Guide 3: Prioritising Potential Research Topics or Potential Network Topics
1 Background

This document outlines the process for the prioritisation of Potential Research Topics (PRTs) or Potential Network Topics (PNTs) submitted to EURAMET in response to a Stage 1 Call.

The EMPIR Committee has the overall responsibility to decide on the priority of the ideas included in the various PRTs received, and has chosen to rely primarily on the recommendations of two Sub-Committees of the EMPIR Committee (Research (SC-R) and Capacity Building (SC-CB)) charged with that responsibility.

Prioritisation must be conducted in a fair and transparent way, irrespective of the number of PRTs or PNTs received or their origin. Sub-Committee members must act on behalf of the EMPIR Committee and not their own national organisation(s) or country.

Following receipt, the PRTs or PNTs will be checked by the EURAMET Management Support Unit (MSU) and those that have been withdrawn or superseded by the submitter and that are spurious or ineligible will be separated and not included in the prioritisation (but will be made available to the EMPIR Committee for completeness).

The requirements for PRT or PNT submissions are defined in Guide 2: Submitting a Potential Research Topic or Potential Network Topic and form the basis of the prioritisation of ideas. A submitted PRT or PNT has to fulfil two requirements:

1. To provide sufficient information to enable EURAMET to evaluate it, in particular;
   - **PRTs only** Has a clearly specified scientific, metrological or technological challenge/problem/opportunity been identified? Is this justified? Why does it need to be addressed by a collaborative European approach rather than a national one? What is the scale of this need?
   - **PNTs only** Has a clearly specified area of major strategic importance for European metrology been identified? Is this justified? Why does it need to be addressed by a collaborative European approach rather than a national one? What is the scale of this need?
   - **PRTs only** What is the likelihood of the European metrology research community effectively addressing the challenge/problem/opportunity taking account of the progress required beyond the current state of the art?
   - **PNTs only** Is there a core network of European NMIs or DIs ready to make a clear commitment to contributing to joint work in this area?
   - How significant will the impact be for stakeholders if the proposed topic was successfully addressed?

2. To be suitable for incorporation into supporting documentation for Stage 2 of the Call, i.e.:
   - Sections B to D must remain anonymous (i.e. no references to the submitter, submitter’s organisation, co-authors and/or affiliations).
   - Text should be clear and concise.

Please note that the details of the individual and their organisation, submitting the PRT or PNT are included in the prioritisation spreadsheets for the EMPIR Sub-Committees during the prioritisation process. EMPIR Committee Members should be aware that external stakeholders have been encouraged to submit PRTs or PNTs.

2 Practicalities

All information associated with the relevant PRTs or PNTs is available to the EMPIR Sub-Committees from password protected workspaces at msu.euramet.org however if EMPIR Sub-Committee members prefer the information can be emailed. PRTs and their associated information for the two sub-committees will be dealt with completely separately i.e. separate spreadsheets, collated documents and zipped files.

Information available for each Sub-Committee:

- Spreadsheet of data including basic statistics, and worksheets for all relevant PRTs or PNTs and for each grouping.
- Zipped folders including Word files of all relevant PRTs or PNTs, with those withdrawn or superseded by the submitter and those that are spurious or ineligible submissions filed separately. Those PRTs...
or PNTs that are suitable for prioritisation will be in their preliminary groupings by classification, which align with the groupings in the spreadsheet.

- Information on which groupings are allocated to which EMPIR Sub-Committee members for pre-meeting review - the EMPIR Chair is responsible for the allocation.
- A single pdf of all the relevant PRTs and PNTs considered suitable for prioritisation in numerical order, rather than grouped by classification.

PRTs and PNTs are grouped by defined “classifications” - the submitters initially identify the most appropriate classification from a menu. Some smaller Targeted Programmes (TPs) may only have a single classification. Depending on the PRTs or PNTs received, additional separation of groupings or reclassification may be done at the initial checking stage if the MSU judge that it will simplify or aid the relevant EMPIR Sub-Committee’s prioritisation process.

The relevant EMPIR Sub-Committee will “mark” each grouping, and may suggest additional or split groupings if appropriate. For each TP the spreadsheet includes:

A. A worksheet with basic statistics regarding the PRTs or PNTs received
B. A worksheet identifying all of the PRTs or PNTs received
C. Individual worksheets per grouping including only those PRTs or PNTs that fall within that grouping and that are suitable for consideration in the prioritisation of ideas. Any initial comments from the MSU will also be included on these worksheets.

In addition, Committee members who are not members of a Sub-Committee are also encouraged to contribute directly to the prioritisation phase. Prior to the close of stage 1 of the call, an EMPIR Committee member can inform the EMPIR Chair and the MSU that they wish to contribute directly to the prioritisation process, identifying the TP of interest. The MSU will then provide the Committee member with details of the deadline(s) that must be met for providing the input to ensure that it can be considered by the relevant Sub-Committee. Once the stage 1 call has closed and the eligibility checks completed, the MSU will provide the Committee member with the relevant prioritisation spreadsheet to be completed. To ensure that input from Committee members can be incorporated into the prioritisation by the Sub-Committees, the input should be provided in the same form (using the prioritisation spreadsheet), on the same timescale and following the same process as undertaken by the Sub-Committees (see Section 3 below). To ensure a robust and fair prioritisation, the Committee member must review complete ‘classifications’ rather than selected PRTs within a ‘classification’ and the prioritisation review must cover at least 8 PRTs or PNTs with the proviso that only reviews of complete ‘classifications’ will be accepted. The exception would be for a TP with only a single ‘classification’, in which case the complete TP shall be reviewed.

All committee members, including the sub-committees, should note that it is their responsibility to maintain the confidentiality of any information they receive as part of and at any stage of the prioritisation process.

3 Pre-review

Individual EMPIR Sub-Committee members are free to pre-review all of the groupings within their Sub-Committee’s PRTs or PNTs, however to ensure that all groupings are pre-reviewed adequately ahead of the relevant prioritisation meeting at least two members of the Sub-Committee will be allocated to each grouping. Prior to the relevant prioritisation meeting each EMPIR Sub-Committee member will need to complete, as a minimum for their allocated groupings:

- Worksheets C (specific to the groupings) which include:
  - identifying any potential “showstoppers” (a specific reason why this topic should not go ahead irrespective of other marks e.g. the subject of a funded EC/EMRP/EMPIR project or there is limited rationale for a collaborative research effort or one of the co-authors does not recognise the PRT or PNT)
  - indicating whether ideas contained in a given PRT or PNT are considered out of scope of the call.
  - marking each grouping collectively (or by sub grouping if more appropriate)
  - identifying potential title(s) for publication at Stage 2
  - capturing which PRTs or PNTs contribute to the idea to be taken forward
identifying the most suitable PRT or PNT to serve as the basis for developing the supporting documentation for Stage 2

- providing comments on each PRT or PNT where appropriate
- identifying up to 3 key reasons, selected from a menu, why a PRT or PNT should not be taken forward.

On Worksheets C, for each PRT or PNT considered suitable for prioritisation, against each of the three criteria:

- **PRTs only** Has a clearly specified and justified scientific, metrological or technological challenge / problem / opportunity been identified and of what scale, and does it need to be addressed by a collaborative European approach rather than a national one?
- **PNTs only** Has a clearly specified area of major strategic importance for European metrology been identified? Is this justified? Why does it need to be addressed by a collaborative European approach rather than a national one? What is the scale of this need?
- **PRTs only** What is the likelihood of the European metrology research community effectively addressing the challenge / problem / opportunity, taking due account of the progress required beyond the current state of the art?
- **PNTs only** Is there a core network of European NMIs or DIs ready to make a clear commitment to contributing to joint work in this area?
- **How significant would the impact be for stakeholders if the proposed topic were successfully addressed?**

A mark of either: 0 = poor, 1 = low merit, 2 = medium merit or 3 = high merit, should be assigned.

4 Collation of pre-grading

Sub-Committee members and any other EMPIR Committee Members undertaking the prioritisation should e-mail their workbooks to the EURAMET MSU by the deadline given. The MSU will assemble the marks into separate workbooks for each TP and distribute the data to the relevant EMPIR Sub-Committee members prior to each prioritisation meeting so that all Sub-Committee members are aware of the initial thoughts of the other members.

Please note the pre-grading exercise is only intended to provide a starting point for the EMPIR Sub-Committees’ discussions. The EMPIR Sub-Committees are entirely free to (and are likely) to come to different consensus conclusions following the collective discussions when facts known to one member are discussed more widely, e.g. issues such as balance across the technological areas or available capability within the metrology community may be a factor etc.

5 Prioritisation meetings

At each prioritisation meeting a consensus position should be reached by the relevant EMPIR Sub-Committee and the information captured on a spreadsheet. Subsequently, the titles and objectives of individual SRTs are refined by email and then taken to a meeting of the full EMPIR Committee for review and approval. This review should have particular emphasis on checking for any additional “showstoppers”. The list of SRTs will comprise two lists, a ‘white’ list of SRTs to be taken forward and a much smaller ‘grey’ list of around 4-8 potential SRTs (on average 1-2 potential SRTs per TP) for the EMPIR Committee to vote on to decide which ones go forward.

Information on the PRTs and PNTs will also be made available to the EMPIR Committee members together with up to 3 key reasons why a PRT or PNT was not taken forward to the SRT stage. The information will be in form of pre-defined reason(s) per PRT or PNT eg poor fit with scope; lack of critical mass in the proposal or required to undertake the research; limited metrology in the proposal; unclear, unspecified or limited need or demand; limited, or no research / development and primarily focusses on training, knowledge transfer, consultancy, surveys or reviews; network does not address an area of major strategic importance for European metrology; lack of European dimension or too nationally focussed; unclear or limited impact, or the impact not focussed on the outside world; limited progress beyond the state of the art, limited rationale, limited, unclear or unquantified objectives; limited stakeholder support demonstrated in the proposal; limited support from standards developing organisations (SDO); poor standardisation links; limited or no capacity building; unnecessary duplication of existing capabilities / facilities, with no clear rationale, or a lack of smart specialisation approach; insufficient budget available within the call to incorporate this topic.