

European Metrology Program for Innovation Research

EMPIR CALLS 2020

Independent Observer's report for the EMPIR 2020 calls:

Joint Network Projects (JNP) Support for Networks (NET)

Support for Impact Projects (SIP)

Joint Research Projects (JRP) in Target Programs (TP)

TP Metrology Research for Pre- and Co-normative (NRM)

TP Metrology for Industry (IND)

TP Fundamental Metrology (FUN)

Part 1 – Public Report

Date of 2020 Review Conference: 3 – 12 November 2020

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1. Introduction and scope of the report

Hereby are described the work flow and *modus operandi* as observed by the Independent Observer (IO), appointed by the Commission to follow the Review Meeting of the EMPIR 2020 calls.

It should be noted that this year, due to the Covid pandemic, the review Conference had to take place fully remotely. As such, all required planning, setup and training was duly prepared by the EMPIR team, and TEAMS was the platform chosen to assist the sessions. The preparation of all participants included detailed instructions, training sessions with computer testing prior to the beginning of the Review Conference. Further to this, the team was always available to assist the participants in case technical difficulties were experienced. The IO considers that all this preparation, procedures and assistance were of unusually high quality.

The role of the IO is well defined by the Commission, is described in the EMPIR Call Process Guide, and it was amply explained to all participants in each initial address made by EMPIR Programme Manager, Dagmar Auerbach, or the Deputy Program Manager, Fiona Redgrave.

Detailing the expected and here reported tasks,

1. To take contact and study all documentation relating to the various calls at stake, including call text and dates, flow of the process (the various stages, aims and results), budget, the correspondence with the experts
2. To be present and the Review Conference, observing the procedures adopted, their consistency across the different groups, led by different EURAMET Management Support Unit (MSU) persons, here called facilitators, and the overall transparency and fairness of the evaluation process
3. To provide a report consisting of two parts – a public one, reporting the observation of the evaluation process, and a confidential part with recommendations/suggestions

The final report is submitted to EMPIR, that will make it available to the Commission. Indeed the IO is bound by confidentiality and has signed in due course the Form 6a: Code of Conduct and Declaration, as did all experts participating in this evaluation.

2. Description of the IO activities

In order to perform the IO tasks, the observer performed the following activities:

1. Prior to the Review Conference,
 - a. the IO went through all the material available on the EMPIR site related to these calls (<https://msu.euramet.org/calls.html> and <https://msu.euramet.org/downloads/>), as well as the material and procedural e-mails sent to referees and representatives;
 - b. the IO exchanged e-mails and had a TEAMS meeting with the EMPIR Program Manager in charge of the EMPIR call 2020 conference, Dagmar Auerbach on 10th

September 2020, where all details of the Review Conference and the all process was described and doubts of the IO on some details were clarified;

- c. on 26th October 2020 the IO attended two TEAMS preparatory meetings, one with referees (8 were present) and the other with representatives (4 were present), taking the FUN group as an example chosen for the IO by the EMPIR team.
2. At the Review Conference, the IO attended virtually
 - a. the Welcome Briefing meetings
 - b. the majority of the referee's briefing sessions*
 - c. most presentations by the JRP or JNP representatives provided in video this year (as opposed to poster sessions that were the ordinary way to have them in previous Review Conferences)*
 - d. most Q&A sessions*
 - e. the majority of breakout sessions with the referees*
 - f. all ranking list and closing sessions
 - g. a meeting with the EMPIR Program manager halfway, on 8th November 2020

*As in various cases there were parallel sessions (NRM - 2 groups, IND – 5 groups, FUN – 3 groups), the IO in these cases dropped in and out through the various sessions occurring at the same time, trying to cover as good as possible the all process.

3. After the Review Conference
 - a. the IO had a virtual meeting with the EMPIR Chair, Erkki Ikonen, and Deputy Chair Marc Pieksma on 13th November 2020
 - b. produced a report consisting of two parts – one public and one confidential (with recommendations/suggestions for improvement)

Due to the Covid situation, and consequent all virtual Review Conference, the direct communication with referees and representatives was indeed compromised, despite all efforts from the EMPIR team to encourage communication. Nevertheless, communication was maintained throughout with EMPIR Program manager and MSUs, the procedures were so excellently organized and run that the IO is fully satisfied with what was observed.

3. Choice of reviewers

The IO was informed in detail about the process of reviewer's choice (document 'Note 1 - Referee selection process v3), as well on the measures the EURAMET takes to protect sensitive information relating to EURAMET referees (document Note 2 - Security of EURAMET referee data v3).

At least 3 primary referees were identified by the EMPIR team for each proposal, based on the referees declarations on having a specialist or generalist knowledge against the SRTs and SNTs following the opening of Stage 2 (mid-June) and the publication of the SRTs and SNTs. It should be stressed though that the referees are not aware of this identification, which exist only for

practical organisation of the discussions, and that all are equally treated during the evaluations sessions, and all have to read all proposals.

The next table provides detailed information on the distribution of experts per gender, age, activity, nationality, as well as previous experience.

Table 1. Experts information

Male	80	76.9%	Nationalities	25	
Female	24	23.1%	Austria	4	3.8%
Average age	53		Belgium	3	2.9%
Age <30	0	0.0%	Bosnia and Herzegovina	0	0.0%
Age 30-34	3	2.9%	Bulgaria	0	0.0%
Age 35-39	3	2.9%	Croatia	2	1.9%
Age 40-44	15	14.4%	Czech Republic	1	1.0%
Age 45-49	23	22.1%	Denmark	0	0.0%
Age 50-54	18	17.3%	Finland	4	3.8%
Age 55-59	19	18.3%	France	8	7.7%
Age 60-64	9	8.7%	FYR Macedonia	0	0.0%
Age 65-69	7	6.7%	Germany	10	9.6%
Age 70-75	6	5.8%	Greece	4	3.8%
Age >75	1	1.0%	Hungary	2	1.9%
Consultancy firms	1	1.0%	Ireland	2	1.9%
Higher Education Establishments	50	48.1%	Israel	0	0.0%
Non-research Commercial sector including SMEs	16	15.4%	Italy	17	16.3%
Non-research International Organisations (Association of States)	1	1.0%	Lithuania	1	1.0%
Non-research Public Sector	0	0.0%	Malta	1	1.0%
Private / Commercial Research Centres	9	8.7%	Netherlands	4	3.8%
Private Non-profit Research Centres	4	3.8%	Other	0	0.0%
Public Research Centres	17	16.3%	Poland	6	5.8%
Other	5	4.8%	Portugal	3	2.9%
No information given	1	1.0%	Romania	3	2.9%
Previous EURAMET referee	81	77.9%	Serbia	4	3.8%
Previous EC evaluator	62	59.6%	Slovakia	1	1.0%
			Slovenia	3	2.9%
			Spain	6	5.8%
			Sweden	1	1.0%
			Switzerland	1	1.0%
			Turkey	5	4.8%
			United Kingdom	8	7.7%

It can be seen that the Review Conference involved 104 experts, presenting a marked gender unbalance (only 23% of the referees are women), with a broad age distribution, centered between 50-60 years old, different activity areas (although with a majority belonging to Higher Education Establishments), spanning 25 different nationalities, presenting a wide country distribution (maximum number of referees is Italian, followed by Germany and UK). Further to this, 77.9% were previous EURAMET experts, and 59.6% previous EC evaluators.

4. Workflow

As stated above, all Review Conference took place remotely, through TEAMS meetings.

It is clear to the IO that all process was very carefully designed, prepared and executed. In fact, up to present this was the best organized and executed evaluation I ever attended.

Prior to the meeting, aside from the technical tests and meetings with each of the groups in each call (referees and representatives in the case of NET, NRM, IND AND FUN) and referees (SIP) referred to above (section 2. Description of the IO activities, points 1.b and 1.c), all participants received an e-mail with detailed information on the detailed information on the 'Virtual' Meetings,

schedule, some reminders, the link to all TEAMS meeting each should attend, and the Conference agenda (EURAMET virtual evaluation meetings 2020 BOOK).

The documents provided included even visual identification of the steps to be followed on connecting to TEAMS, choice to make, what to expect to see. EURAMET strongly recommended all participants, to also identify a backup device for joining the ‘virtual’ review conferences, as an extra safety measure. The IO received copy of all these e-mails, and as she was given access to all meeting, also received an e-mail where all meetings, days, time and link were collected together for easier use, which was highly appreciated.

As clearly explained in document received (EC & IO virtual evaluation meeting MS Teams invitations-4), the EMPIR PM, Deputy PM, IO and EC’s representative for the EMPIR programme received 7 different MS Teams Outlook calendar invitations for EACH ‘virtual’ review conference, including one additional invitation to the discussion of the single ranked list and closing sessions (compared to facilitators, note takers and supporters), as these sessions are not attended by other MSU staff unless specifically invited.

The overall planning is shown in the table2 below.

Table 2. Workflow in review conference

TEAMS INVITATION	CORRESPONDING ‘VIRTUAL’ REVIEW CONFERENCE SESSION	ATTENDEES ALLOWED IN THE SESSION
1	Registration (DAY 1) Welcome session (DAY 1)	All delegates, IO
2	Evaluation guidance for referees session (DAY 1)	All referees EMPIR PM, Deputy PM & MSU EMPIR Chair & Deputy, IO
3	What to expect at the review conference & if your proposal is successful (DAY 1)	All JRP/JNP representatives EMPIR PM, Deputy PM & MSU EMPIR Chair & Deputy, IO
4	Referees introduction session (DAY 1) Presentation and referees development of questions session (DAY 1)	Referees in breakout groups EMPIR PM, Deputy PM & MSU, IO
5	Formal Question & Answer session (DAY 1)	Referees in breakout groups JRP/JNP representatives in breakout groups EMPIR PM, Deputy PM & MSU EMPIR Chair & Deputy, IO
6	Registration (DAY 2) Reminder of the Tasks session (DAY 2) Marking’ sessions (DAY 2)	Referees in breakout groups EMPIR PM, Deputy PM & MSU, IO
7	Discussion of the single ranked list session (DAY 2) Closing session (DAY 2)	All referees EMPIR PM & Deputy PM EMPIR Chair & Deputy, IO

Note: This overall scheme does not apply to SIP, as in this case there were only referees, and all took place in one day, Sunday November 8.

The agenda for the 10 days was the following:

- Support for Networks ‘NET’ Review Conference: Tues 3rd & Weds 4th Nov
- Pre & Co-Normative ‘NRM’ Review Conference: Thurs 5th & Fri 6th Nov
- Support for Impact ‘SIP’ Consensus Group Meeting: Sun 8th Nov
- Metrology for Industry ‘IND’ Review Conference: Mon 9th & Tues 10th Nov
- Fundamental Metrology ‘FUN’ Review Conference: Weds 11th & Thurs 12th

Although proceeding virtually, the Review Conference 2020 followed the previous procedure in EMPIR Calls,

- Referees (NET, NRM, IND & FUN) were required on DAYS 1 & 2 of each review conference
- Representatives (NET, NRM, IND & FUN) were required on DAY 1 ONLY of a review conference (only ONE representative for each eligible proposal)
- Referees (SIP) are required on DAY 1 of the consensus group meeting, and Proposers (SIP) are NOT ALLOWED to attend the consensus group meeting

When JNP or JRP consortium confirmed its representative, the EMPIR MSU emailed the details of how the representative can join the ‘virtual’ evaluation meetings (late October).

One main difference had to be adopted this year, due to virtual meetings - the face-to-face poster session between referees and JNP and JRP representatives at a review conference was substituted by a 10 min presentation, previously recorded and sent to EMPIR by 11th October at 23:59 CEST at the latest. The video was shown to the referees in the breakout respective group, and they were not given further access to it, neither before nor after the session.

The JNP and JRP representatives received detailed instructions on the video preparation, namely, that the video:

- should present the key aspects of the proposal in a clear and concise manner
- should help the referees evaluate the proposal against the 3 evaluation criteria
- should help to clarify the referees’ understanding of the proposal.
- Could include diagram(s) of how the work packages fit together
- Could, if necessary, address any omissions or errors identified by the consortium since the proposal was submitted.

They were assured that the pre-recorded video presentations would not be used by EURAMET for any other purpose other than the ‘virtual’ review conferences and will be deleted following the formal announcement of the Call outcomes at the start of January 2021.

The other difference was indeed in the closing sessions, for the approval of the ranking lists. The all procedure was recorded, the ranking list was read by the Deputy EMPIR Program Manager, and each expert was asked to state orally his/her agreement with the just read ranking list.

5. Overall impression and conclusions

The scale of complexity of the assessment tasks is high, considering workflow since stage 1 (duly explained in all welcome sessions), the number of topics under evaluation, each with its specific characteristics, the presence of referees and applicants. All evaluation phases require a high degree of planning and execution, that was clearly present.

It is worth noting that all process was followed basically in the same way in all sessions, to an unusual degree of excellency. Even though the running group was composed of 18 persons (EMPIR Program Manager and Deputy Program Manager, together with 16 MSU collaborators), the same procedures and attitude was followed in all meetings. To attend this to the degree observed implies a high standard of organization, that is highly appreciated.

The all procedure is highly transparent – some less usual examples are the fact that the pictures and of all participants is displayed in the EURAMET virtual evaluation meetings 2020 BOOK, the overall budget is clearly displayed, together with the summative budget asked by the applicants (shown together with the ranking lists in the closing sessions). Indeed, the same applies to all discussions., where all procedures were explained in detail at the beginning of the session.

The processes chosen were very efficient, extremely well organized and implemented. Worth noting was a high concern with keeping the times allotted to each proposal at all stages of the Review Conference processes, for equity between proposals. This was taken very seriously, and explained in all sessions.

At last but not the least, the overall conduct of the staff was exemplary – despite the long days and the two weeks duration, all MSU staff members, EMPIR Program Manager, Deputy EMPIR Program Manager were always responsive, presenting high professional and social skills, making the working environment very pleasant, despite the high work load.

The IO could observe that the evaluation process was very well conducted, with impartiality, fairness and confidentiality.

The overall impression of the IO is that the Review Conference organization and completions was exemplary.