



EUROPEAN COMMISSION

Directorate-General for Environment

Policy, Coordination and Resources

Environmental Knowledge, Eco-Innovation & SMEs

SCIENTIFIC COMMITTEE ON HEALTH, ENVIRONMENTAL AND EMERGING RISKS (SCHEER)

Request for a scientific opinion on emerging environmental issues within the field of "New technologies in the urban environment"

Commission Department requesting the Opinion: Directorate-General for Environment

1. Background

Responding to the need identified in Priority Objective 5¹ of the 7th Environmental Action Programme, ENV and its partners of the Environment Knowledge Community (EKC)² have established a foresight system for the systematic identification of emerging environmental issues (FORENV). This is also in line with the importance attributed to foresight and other forward looking tools in the Better Regulation guidelines,³ which stress that those tools "complement quantitative modelling with a system thinking and long-term approach".⁴

The EKC foresight system, FORENV, has the overall aim:

To identify, characterise and assess emerging issues that may represent risks or opportunities to Europe's environment, and to communicate these results to policy-makers and other stakeholders, encouraging appropriate and timely actions to be taken. Ultimately the aim is to enable policy makers and other stakeholders to prevent or effectively manage emerging risks, and to ensure that opportunities are identified and exploited.

FORENV is bringing together existing EU knowledge, expertise and practice on foresight and identification of emerging environmental issues. It shall provide regular and timely update to EU senior and middle management on issues which may represent opportunities and/or risks for the environment.

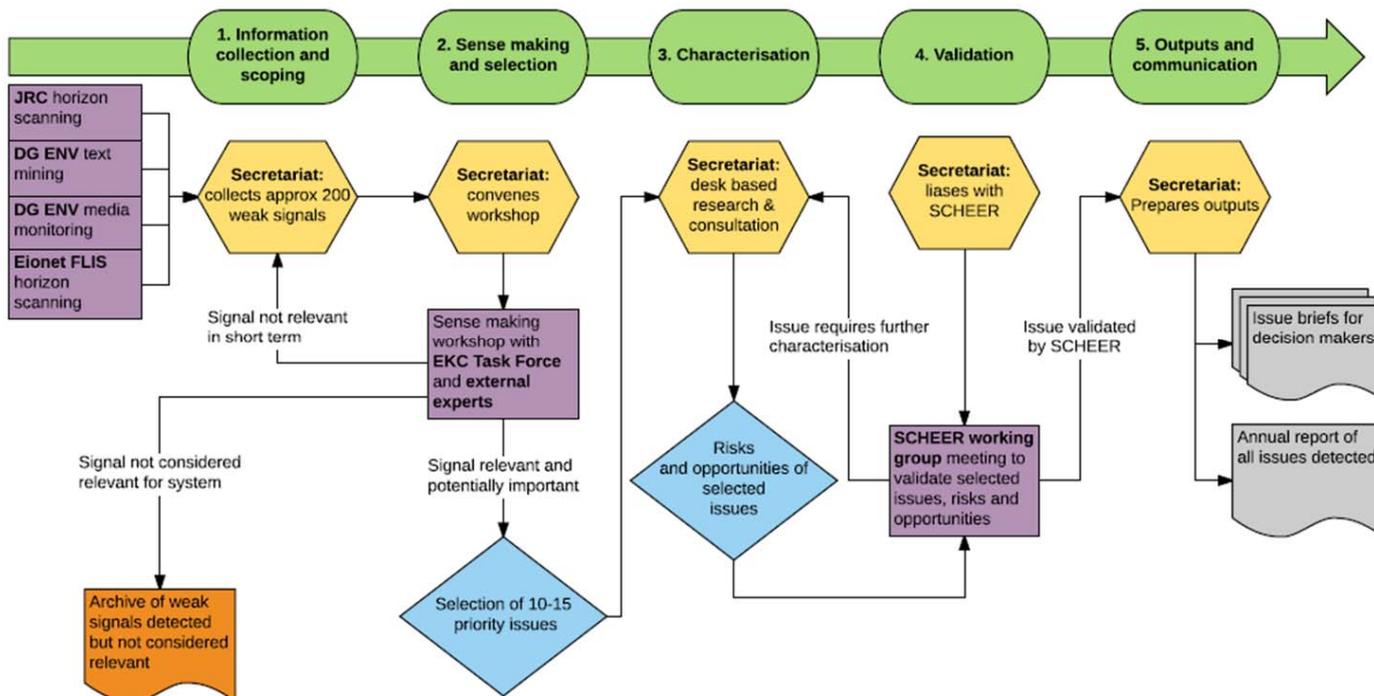
FORENV is based on a 5 step approach, as detailed in the image below:

¹ Priority Objective 5 requests 'that (by 2020) the understanding of, and the ability to evaluate and manage, emerging environmental and climate risks are greatly improved'. See <http://ec.europa.eu/environment/action-programme/>

² The EKC is an informal platform set up in 2015 by ENV, CLIMA, RTD, ESTAT, JRC and EEA to improve the generation and sharing of EU environmental knowledge.

³ See the Better Regulation Toolbox (pp. 14-16), complementing the Better Regulation Guideline, SWD(2015) 111.

⁴ Ibid.



The primary sources of information for the collection of information (Step 1) will be through the horizon scanning activities currently in place in the JRC, RTD and EEA/Eionet FLIS⁵; the text mining developed by ENV⁶; and the Science for Environment Policy newsalert managed by ENV⁷. Commission and external experts will be involved in the sense making and prioritisation (Step 2) and in the characterisation of the priority issues (Step 3). The Scientific Committee on health, environmental and emerging risks (SCHEER) is asked to peer review and validate the process (Step 4), and the final findings will be communicated to other Commission services and senior managers for discussion and follow-up action, where appropriate (Step 5).

In order to test the system, EKC partners are running a pilot phase in the field of "New technologies in the urban environment", for which the following timing is expected:

- 200 relevant weak signals of change are collected between July and September 2017 (Step 1);
- In October, internal (Commission) and external experts identify maximum 8 priority emerging environmental issues by analysing and clustering the weak signals (Step 2);
- In November, the 8 (maximum) emerging issues are characterised by FORENV Secretariat, to highlight in particular associated opportunities and risks (Step 3);
- Between December 2017 and February 2018 SCHEER shall review the characterisation and produce its opinion (Step 4);

⁵ European Environment Information and Observation Network (Eionet) for Forward Looking information and Services (FLIS). See: <https://forum.eionet.europa.eu/nrc-flis>

⁶ Using two JRC tools: Tools for Innovation Monitoring (TIM) and Europe Media Monitor (EMM).

⁷ http://ec.europa.eu/environment/integration/research/newsalert/index_en.htm

- In March 2018, the 2 or 3 most relevant emerging issues will be brought to the attention of the Commission senior management (Step 5).

The pilot will run from July 2017 until February 2018. After the pilot, the system will be run in annual cycles.

2. Terms of reference

In the system, SCHEER is requested to review and validate the outcomes of steps 1- 3 in the area of "New technologies in the Urban environment".

For Step 4, SCHEER is asked to review the evidence provided through the characterisation (delivered by ENV), comment on and validate the outcomes, in particular the risks and opportunities identified and the levels of uncertainty and scientific consensus.

In doing so, SCHEER should consider a set of key questions, including:

- Is the emerging issue identified likely to have the risks and/or opportunities described, or others?
- Is the described expected impact (positive or negative) on environment and human health plausible, including the expected time-frame?
- Can you assess and rank the relevance on the basis of environmental and human health impact of the identified emerging issues?

DG ENV will provide to SCHEER a characterisation of maximum 8 issues as evidence for its validation. The validation is expected to require a broad range of expertise, including on: risk assessment, urban environment, environmental media (land, water, air and noise, climate, natural resources) and human health.

3. Deadline

SCHEER is expected to provide its opinion by May 2018.