JRC’s activities on reference materials

Terms of reference for an evaluation panel

Background

The European Commission’s Joint Research Centre (JRC) has a well-established capability\(^1\) for the development and production of certified reference materials (CRMs). In 1960 it started a Central Bureau for Nuclear Measurements in Geel (Belgium) as part of the Commission’s tasks under the Euratom Treaty.

In 1973 the Commission established a Bureau Communautaire de Références (BCR) with the mandate to organise interlaboratory studies and to certify materials using existing laboratories in the Member States. From 1987-2002 this BCR became part of the European Community research framework programmes. The JRC institute in Geel with its experience in producing nuclear standards and references was involved in the BCR programme off and on. In 1993 the JRC changed the name of the institute into the Institute for Reference Materials and Measurement (IRMM). Eventually, in 1995 the JRC took over full responsibility for the management of the BCR CRMs, including storage, distribution and stability monitoring. At the same time the JRC became involved in the development of new measurement standards to meet emerging needs in for instance food control and clinical chemistry.

Today, the JRC’s certified-reference-materials catalogues contain more than 800 different materials available under the BCR, IRMM and ERM\(^2\) brands. More than 700 materials are related to environmental analysis, the analysis of food and feeding stuff, clinical chemistry, industrial applications and isotopic measurements, or certified for physical properties. A further more than 100 are nuclear certified reference materials.

The JRC is currently establishing a long-term strategy, which requires substantiation and a regular update of the rationale and vision for the various fields in which the JRC is active. For this purpose the JRC is convening a panel of external experts for the evaluation of its activities in the field of (certified) reference materials, also in line with the recommendation of the ex-post FP7 evaluation\(^3\) that the Joint Research Centre (JRC) should conduct dedicated sectoral evaluations.

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\(^1\) Accredited to ISO Guide 34 for the production of certified reference materials (accreditation by the Belgian Accreditation body BELAC - Registration No. 268-RM)

\(^2\) ERM is the registered trademark for European Reference Materials

Objectives and scope

The objectives of the evaluation are:

- To offer an account of the work and the achievements of the JRC in the field of (certified) reference materials
- To assess the relevance of the various parts of the JRC’s reference materials programme in a European as well as in an international (global) context;
- To provide the JRC management with recommendations for future priorities regarding the JRC’s reference-materials activities.

The evaluation should focus on: efficiency, effectiveness, relevance, coherence and EU added value, i.e. the five evaluation criteria of the Commission’s Better Regulation Guidelines. It should help to obtain an independent view on the effectiveness and efficiency of all related activities and projects and look at their output and impacts in a cost-benefit perspective.

The scope of the evaluation encompasses all reference materials developed, produced and/or distributed by the JRC including those for nuclear analytical techniques. The historical perspective of reference-materials development and production is relevant for the evaluation, but in principle the evaluation should cover the activities over the last ten years (2006-2015). The evaluation should include a forward look to help the JRC long-term strategy addressing the science and technical support required by the EU.

The evaluation questions

- To what extent is there a (formal) intervention logic for the JRC’s various activities in the field of reference materials?
- In which sub-areas of this field does the JRC have a unique role and/or is the use of its competence essential?
- To what extent is the JRC’s priority setting for its activities in this domain rational and transparent?
- To what extent are the JRC’s infrastructure and facilities appropriate for the reference-materials activities, also in a cost-effectiveness perspective?

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European added value is a key criterion for spending at EU level. In general terms, it is the additional value resulting from an EU intervention compared to the value that would have been otherwise created by member-state action alone, Commission Staff Working Paper “The added value of the EU budget”, SEC(2011)867 final.
• To what extent do the JRC’s reference-materials activities contribute to
  o the implementation of EU legislation?
  o advancing measurement standards?
  o creating EU added value?
  o international co-operation?

• To what extent does the ERM trademark facilitate the customers’ choice for the
  appropriate reference material?

• What are fundamental issues regarding the (future) (role) of the JRC in the field of
  reference materials, e.g. as developer, producer, in relations to relevant European
  and international organisations?

The evaluation panel

The evaluation panel will consist of five high-level external experts including the Chair. The
JRC Director General will select the experts, nominate them through expert contracts and
appoint one person to chair the group.

The character of the exercise requires that the experts cover a broad range of expertise (e.g.
scientific, technical, economic and politico-institutional) and that the composition of the
Panel respects equal gender opportunity.

Working method, deliverables and timetable

The Panel carries out the evaluation according to these Terms of Reference following the
objectives and answering the evaluation questions.

The Panel will build its assessment largely on written information in background documents,
an extensive self-assessment report, bibliometric analyses and market analyses, all provided
by the JRC. To help its judgement the Panel may want to complement its impressions
through JRC presentations, additional punctual expertise, or through contacts with
beneficiaries of JRC activities.

The JRC’s Adviser for Evaluation and Scientific Integrity assists the Panel in organising all
aspects of the evaluation, makes available a secretariat to the Panel and assists in
establishing the final report.

During the kick-off meeting the experts may propose to provide specific deliverables in the
form of individual contributions to the final report.

The ultimate deliverable is the final evaluation report, counting a maximum of 30 pages -
including an executive summary, excluding annexes - with an analysis of findings and a set of
conclusions and recommendations based on evidence. The JRC will make the final report available to its stakeholders and the public.

Proposed timing:

- February 2016: Appointment experts
- March 2016: The JRC provides a Self-Assessment Report to the Panel.
- April 2016: The kick-off meeting @JRC in Geel; establish an outline of the final report that addresses the evaluation questions; possible request for further information.
- May 2016: Mid-term discussion; preliminary results are included in the first draft report. List of possible recommendations.
- June/July 2016: Final discussion of the findings and list of recommendations in the completed draft final report; report to be finalised in written procedure.
- July/August 2016: Final report ready

The Evaluation Panel may choose to schedule some of their discussions by audio or video conference.

11/04/16
discussed and accepted by the Panel