



EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

Directorate E – Space, Security and Migration
Disaster Risk Management

Network of Drought Observatories in the EU

Terms of Reference

Europe is facing more frequent, longer and more severe droughts. This tendency is projected to worsen in the coming decades. There is an urgent need for adaptation, even in regions historically less exposed to drought.

Drought Observatories (DO) and other related climate services have been developed to better monitor and understand drought events and provide early warning. The [European Drought Observatory \(EDO\)](#) operated by the European Commission's Joint Research Centre (JRC), delivers up-to-date information on the occurrence, evolution and forecasts of droughts in Europe. It is part of the [Copernicus Emergency Management Service \(CEMS\)](#)¹ and is the primary climate service for droughts at the European level.

In addition, several regional and (sub-)national Drought Observatories are operated by various governmental and non-governmental institutions, and the EU Member States are cooperating on water-related issues through existing structures and networks (e.g. River Basin Commissions).

However, drought monitoring and impact and risk assessment remain complex and specific challenges such as impacts across different but interconnected water-dependent sectors, across regions, and from the local up to the continental level, create a need to exchange information and expertise between the DOs in the EU. To that end, the [European Drought Observatory for Risk and Adaptation \(EDORA\)](#) project is establishing a network of Drought Observatories.

Network objectives

The network of Drought Observatories in the EU (hereafter referred to as the network) **aims to enhance the capacity of both the EU and the Member States to perform drought monitoring, early warning, and impact and risk assessment.** Therefore, the network encourages and assists in the creation, continued operation, further development and increase of the compatibility of the services offered by DOs in the EU. The network promotes knowledge exchange and aims to offer technical, scientific, and operational support for data and services related to drought monitoring, early warning, risk and impact assessment across different sectors and regions in the EU, including adaptation to climate change.

¹ CEMS is part of the Copernicus services and provides information for emergency response to different types of disasters, including meteorological hazards, as well as the prevention, preparedness, response and recovery activities.

Specifically, the objectives of the network are:

- To establish and maintain relationships between DOs in the EU, and to set-up and support a multi-disciplinary community of technical and scientific drought experts.
- To provide a platform for sharing knowledge and experience, organising activities (e.g. trainings, workshops, seminars) , and fostering opportunities for wider collaborations on drought issues in the EU.
- To encourage and support multilateral compatibility and exchange of data, services and methodologies in drought monitoring and forecasting.
- To share methodologies for drought risk and impact assessment, and the extension of these methods to the assessment of the effectiveness of sectoral sustainable adaptation actions.
- To identify and address technical and scientific gaps in drought monitoring, early warning, impact and risk assessment, and their integration into related adaptation strategies across different sectors and regions in the EU.
- To communicate and disseminate the results of the activities of the network on drought monitoring, risk and impact assessment, and associated sectoral adaptation actions within the existing initiatives (e.g. EDO/GDO User Meeting, CIS meetings)

The network is not a platform for policy development, but it will report to and coordinate with the Common Implementation Strategy for EU Water Law and other relevant policy-oriented structures, which may draw upon the network for technical and scientific support.

Tools and instruments

JRC (EDO) maintains a collaborative digital workspace on behalf of the network, for general information and to support the activities (e.g. discussions, document sharing, etc.). JRC (EDO) will assist in addressing additional needs, functions and features that may emerge, as well as provide training to users, if requested.

Publicly available content related to the network will be hosted on a dedicated section of the EDO website.

A functional mailbox is available to submit communications or contributions for further dissemination to the network, practical queries, and other issues: JRC-EDORA@ec.europa.eu.

Benefits for network members

By joining the network, members may benefit from the following:

1. Networking

- Access to a channel of communication with drought experts across the EU and to a permanent platform for knowledge exchange.
- Access to multi-disciplinary competences and complementary knowledge in the network.
- Dedicated conference sessions and workshops.
- Europe-wide reach to advertise events, system updates, data release, tenders, jobs, etc.
- Periodic communications on relevant issues.

2. Data products

- Access to the pan-European drought impact database to be established in the European Drought Observatory for Resilience and Adaptation (EDORA) project, and inform its development and growth.

- Access to drought risk data, methods, and products (e.g. the EDORA sectoral drought risk atlas), and contribution to their development.
 - Dissemination material on the interpretation of data products.
3. Knowledge and development
- Technical and scientific support for the development of: (national) drought monitoring and forecasting; impact and risk assessments; drought management and adaptation plans, upon partner request.
 - Training sessions and written reference material on data products and services
 - In case of data exchanges with EDO, assistance with database design, protocols and use.
 - A discussion hub for new drought products and research activities.

Recommendations for partners

Participation in the network and network activities is voluntary and non-binding, but establishing informal commitments would be beneficial and highly recommended. These commitments can be established and reviewed in bilateral meetings with JRC.

In general, for the network to be active and effective, each partner is expected to:

- Maintain an active contact point for communication (email and telephone) and give notice in case the primary contact point should become obsolete.
- Agree to receive communications from the network, and provide content, amendments or suggestions when relevant (e.g. to the network strategic objectives).
- Inform the network about own relevant activities, data and updates and, if possible, make data accessible to the network through EDO.
- At partner's discretion, contribute to the pan-European drought impact database and risk assessment methodologies that will be established by the EDORA project.
- Attend network and EDO meetings (in presence or remotely) once or twice a year, to get and share updates on drought related topics.
- Join the network digital workspace and, at the members' discretion, be proactive in posting queries, updates, advertise events, etc.
- Reply to outreach from EDO or network members, for surveys, or feedback on drought events and impacts that occurred and provide insight on specific issues of partner expertise.

Network governance

The organisation and coordination of the network is led by JRC (EDO), DG ENV will co-lead the network to ensure coherence with actions on drought in the EU and the objectives of the EDO. To that end, JRC (EDO) and DG ENV will review and, if necessary, revise the functioning of the network at least once per year, or upon members' request.

JRC (EDO) and DG ENV will draft strategic objectives to guide the activities of the network based on interactions with or requests from network members, EU Member States or other EU bodies and propose these to network members to comment on and amend. These strategic objectives will be revised periodically. Network members may take on the coordination and management of specific network activities or tasks, assisted by JRC (EDO) and DG ENV as needed.

JRC(EDO), in cooperation with DG ENV, will maintain the directory of network member contact points.

The primary network contact point is the functional mailbox: JRC-EDORA@ec.europa.eu