions’ management).
Project impact	The new approaches will be used by ministries and national institutions as stakeholders to manage resources by using data, approaches and platforms.
Reference	A signed convention between CNCT and MESRS

Overarching objective [1]	Actions [e.g. 1.2]
Country/Observer Organization	Tunisia
Project partners	National Centre of Cartography and Remote Sensing, Sahara and Sahel Observatory OSS Ministry of Agriculture, Water Resources and Fisheries
Short Project summary and goals	<p>A joint initiative from the African Union Commission and the European Union GMES & Africa, aims to respond to the growing needs of African countries to access and to use earth observation data for the implementation of policies for sustainable development, environment and natural resources management.</p> <p>This initiative aligns with the African agenda that aspires to a prosperous peaceful and integrated Africa with a robust and responsive African space program. It focuses on thematic areas reflecting Africa's development priorities including water and natural resources. Its implementation is concretised through the consortium of regional and national institutions in the African continent.</p> <p>In this regional project, CNCT is a member in the north African consortium and at a national level CNCT assures the national coordination of all the stakeholders involved.</p> <p>Four pillars concern the implementation of the GMES & Africa initiative: the infrastructure (installation of E-station distributed across certain African countries, Tunisia has its own E-station based in CNCT), the data and services produced, training and capacity building as well as awareness and engagement.</p>
Relevant SDGs	[2] Zero hunger [6] Water and Sanitation [11] Cities [15] Biodiversity, Forests and desertification
Space/Satellite solution:	E-station is a system of Earth observation data processing, designed to automatically acquire, process, visualize and analyse the key environmental parameters derived from the Remote Sensing data.
Project impact	<p>“The global monitoring for Environment and Security and Africa support Program” is a joint Program which intends to adapt and use the Copernicus data and services in the African context. It consists of three main services:</p> <ul style="list-style-type: none"> • Misland: the monitoring Integrated system for land degradation. • Misbar: The irrigation and water abstraction monitoring system is a service dedicated to water and agriculture. • GuetCrop: Crop Monitoring and Early Warning in North-Africa is an online decision support system which aims to « detect agricultural production drops; or anomaly “HotSpots” of agricultural production (crop & rangeland) using Remote Sensing (RS) and Meteorological data ». <p>The project organised many training sessions on those services at national and regional levels for all the stakeholders involved.</p>
Reference	GMES & AFRICA website

Overarching objective [2]	Actions [e.g. 1.1]
Country/Observer Organization	Tunisia
Project partners	Ministry of National Defence (National Centre for Cartography and Remote Sensing) Ministry of Environment (General Direction of Environment and life Quality) National Civil Protection Office
Short Project summary and goals	The CNCT takes part in the elaboration of the National Strategy of Disaster Risk Reduction. Its contribution is the promotion of space techniques and actions of awareness related to the importance of remote sensing in the management of disasters. The CNCT as focal point of UNSPIDER Program, is in charge of the integration of geospatial data in the cycle life of disasters from prevention to response and reconstruction. CNCT plays a pivotal role in the elaboration and the implementation of actions in the National Strategy of Disaster Risk Reduction.
Relevant SDGs	[1] End Poverty in all its forms [11] cities [13] climate change
Space/Satellite solution:	All types of images provided under the UNSPIDER program
Project impact	CNCT as focal point of UNSPIDER Program, aims to set up an operational process, which extracts information and provides all data to stakeholders in response phase of disasters.
Reference	website

Overarching objective [3]	Actions [e.g. 1.1]
Country/Observer Organization	Tunisia
Project partners	Ministry of National Defence (National Centre of Cartography and Remote Sensing) Ministry of Communication Technologies
Short Project summary and goals	<p>Many countries all over the world are developing, in the framework of implementing the 2030 agenda for sustainable development, their own spatial data infrastructure (SDI) to improve access and sharing of geospatial data.</p> <p>In this context and to strengthen national geospatial information management capacities, CNCT conduct a national project with the help of national stakeholders, which provides tremendous opportunity for the geospatial community to meet the unprecedented need for more and new sources of data covering all aspects of sustainable development.</p> <p>The main objectives of this project are :</p> <ul style="list-style-type: none"> • Enabling users to access updated, accurate, referenced, official geoinformation data. • Establishing a true partnership and cooperation between all the digital data users through the exchange of geographical data, their re-use and their evaluation in various related fields. • Developing the study offices' capabilities, surveying experts and reducing unemployment among technicians in the geomatics field.

	<ul style="list-style-type: none"> Ensuring the national sovereignty of the geographic information field.
Relevant SDGs	[1] End Poverty in all its forms [8] Economic Growth [11] cities [9] infrastructure, industrialization
Space/Satellite solution:	Satellite images or aerial photos
Project impact	The project will provide a national reference of geographic information addressed to all stakeholders from national institutions organised in 04 databases: topographic, ortho-photo, address, cadastral database.
Reference	

Overarching objective [4]	Actions [e.g. 1.1]
Country/Observer Organization	Tunisia
Project partners	Ministry of National Defence (National Centre of Cartography and Remote Sensing) Ministry of High Education and Scientific Research
Short Project summary and goals	Attending a webinar on " Introductory Technical Advisory Mission TAM on space law and policy to African Countries " held on December 2020. This webinar consisted in a training for the benefit of persons in charge of national spatial law elaboration in the African countries. This event was organised by UNOOSA in collaboration with the African Commission UNECA "United Nations Economic Commission for Africa".
Relevant SDGs	[16] peace, Justice and strong institution [17] Partnerships
Space/Satellite solution:	
Project impact	Stakeholders will be able to discuss and understand the content of a space law and will participate in the elaboration of policy and the national space law.
Reference	

Overarching objective [4]	Actions [e.g. 1.2]
Country/Observer Organization	Tunisia
Project partners	Ministry of National Defence (National Centre of Cartography and Remote Sensing)
Short Project summary and goals	Attending a training organised by UNOOSA in 2021, in the framework of the project « Space law for new space actors ». This project aims to build the capacities of the persons involved in the elaboration of the national space law.
Relevant SDGs	[16] peace, Justice and strong institution [17] Partnerships

Space/Satellite solution:	
Project impact	Stakeholders will be able to discuss and understand the content of a space law and will participate in the elaboration of policy and the national space law.
Reference	Certification

Overarching objective [4]	Actions [e.g. 1.3]
Country/Observer Organization	Tunisia
Project partners	National Centre of Cartography and Remote Sensing (CNCT) Inter-Islamic Network on Space Sciences and Technology (ISNET)
Short Project summary and goals	Attending a webinar on « Policy and Spatial Law » in February 2021 organised by ISNET. This event aimed to explain and introduce the content of space law and policy that will help members to elaborate their policy and national space law in their respective countries.
Relevant SDGs	[16] peace, Justice and strong institution [17] Partnerships
Space/Satellite solution:	
Project impact	Stakeholders will be able to elaborate policy and the national space law.
Reference	certification

Overarching objective [4]	Actions [e.g. 1.4]
Country/Observer Organization	Tunisia
Project partners	National Centre of Cartography and Remote Sensing (CNCT) Indian Space Research Organisation (ISRO)
Short Project summary and goals	A memorandum of Understanding (MOU) is conducted between the government of the Republic of Tunisia and the government of the Republic of India for the cooperation in the exploration and use of outer space for peaceful purposes. The areas of cooperation include : <ul style="list-style-type: none"> • Remote sensing of the earth • Satellite Meteorology • Satellite communication and satellite based navigation • Space science and planetary exploration • Use of spacecraft and space systems • Practical application of space technology
Relevant SDGs	[2] Zero hunger [6] Water and Sanitation [11] Cities [15] Biodiversity, Forests and desertification [17] Partnerships

Space/Satellite solution:	Space Technology : development of small satellites Disaster Management by the use of satellite images New approaches based on geospatial data in the fields of Water and Agriculture.
Project impact	establishment of joint working group proposition of joint projects on common thematic and mutual interest
Reference	Memorandum of Understanding signed between Tunisian and Indian governments.

Overarching objective [4]	Actions [e.g. 1.5]
Country/Observer Organization	Tunisia
Project partners	National Centre of Cartography and Remote Sensing (CNCT) Space and Upper Atmosphere Research Commission (SUPARCO)
Short Project summary and goals	<p>A Memorandum of Understanding (MOU) between CNCT and SUPARCO Pakistan, is conducted to establish a framework for cooperation in the field of space science, technology and applications on the basis of equality, mutual benefits of the parties. The main areas of cooperation and potential cooperation are:</p> <ul style="list-style-type: none"> - Space technology applications: Agriculture, forest, coastal resource Management, Disaster Management... - developing necessary technologies and infrastructure for sharing satellite images, - Exchange and visit of experts of both countries. <p>The MOU is finalized and will be signed soon.</p>
Relevant SDGs	[2] Zero hunger [6] Water and Sanitation [11] Cities [15] Biodiversity, Forests and desertification [17] Partnerships
Space/Satellite solution:	Disaster Management by use of satellite images New approaches based on geospatial data in different fields identified in the MOU.
Project impact	Establishment of joint working group Proposition of joint projects on common thematic and mutual interest
Reference	Memorandum of Understanding