EDMO Scientific Focus

Identify and mitigate threats and risks to a healthy online information environment

EDMO brings together experts and organisations from the digital media fields in the widest sense. This includes fact-checkers, academic researchers, media professionals, media literacy experts to better understand and analyse online disinformation, in collaboration with - among others but not exclusively – online platforms, community leaders and national regulatory authorities. It promotes scientific knowledge on online disinformation, advances the development of fact-checking services and supports media literacy programmes. As such, EDMO offers a body of facts, evidence and tools that gathers stakeholders and acts in the interest of society.

EDMO's Scientific Focus acts as a background framework to guide the work of EDMO in all of its activities aimed at identifying and mitigating threats and risks to a healthy online information environment, including when organizing events and providing training, and to inform its overall approach to tackling online disinformation. Within its broader role as enabler and collector of activities aiming at countering online disinformation, EDMO may be involved in advising on the scientific priorities of externally funded research, media literacy and fact-checking projects.

EDMO will also act in a scientific advisory role to the European Media and Information Fund (EMIF). In this context, EDMO's Scientific Focus will act as a framework to guide the scientific priorities of EMIF interventions in support of fact-checking and media literacy initiatives, as well as fundamental research projects, with a view to addressing the phenomenon of online disinformation in Europe. In particular EDMO's scientific Focus will help define the scientific priorities for EMIF's interventions in funding "Multidisciplinary investigations on Disinformation" (medium projects), "Studies and Sandboxes" (large projects), and "Actions in support of Media Literacy" (large projects).

Principles of our approach:

1. Societal impact-oriented

All research related to EDMO activities needs to demonstrate its potential to have a significant societal impact. This implies that it creates value in terms of its contribution as to how society operates in a tangible, transparent and preferably measurable way. It also means that the research outcomes can be applied in the targeted areas and that the knowledge generated is directly relevant to these areas. An impact-oriented research approach will also allow evaluating and assessing the direct or indirect effects of interventions and initiatives, so as to respond to the question "what works?".

2.   Knowledge has to benefit the EU

The research should aim at strengthening the knowledge on how disinformation is created and spread in the EU and at EU member states' level. Research can be carried-out also by non-EU researchers provided that the research focus is on the EU. Research should specify its potential for significant societal impact by answering the question, "what works?" in relation to a particular problem, initiative or intervention. The relation between research outcomes and anticipated impact should be transparent and open to independent evaluation.

3.   Scientifically grounded

EDMO aspires to advance original and high-quality research on disinformation. For this, it places value on the grounding of new insights into this phenomenon on rigorous scientific theories, hypotheses and methods. It also encourages the development of hybrid approaches that combine methods from the empirical sciences with those of the humanities. In addition, EDMO welcomes research that brings to bear the latest tools and techniques from data and information science and dynamical systems to the challenges the field of disinformation is facing.

4.   Accessible and well-documented data

EDMO prioritizes research with accessible and well-documented datasets with high replicability that is not tied to exclusive and proprietary access to data from platforms and digital media organizations. Researchers are encouraged to use rigorous and legal methods for digital data collection; established (e.g. surveys, APIs, scraping, usage diaries, eye-tracking, experiments, simulations, census data, available archives and repositories, internet panels) as well as innovative methods to collect trace data (e.g. bots, data portability programs, apps). Research must respect applicable privacy and data protection rules.

5.   Ethical principles

European legislation and ethical standards such as the European Code of Conduct for Research Integrity and the EU General Data Protection Regulation must be respected as well as the ethical standards within the relevant research fields.

6.   Open to all

Research within the framework of the EDMO activities can be carried out by any research institute, NGO or other organisation with a proven track record in scientifically-grounded high-quality research which meets the specific eligibility criteria of the call.

Focus areas:

EDMO identified a number of focus areas. This list is not intended to be exclusive and will adapt to the developments in the online disinformation sphere and in the tools and strategies to counter it.

A) What is disinformation? The nature and flows of disinformation and associated phenomena

1. Archetypes and core features of disinformation narratives
2. Radicalization pathways' network structures and dynamics
3. Categories of disinformation
4. Categories and logics of influence(rs)
5. Cascade dynamics across digital platforms
6. Disinformation as a symptom of more fundamental structural changes
7. Agents and consumers of online disinformation
8. Relation between information and disinformation

B) What are the references? Ontology and epistemology

9. Establishing ground truth as ontological reference for humans and algorithms
10. Models of "truth" and "facts" in the real-world and cyberspace
11. Fact-checking methods, technologies and practices

C) Who is part of the disinformation cycle?

12. User modelling and the psychological and neuronal principles underlying the construction, impact and propagation of disinformation
13. Disinformation and its demographics and propagation
14. Agents of online disinformation
15. Assessing media literacy and resilience
16. Public mental health impact of disinformation
17. Levels of media literacy among the public
18. Consequences of online disinformation for democracy
19. Consequences of online disinformation for public understanding (e.g. of science, health)
20. Motivations behind the spread of disinformation (political, financial, psychological, social, etc.)

D) What enables disinformation? Digital (communication) infrastructures: Algorithms, big data and AI

21. Big data analytics, access and visualization of disinformation
22. Online assessment of disinformation creation, consumption and propagation (also outside of the platforms)
23. The future of disinformation and the hijacking of deep faked reality
24. The algorithmic modulation of disinformation and disinformation campaigns
25. The construction and probing of a potential algorithmic transparency solution

26. The construction and probing of sustainable data sharing models with a balance between science for society and privacy for people
27. Fundamental structural dynamics influencing disinformation and associated phenomena
28. Cybersecurity aspects of disinformation
29. Wargaming future disinformation campaigns and defensive measures
30. Principles for the normative assessment of disinformation beyond the precautionary principle
31. Economic frameworks for estimating the cost of disinformation
32. Design of services that host and amplify or target disinformation
33. Market concentration in the online environment

E) How to respond? Public knowledge, digital and media literacy and policy responses

34. Education for media literacy/building resilience - what works?
35. Formal curricula based approaches vs informal
36. Extent to which media skills and knowledge lead to higher-order competences
37. Civic education and where and how media literacy fits
38. Influencers and influencing practices
39. Understanding the relation between disinformation and public connectedness
40. Investigating how evidence-based research findings on media literacy can be translated into policy
41. How to develop future-proof policies in line with new trends and developments in the online environment
42. Legal frameworks for protective and punitive measures including experimental methods to validate and evolve them
43. Online disinformation and human rights
44. EU and Member State policies to tackle disinformation, including comparative analysis with non-EU countries
45. Platform practices to fight disinformation
46. New governance bodies/solutions to tackle disinformation
47. The role and future of journalism and media.