



OBSERVATOIRE DU SAHARA ET DU SAHEL
SAHARA AND SAHEL OBSERVATORY



**GMES
AND AFRICA**



**Global Monitoring for Environment and Security & Africa
(GMES&Africa)**

OSS North Africa Consortium

Regional workshop – North Africa

**“Earth Observation for Decision Support
in Water and Natural Resources Management
in North Africa”**

October 19th – 21st, 2022

(Hybrid event)

Concept note (draft)



The OSS will be organizing the regional workshop for North-Africa from October 19th to 21st, 2022 in Tunis (Tunisia). The event will bring together the North-African stakeholders, the consortia partners from the Water & Natural Resources theme as well other relevant end-users and key institutions involved in the GMES&Africa project. Due to COVID constraints, the workshop will be held in hybrid mode, where virtual access will be ensured through Zoom and broadcast through the OSS GMES YouTube channel.

The Global Monitoring for Environment and Security & Africa (GMES&Africa) Support Programme is the achievement of the longstanding cooperation between Africa and Europe in space science & technology, which is one of the key priorities of the long-term EU-Africa Joint Strategy. In October 2006, the Maputo Declaration provided the necessity for the EU-Africa partnership to confirm the commitment to avail European infrastructure and facilities, under the Copernicus programme to Africa, Caribbean, and Pacific (ACP) countries.



The second phase of the **«Earth Observation for Sustainable Land and Water Management in North Africa»** project is a continuation of the first phase and aims at addressing and solving global challenges in North-Africa as well as contributing to a more sustainable management of water and natural resources and tackling climate change based on Space science and technology applications.

The overall objective of this project is to support decision-making in the sustainable management of natural resources and water through products and services based on Earth Observation (EO) data and techniques. It is achieved through the following specific objectives:

- Developing and sustaining decision support services for natural resource and water managers;
- Boosting regional cooperation and promoting the exchange of know-how on natural resources and water management in North Africa; and
- Capacity building and awareness raising for all partners and end users on the potential and better consideration of technical data and Earth Observation applications.

The second phase activities are based on the capitalization of the first phase achievements with respect to the operational EO services in support of the sustainable management of natural resources and the socio-economic transformation of North-Africa aligned with the national policies and strategies. Two services will be operationalized during this phase:

- Water abstractions and seasonal agriculture monitoring;
- Land Degradation Monitoring and Assessment.

Presentation

regional GMES&Africa North-Africa workshop will be organized by the Sahara and Sahel Observatory (OSS) from October 19th to 21st 2022 in hybrid mode in the Laico Hotel, Tunis (Tunisia).

The theme of this workshop is “**Leverage Earth Observation in support to decision making**”. It will be held with the aim of raising awareness on EO potentials in water and natural resources management, on the one hand, and to discuss how to bridge the gaps for further strengthening of EO transformation into actionable information for the decision-making chain in different fields, on the other hand.

The workshop will be held back to back with the third advanced geospatial science and technology [TEANGEO conference](#), organized by CRTEAN under GMES&Africa umbrella.

About 100 representatives of Earth Observation thematic experts and water and natural resources managers, stakeholders and decision makers, end-users, academia, the private sector, research institutions from North-Africa and all over the world are expected to attend the three-day event.

The conclusions of the regional workshop, action items and key recommendations will be endorsed at the end of the workshop by the participants and will be considered as valuable input for the next regional workshops as well as GMES&Africa activities. The full report and proceedings will be produced and disseminated online to the participants.

Objective

In North-Africa, despite the high potential of freely available satellite imagery at adequate spatial and temporal resolutions for efficient water and natural resources monitoring and the stronger importance of EO for SDGs' monitoring as well as for national and regional plans and strategies, a weak integration in decision making is observed. It can be due to the reduced awareness, lack of capacity building, weak infrastructure for data access, etc.

The regional workshop aims to:

- Raise awareness on EO potentials for sustainable management of water and natural resources as well as for SDGs' monitoring and decision making;
- Showcase the achievements of GMES&Africa – North-Africa;
- Share best practices between the consortia partners on how to use EO in support to sustainable management of water and natural resources and reinforce the regional exchanges and dynamize cooperation among partners.

Expected results

At the end of the workshop, it is expected that:

- Greater awareness on the benefits of Earth Observation through GMES&Africa in North-Africa for SDG's monitoring and in support to decision making and sustainable management of water and natural resources;
- Communication channels between GMES&Africa key partners and end-users, decision makers and stakeholders, academia and private sectors are strengthened;
- A roadmap for EO integration in water and natural resources management is developed; and best practices sharing between the consortia partners on solving environmental issues using EO data and products is promoted.

Target groups

The target groups are:

- The consortium partners'
- International and regional organizations
- GMES&Africa technical partners
- End-users of the different services developed
- Academia and Private sector
- Highly involved stakeholders.

Participants

Participants will represent mainly the institutions and end beneficiaries, involved in the second phase of the GMES&Africa project, universities and stakeholders.

Expected participants are from the 06 Member States of North-Africa, Regional Economic Communities, the African Union Commission, the European Commission, regional and international institutions, Non-governmental organisations and the United Nations system.

Participants will also come from among GMES&Africa involved institutions and academia, private sector and GMES&Africa final beneficiaries such as policy and decision makers, water and natural resources managers, etc.

All other interested entities or organizations will be welcome to participate.

Appointments

The workshop sessions will be designed according to the following main themes:

- EO as an instrument for land degradation monitoring, water abstractions and seasonal agriculture monitoring
- Potential of emerging technologies such as cloud computing, big data analytics and machine learning in supporting decision making;

- Spirit of the second phase of GMES&Africa and its new expected outputs;
- The way forward for a better integration of EO in decision making;
- Focus on communication and outreach, gender dimension;
- Role of academia and private sector in GMES services delivery and operationalisation.

COVID-19 related health measures will be applied, which means that only a limited number of people will be allowed in the meeting room at the same time while observing social distancing and travel constraints.

There will be an exhibition area in the workshop venue (Tunis) where GMES&Africa and its stakeholders, partners and users can demonstrate and exhibit their products and services. It will be a venue for free interaction among users and service providers. It's foreseen that the exhibition management takes into consideration the COVID-related constraints, which implies that a limited number of persons are allowed to visit the different stands at the same time while observing social distancing and movement constraints.

Venue, date and organisational structure of the workshop

The regional workshop will be held in the Laico Hotel in Tunis (Tunisia), on October 19th - 21st, 2022 in hybrid mode.

The sessions will be organized in the form of panel sessions where, for each theme, starter presentations will be undertaken, followed by the panel discussions that will be moderated to highlight the opinions and outputs for each panel member, then the debates will be open to the different participants from various spheres and backgrounds.

Provisional Agenda

Date	Activities
Day 1 – October 19th, 2022	
Introductory Session: Welcoming ceremony	
08h00 – 09h00	Welcome and participants registration and installation
09h00-10h00	Opening Statements by: Representative of AUC Representative of the Ministry of Agriculture, Tunisia Mr. Nabil BEN KHATRA, Executive Secretary of the OSS
10h00-10h30	Family photo Stands visit Coffee break
Session 1: Presentation of GMES&Africa	
10h30 – 12h30	Introductory presentations: - Overview of GMES&Africa – North Africa, OSS - Geospatial data standards and interoperability: FAO experience Theme 1: High level panel of experts: EO as an instrument for sustainable management of water, natural resources in North Africa: current state and the main challenges - Representative of AUC, OSS, UNCCD, FAO, JRC
12h30 – 14h00	Lunch break
Session 2: GMES for land degradation monitoring	
14h00-16h00	Introductory presentations: - Overview of LDN guiding principles, indicators and approaches, UNCCD. - Overview of GMES&Africa land degradation monitoring service, OSS. - Overview of JRC support for developing land degradation monitoring, JRC. - Overview of SEPAL 15.3.1 module and applications, FAO. Theme 2: EO as an instrument for land degradation monitoring in North Africa Expert group discussion: - Representative of the environment managers'/end-users' segment in North Africa - Representative of the consortium, academia and private sector
16h00 – 16h15	Wrap-up of day 1
16h15-16h45	Coffee break

Day 2 – October 20 th , 2022	
Session 3: GMES for seasonal agriculture and water abstractions monitoring	
09h00-10h30	Introductory presentations: • Overview of the GMES&Africa seasonal agriculture monitoring service, OSS • Overview of agriculture monitoring and food security, JRC Theme 3: EO integration in decision making in the agriculture sector in North Africa Expert group discussion: • Representative of agriculture managers'/end-users' segment in North Africa • Representative of academia/private sector • Representatives of the consortium
10h30 – 11h00	Coffee break
Session 4: New emerging technologies	
11h00-12h30	Introductory presentations: • Overview of BDAP-JRC • Overview of Digital Earth Africa Theme 4: EO Emerging Technologies (big data, cloud computing and machine learning) in support to decision making Expert group discussion: • Representative of agriculture managers'/end-users' segment in North Africa • Representative of the consortium, private sector and academia
12h30 – 14h00	Lunch break
Session 5: Academia and private sector role for EO integration	
14h00-16h00	Introductory presentations: • Overview of the academia and private sector role for EO services operationalisation Theme 5: role of academia and private sector in EO integration Expert group discussion: • Representative of agriculture managers'/end-users' segment in North Africa • Representative of academia and private sector • Representatives of the consortium
16h00 – 16h15	Wrap-up of day 2
16h15-16h45	Coffee break

Day 3 – October 21 st , 2022

Session 6: Gender dimension in GMES&Africa	
09h00-10h30	- Overview of “Women in GMES” Theme 6: Women in GMES - Representative of women in the GMES bureau - Representative of women in the research field - Representative of women in the private sector field
10h30 – 11h00	Coffee break
Session 7: Communication and outreach in GMES	
11h00-12h30	- Overview of communication activities in GMES II Theme 7: Communication for a better advocacy of EO utility in the field of water, natural resources in North Africa Expert group discussion: - OSS Communication Expert - Representative of end-user’s segment, WNR managers segment - Representative of academia/private sector
12h30 – 14h00	Lunch break
Session 8: Roadmap for EO integration in decision making	
14h00-16h30	Theme 8: The way forward for EO integration in decision making for a more sustainable management of Water and Natural Resources Management Expert group discussion: - Executive Secretary, OSS - GMES&Africa program Coordinator, AUC - Representative of JRC, UNCCD, FAO - Representative of end-users’ segment - Representative of WNR managers segment - Representative of academia/private sector Open discussions Road map elaboration
16h30-16h45	Wrap-up of day 3
16h45-17h00	Closing ceremony
17h00-17h30	Coffee break