### THE GREEN OAT EVALUATION COUNCIL

# **Terms of Reference**

# Impact Assessment of the Public Subsidies to Meteorological and Earth Observation Activities

## 1. Background

In January, when France issued its first sovereign Green Bond, the Green OAT, it has committed to provide a thorough *ex post* environmental impact evaluation of green eligible expenditure under the guidance of the Green OAT Evaluation Council. As of end 2020, the Council has endorsed three public evaluation reports.

At its June 2020 meeting, the Council decided that the next evaluation should focus on the environmental impact of the public subsidies granted to the national meteorological agency and to Earth observation activities. In the French Finance Bill 2020, the corresponding consolidated expenditure eligible to the Green OAT is estimated to approximate €0.5 billion and includes the following components (the programme, action and title indications are references used in the budget process):

- State subsidy to *Météo-France* (programme 159, action 13; 27% of the subsidy is eligible, as it corresponds to system and organisation expenditure, plus 10% of the subsidy for applied research and innovation expenditure)
- Share of the state subsidy to *Centre national d'études spatiales* (CNES) dedicated to Earth observation at national level (programme 193, action 2, title 3)
- France contribution to the *European Organisation for the Exploitation of Meteorological Satellites* (Eumetsat) (programme 193, action 7)
- France contribution to the *European Centre for Medium Range Weather Forecast* (ECMWF) (a part of programme 172, action 18, title 6)
- France contribution to Earth observation activities of the *European Space Agency* (ESA) (programme 193, action 2, title 6).

*Météo-France* has been the French national meteorological agency since 1993 (prior to this date, national meteorological services were provided by a division of the Transport Ministry). The State subsidy today accounts for two third of Météo-France's total funding, with the balance mainly consisting in aeronautical fees and commercial revenues.

CNES is the French national space agency established in 1961. It played a central role in the development of the European launcher, Ariane. Earth, environment and climate now constitute one of the five missions assigned to CNES.

*Eumetsat*, is a 30-member intergovernmental organisation created in 1986 and headquartered in Darmstadt, Germany. Its primary objective is to establish, maintain and exploit European systems of operational meteorological satellites. Météo-France receives a grant from the State to fund its contribution to Eumetsat.

ESA is a 22-member intergovernmental organisation created in 1975 and headquartered in Paris, France. Strategic partner of the European Union and Eumetsat, acting as the space agency for Member States that do not have their own, the Agency develops many space activities for Europe, including space transportation, space sciences and exploration, human spaceflight, satellite telecommunications, Earth observation, and global navigation system by satellite.

*ECMWF* is a 22-member independent intergovernmental organisation established in 1975 and based in Reading, UK. It provides middle range and seasonal forecasts to the national meteorological services of its Member States and participates in international programmes of scientific research.

# 2. Content of the report

The report will feature a non-technical summary and a full study including detailed results and description of the methodologies used, so that the Council may assess the scientific robustness of the analysis.

The report shall begin with a brief description of Météo-France, its missions and the associated environmental objectives. This section of the report shall also present CNES, Eumetsat, ESA and ECMWF, outlining in particular their respective role as data and infrastructure providers to Météo-France. To proceed with the evaluation as such, the report shall assess, when relevant, the *ex post* impact of the subsidies against the four environmental objectives supported by the Green OAT – climate change mitigation, climate change adaptation, biodiversity protection and fighting pollution. The report will investigate the contribution of Météo-France and Earth observation to the prevention of natural disasters and to research on climate evolution in the long term. It will also attempt to assess the alignment of the subsidies with the EU Taxonomy.

The evaluation will require to identify the sectors with are the main users of data provided by Météo-France and Earth observation services. To ensure that the publication of the report is completed within an acceptable timeframe, the scope of the evaluation shall, however, be limited to those sectors whose environmental impact is deemed the most significant.

# 3. Detailed requirements on the report content

The Council expects the evaluation team to assess the environmental impact of the use of Météo-France and Earth observation data provided by the above-listed programmes on the following items.

Climate change mitigation

- Reduction of GHG and/or CO2 emissions in the selected economic sectors.
- Emissions due to the programme: Météo-France's supercomputer; satellites construction, launch and maintenance
- R&D

Climate change adaptation

- Adaptation in the selected economic sectors.
- Prevention of natural disasters
- R&D

**Biodiversity Protection** 

- Technological/practical changes achieved in the selected economic sectors
- R&D

Fighting pollution

- Pollution reduction in the selected economic sectors.
- R&D

The list is not limitative. Economic sectors studied should be selected following a materiality criterion, and shall include energy, housing, transport (air, land), agriculture, and human and goods safety.

All evaluations should be carried out in reference to a counterfactual scenario, the relevance and the rationale of which should be outlined in detail in the report or in its annex. Failing a better alternative, the counterfactual scenario might consist in a situation where the information currently provided by Météo-France and Earth observation satellites is not available at all.

The Secretariat of the Evaluation Council and the French administrations concerned shall facilitate the access of the evaluation team to information as well as its requests for meetings with third parties.

#### 4. Referees

Two referees will monitor the evaluation process and guarantee its independence. They will be chosen based on their academic records in relation to the scope of study.

The referees will

- Provide insights and recommendations to the evaluation team, on the basis of the terms of reference.
- Be given access to draft versions of the report, exchange with the evaluation team at earlier stages and provide guidance during the whole process. The Secretariat will provide technical support along the process.
- Provide the Council with a summary of their exchanges with the evaluation team and will give their opinion on the versions of the evaluation report submitted to the Council. This will take the form of a short presentation during two Council meetings.

### 5. Tentative timeline

The evaluation team being expected to regularly report on the progress of its work to the Council, the timeline is contingent upon the dates of the next Council meetings. Therefore, in the event that these dates are modified the timeline below shall be adjusted accordingly.

- **June 2021** The Evaluation Team presents to the Council the main findings and possible methodological issues.
- October/November 2021 The Evaluation Team presents to the Council an intermediate version of the report. The referees provide an assessment on the intermediate report.
- **Spring 2022** The Evaluation Team presents to the Council the final version of the report. The referees provide an assessment on the final report.
- **June 2022** The Council endorses the final report and approves its publication.