

# Final Assessment of M-ERA.NET Report

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The asssessment was carried out from October to December 2015 by a team consisting of Peter Hahn (coordinator), Michael Huch, Ben Kummer and Michael Nerger (all VDI/VDE-IT). Beneficial inputs were realised by Angus Hunter of Optimat Ltd.

In addition, the team received active and well-managed conceptual and operational support from the evaluation working group of M-ERA.NET, led by Sara Alfonso Romero of Fundación madri+d and with the participation of Aase Marie Hundere (Research Council Norway), Sisko Sipilä (TEKES), Roland Brandenburg (FFG), Paul Schreurs (IWT) and Sinan Tandongan (TUBITAK).



# 1 The Final Assessment in Brief; SWOT, Key Facts, Findings and Improvement Potentials

M-ERA.NET has an excellent database, with a lot of well selected data compiled from call operation, proposal evaluation, and from beneficiaries during the lifetime of M-ERA.NET. In addition, data is used in this report which was compiled during the operation of M-ERA.NET predecessors MATERA and MNT-ERA.NET, or displayed in their final assessment reports. Furthermore, a SWOT workshop and two web surveys – directed at M-ERA.NET work members and at beneficiaries and proposers – were performed to complete the data base for this assessment. Main findings of the evaluation and practical insight are summarised in the following. Recommendations or noticeable issues or aspects that should be followed up are written in *italic*:

# 1) M-ERA.NET has a widespread European and global outreach, and a consistently broad participation in calls.

M-ERA.NET is a large network. In total, 44 different funding programmes participated in the performed calls. M-ERA.NET regularly mobilised 30+ funding programmes to participate in its annual calls. It has a resilient core of 30 funding programmes that have participated in at least 3 out of the 4 calls performed between 2012 and 2015.

While the coverage of the European relevant research areas may be considered close to complete, the outreach to neighbours and the global research community has leapt forward during the M-ERA.NET duration: multiple participations of funding programmes from Taiwan and Russia have been realised. A Brazilian and a Korean programme started their participation in the 2015 call, and close contacts have been established, for instance to partners from the U.S., Canada and South Africa.

The increasing global outreach of M-ERA.NET adds relevance to the strategic question of the role the network can or should play in tackling global societal issues – and where and how it should focus on the enhancement of European competitiveness, in cooperation between European actors.

#### 2) Beneficiaries and even unsuccessful applicants value M-ERA.NET

The M-ERA.NET has received overall positive feedback from its clients, and, not surprisingly, this feedback is more positive coming from the funded ("beneficiaries") than from the rejected project partners ("proposers"/"applicants"). The general set-up of implementing the calls and administering funded projects is mostly appreciated. The vast majority of participating agencies has been estimated to be good; only two agencies received multiple critical assessments of their service quality. The only other criticized aspect was a perceived lack of support in finding appropriate project partners.

It may be considered to invest in more efforts for identifying and matching project partners.

## 3) Increasing participation of proposers - constant level of projects - decreasing success rates

M-ERA.NET had a constantly growing number of pre-proposals, starting from 122 in the 2012 call to 172 in the 2015 call, and over 200 pre-proposals in the 2015 call.

The number of funded projects remained on the same level with more than 20 realised projects per call (23 in 2012, 26 in 2013, and 22 in 2015).

As a logical consequence of higher participation in pre-proposals, and following higher numbers of full proposals as well, the success rate of applicants has dropped significantly. The success rate of full

5

Even where not valid from a scientific point of view, this followed a motivation to weigh and compare actual data with it.



proposals dropped significantly from 33.3% successful full proposals to 19.2%, and from 18.9% to 11.6% of pre-proposals applications respectively.

There are remarkable differences in the success rates between the funding parties participating in calls. 10 of the participating programmes manage to bring 25% and more of their pre-proposal applicants to a successful, funded project application. On the other side, participation in calls for 8 programmes did not lead to a single funded project application.

This includes 2 programmes which participated in the calls more than just once, raising questions about the quality of the match of these funding parties with the rest of the network. It is recommended that these programmes reassess their objectives and related participation in the network. However, this can only be properly assessed when e.g. the TRL orientation is taken into account (see below).

The nominal call budgets amounted to app. EUR 30 million each and the realised volumes of funded projects amounted to EUR 14 million to EUR 23 million per call. The average funding per participating funding programme was app. EUR 1.2 million for the combined calls 2012-2014.

The analysis of the success rate is a constant issue in the M-ERA.NET consortium, and has also been subject of discussion during the final assessment workshop. Ineffective control in early phases of national or regional applications is certainly one of the root causes of this call inefficiency — and the waste of research-time connected to it. Nominal call budgets, and the smart selection of funded topics could be amongst additional causes to be discussed.

#### 4) Unclear causes for lower addressed Technology Readiness Levels

The TRL self-assessment of beneficiaries revealed some differences between selected projects and rejected proposals, the latter addressing slightly higher TRL than the first. This finding gives room for a few considerations: Does M-ERA.NET still support access to project ideas spanning TRL more broadly in order to have a more balanced project portfolio – or is there rather a dominance of earlier TRL? The latter is supported by the self-assessment of beneficiaries vs. proposers, and became obvious during a discussion of the results during the assessment workshop. It remains unclear if the dominance of the early phase is involuntary or due to structural aspects.

The network is encouraged to discuss the targeted TRLs on a general level – and to assess its methodologies and processes with regard to the appropriateness of their designs. This refers e.g. to the structure and competence of evaluators (dominance of scientists) and to evaluation criteria (scientific quality vs. exploitation potential).



#### 5) Evolving geographical project cooperation patterns towards a structured ERA?

RTD cooperation funded by M-ERA.NET is unevenly distributed, with some preferred constellations in terms of partner countries. Comparatively intensive cooperation can be detected between neighbours such as Austria and Germany, Poland and Germany, Portugal and Spain – which was likely to evolve. Also, cooperation between some eastern European countries may have their roots in historic ties. However, increased partnerships between Spanish and German partners for example, or between Portuguese and Belgian project partners are not as easily explained.

Such intensive ties should be further explored: are these patterns of a development towards an aligned, coordinated transnational, truly European research and innovation area in thematic clusters? Can such an analysis drive cross-national roadmaps and policies for certain research topics – and adequately designed calls? Which role could M-ERA.NET play in this regard?

# 6) High added values for regional/national programmes from leverage effects of transnational cooperation

There is considerable added value from transnational cooperation for the participating programmes: in comparison to a solely national funding of research projects, national/regional programmes leveraged research value equalling more than EUR 100 million for their national beneficiaries – financed by other funding programmes or research actors from cooperating countries<sup>2</sup>.

The amounts vary from as little as 0 for those programmes that did not fund projects, to e.g. more than EUR 8 million for the German DFG, levered with app. EUR 4.5 million DFG project funding for the German sub-projects.

The leverage factors of national funding vary according to the shares of foreign partners in projects. They are likely to be higher for countries with little participation (in large transnational projects) and range from e.g. 0.38 (KIT/Germany) to right above 10 for the Belgium FNRS.

Leverage and leverage factors are not commonly calculated yet, but they are recommended as promotion instrument and benchmark for networks that realize transnational projects with the contribution of national budgets.

#### 7) Only mildly positive perception of benefits from cooperation among network members

While the added values leveraged through cooperation are high (see previous paragraph and chapter 4.10), the network representatives' response to the questions about scale and scope synergies from call and project cooperation are only mildly positive. None of the typical categories of benefits from cooperation (widening of scope, better research quality, faster/cheaper realization) were assessed to be clearly positive by a majority of responders. Typically, smaller regions'/nations' programmes seem to experience more benefits than the larger ones – in correlation with leverage effects data. As a remarkable aspect, those programmes that declared their call participation a subject of internationalisation strategy evaluated benefits higher than representatives of participation which did not claim to act in the frame of a strategic internationalisation approach.

This value is the sum of all research cost, which is financed by others besides the national/regional parties. They include foreign funding and contributions by the research actors. This leverage factor indicates how much a funding programme would have had to be financed or mobilised by itself and by national sources, in order to realize a similar research project without transnational cooperation – provided there is respective research capacity and infrastructure in comparable volume and quality

at all.



There seems to be a widespread neglect of factual benefits from international cooperation. Network internal statistics and analysis, highlighting achievements and benefits may help to add fact bases for future perceptions, opinions and subsequent decisions about participation in M-ERA.NET. Since strategy seems to be a driver for benefits, also this area of activity may be considered for enhanced network activity. This may include intensified cooperation with JPIs, European technology platforms, or actors who elaborate research agendas on the technical and on the policy level for regions, nations and Europe.

#### 8) Abundant mutual learning and considerable structural impact

The representatives were asked in a first step if they learned about good innovation support from their partners, and in a second step if subsequently, funding programmes were improved or opened for transnational cooperation. Mutual learning about good programme management was the perception which was agreed and fully agreed by more than any other benefit category of the survey. Mildly positive structural impact was stated on the increase of interoperability of programmes and on the change of national funding programmes.

Good innovation support management seems to be a topic among the consortium members, with rather implicit impact on the adequateness of funding programme design and operation. This has not only been a result of the survey: Also during the assessment workshop, one of the positively discussed "additional activities" was a format for peer review and good programme practice exchange. This topic may well be further considered and developed towards a format for joint activity.

#### 9) Embedded strategic approach and management quality are drivers for network resilience

The network participants were directly asked for their drivers and barriers to sustained network participation. More than 90% of those who continue with a participation in the ERA-NET Cofund phase to come considered the high operational network management quality as one of the drivers for it. The response to the match of the internationalisation strategy with the expected offers of the ERA-NET cofund is equally high – however, this aspect was a strong barrier for 2 out of 3 responders who are about to leave the network .

Both aspects suggest that functional structures have been professionally established in the last years. They also hint at trust that the call topic identification mechanisms of M-ERA.NET and the subsequent calls will continue to be a suitable platform for the realisation of regional/national internationalisation strategies.

#### 10) High network management quality

The network activities and its management are considered an asset by the applicants, 80% agree or fully agree that the activities were adequately designed and implemented to reach the objectives of the network. In addition, more than 90% state that the network operational management was considered excellent in a way that it has been functioning as a driver for sustained participation (see previous chapter). This is a remarkably positive result and may be a source of continued attractiveness in comparison to partially alternative transnational cooperation platforms like the EUREKA family.



#### 2 The Final Assessment of M-ERA.NET

#### 2.1 About M-ERA.NET

M-ERA.NET is an EU funded network which has been established to support and increase the coordination of European research programmes and related funding in materials science and engineering. As a network, it mainly comprises former MATERA and MNT-ERA.NET consortium partners. The merger was a logical consequence of the closeness of the growing links between the technology and research domains. Even before the merger, MNT-ERA.NET and MATERA organised a joint call and delivered "proof of concept". Between 2012 and 2016, the M-ERA.NET consortium did and still does aim to operate as a single innovative and flexible network of funding organisations. The core activity of the network is joint strategic programming, and subsequent organisation and implementation of annual joint calls. Thereby it contributes to the coordination, integration, efficiency and harmonisation of the European Research Area (ERA).

In February 2012, M-ERA.NET started as a network of 37 public funding organisations of which 29 are national and 8 are regional, from 25 European countries. M-ERA.NET aims to identify further relevant European programmes and develop links with partners outside Europe, which it successfully did, setting a benchmark for ERA-NETs in a technology domain: nowadays, e.g Brazil, Korea and Taiwan participate in joint calls.

Large parts of the consortium successfully applied for an ERA-NET cofund project, taking integration and internationalisation a step further in the years to come.

#### 2.2 Scope of the Final Evaluation

The main objectives of the final assessment, in line with the previous experiences in MATERA and MNT-ERA.NET, are to check objectives versus achievements regarding

- joint calls and
- other objectives (political level, effects on programme design, support for the innovation chain, etc.).

Specifically, required additional assessment aspects included:

- perception of and behavioural additionality for beneficiaries/researchers and the funding agencies,
- indications on the level of sustainability (e.g. with respect to post-funding expectations and achievements),
- some analysis about the role or effect of regions participating in the M-ERA.NET calls and reasons for some agencies not to participate in single calls or M-ERA.NET 2.

The outcome of the assessment was targeted to include discussions and insights resulting from individual interviews between evaluation team members and actors on network level, as well as insights resulting from group discussions and discussions in plenary, a documentation of strengths and areas for improvement identified, to be documented in this report. The report was supposed to be concise (<50 pages), and to contain only the major findings. Furthermore, a presentation and discussion of the initial findings took place during the assessment workshop on Dec. 2, 2015 in Berlin.

Since the network is continuing its work, insights into such subjects were emphasised, which may have implications for future improvements of the consortiums objectives, processes and structures.



#### 2.3 Data Sources

The evaluation team was provided with the following data sources:

- M-ERA.NET reports as published on M-ERA.NET website <u>www.m-era.net</u> and provided by the consortium
- Applicant, partner, project and funding data as available from the submission/evaluation project data base. Most tables and graphs in chapter 4 are based on an export of the database on September 29, 2015.
- A web survey among beneficiaries: (n=82 completed out of app. 320 funded), performed in QIV, 2015
- A web survey among proposers/applicants: (n=134 completed out of app. 2020), performed in QIV, 2015
- A web survey programme among owners and agencies (n=30 completed), performed in QIV,
   2015

#### 2.4 Realisation

The assessment approach included statistical analysis of collated facts, web surveys, and a workshop. These were realised as follows.

#### **Step 1 Assessment Design**

With a view to assure a continuation of the methodologies used in MATERA and MNT-ERA.NET final assessments in 2011/2012, VDI/VDE-IT in a first step discussed and further specified with the evaluation working group in the M-ERA.NET consortium major aspects and themes which were to be assessed, target groups and questions of the web surveys. The respective assessment design was approved by the M-ERA.NET evaluation working group. (see appendix chapter 5)

#### **Step 2 Data Based Initial Assessment**

This consisted of the assessment of initial data and documentation made available. This included e.g. network, partner, and project related data which was collected by the network. It also included statistical facts e.g. on calls which have been collated during the operation of M-ERA.NET, its calls and transnational funding since 2012. The methodology followed earlier ERA-LEARN material or modifications of actually discussed approaches.

#### **Step 3 Web Survey**

This task consisted of the design and realisation of the web based surveys directed at the consortium members, the beneficiaries and the applicants for proposals.

#### **Step 4 SWOT Workshop**

The SWOT workshop was held in Berlin on Dec. 2, 2015. It was held in conjunction with a network meeting. There, results of the earlier steps were presented. Strengths, weaknesses, opportunities and risks were identified, and discussed comprehensively to identify options for the improvement of practices.

These steps were followed by the preparation of this report, a final presentation of findings during a network meeting on January 26 in Vienna.



#### 3 Analysis of the Online Surveys

#### 3.1 Beneficiaries and Proposers

This chapter presents the survey design and the analysis of findings from the survey among beneficiaries and proposers. The two groups are distinguished as follows:

- Beneficiaries are partners in projects that were selected for funding.
- Proposers are the representatives of organisations that submitted full proposals which were not selected for funding.

Both groups were invited to participate in the survey via e-mails sent by the evaluation representative of M-ERA.NET.

#### 3.1.1 Questions and Scores

Beneficiaries were requested to answer all questions. A subset of questions was addressed to proposers. The questions covered the following aspects:

- A self-assessment of Technology Readiness Levels
- Experience with and benefits from transnational cooperation
- Quality of the application, evaluation and monitoring process
- Follow-up intentions of proposals/projects as an indication of sustained cooperation

Details are listed in the attached assessment design paper (see Appendix 5)

At the end of the survey period, 82 completed sets of questions were available from beneficiaries, and 134 from proposers. The responses that were also presented during the SWOT workshop are outlined in the following.

#### 3.1.2 Addressed and Achieved Technology Readiness Levels

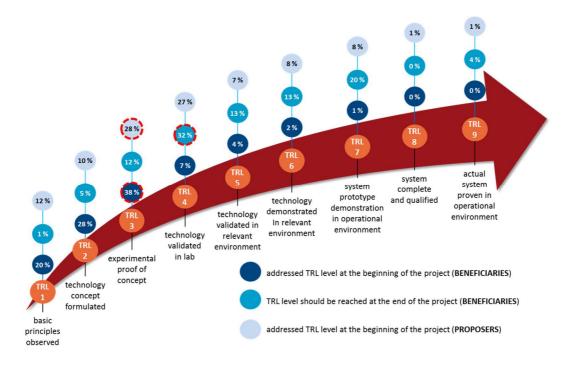


Figure 1: Technology Readiness Levels - Change



Beneficiaries and unsuccessful proposers were asked to self-assess their intended beginning and end TRL which was targeted in their respective participation in proposed projects.

This self-assessment of the Technology Readiness Levels (TRL) of beneficiaries and proposers of their individual project work (or project as a whole) at the time of submitting the full proposal (i.e. at project start), respectively the assumed TRL at the project end (for beneficiaries only) revealed some interesting results, which were already extensively discussed during the SWOT workshop, (Figure 1).

As a clear visible pattern, selected projects for funding (i.e. the "dark blue" responses from the beneficiaries) were perceived to be on earlier TRL than proposals not selected for funding (i.e. the "light blue" self-assessment of proposers). While both groups mostly mention TRL 3, the selected projects mostly range from TRL 1 to 3, while the not selected proposals were positioned on TRL 3 and 4

The "middle blue" bubbles show the assumed TRL at the end of the project's lifetime. The two TRL mentioned most often are 3 and 4. The "movement" of each individual assessment is presented more clearly in the following figure.

Following interpretations can be drawn from these results:

TRL 1

TRL 2

- The M-ERA.NET project portfolio is, at the time of the proposal submission, clearly orientated towards early TRL (1-3). This might be in contradiction to the M-ERA.NET agreement to having an overall more TRL balanced project portfolio.
- 2. However, during the project's lifetime, all projects move up the TRL ladder, with some reaching TRL 8.
- 3. Eventually, the selection of proposals is biased for earlier TRL, as proposers of not selected proposals self-assessed higher starting levels.

Change of the TRL level

# TRL 9 TRL 8 TRL 7 TRL 6 TRL 5 TRL 5 TRL 4 TRL 4 TRL 4 TRL 3 TRL 2 TRL 1 TRL 1

Figure 2: Technology Readiness Levels - Change

TRL 4

position at the beginning of the project

TRL 7

TRL 6



Figure 2 above presents the "movements" of funded projects during their lifetime. The figure reads as follows: The horizontal axis represents the self-assessed position at the beginning of the project, the vertical axis the position at the end of the project.

There is only one self-assessment per project (marked in the figure with a blue circle) that started at TRL 5 and ended at TRL 4. Either this is a misunderstanding, or, indeed, the project partner experienced drawbacks during the implementation which results in a lower TRL.

Three self-assessments – those placed on the diagonal line – did not progress in terms of TRL.

All other self-assessments moved up at least one TRL, (e.g. eight from TRL 1 to TRL 4, 10 from TRL 3 to TRL 4) but more often two or more levels. Three projects, having started at TRL 3, 5 and 6, will end at TRL 9, i.e. very close to market introduction.

#### 3.1.3 Comparative Perception of M-ERA.NET as a Funding Source

Interpreting the beneficiaries' level of experience as shown in the following figure, very few partners seem to have no experience in any funding programme yet: 7% saw their experience level in national/regional programmes between 4 and 6, with 6 standing for no experience.

The experience level declines with the – considered to be more ambitious – European Framework Programme, though still more than 50% claim to be experienced (all answers from 1 to 3).

In turn, the decline in experience in other transnational funding programmes may be best explained with the scarcity of such programmes, at least in similar topical areas of M-ERA.NET.

#### ... national/regional research funding programmes 49% 26% 18% 15% ... European Framework programmes (FP6/7/Horizon 2020) 26% 20% 16% ... other transnational funding programmes 9% 18% 20% 21% 22% ■ 1 - extensive experience ■ 6 - no experience

#### Experience level in participating in...

Figure 3: Pre-existing international collaboration

In summary: M-ERA.NET seems to be a first encounter or entry point for transnational/international research endeavours for a considerable number of project partners.



■ 6 - not agree

For the following two sets of responses regarding comparative positions on specific aspects of M-ERA.NET in relation to either national/regional or European Framework Programmes, at first the responses of beneficiaries are shown, followed by the proposers' judgements.

#### Comparison of geographical levels of funding programmes Compared to... ... national/regional programmes, the M-ERA.NET aims at more ambitious 16% 32% 35% research and innovation projects ... national/regional programmes, the M-ERA.NET provides access to more 22% competent partners (with relevant know-how) ... national/regional programmes, the M-ERA.NET puts more emphasis on 33% the exploitation of research results ... other funding programmes on regional / national / transnational level, 35% M-ERA.NET consortia more often cover the whole innovation chain ... EU Framework Programmes, the M-ERA, NET rules are simpler 40% 12% ... EU Framework Programmes, the M-ERA.NET is more attractive to 34% 18% 10% ... EU Framework Programmes, the M-ERA.NET puts more emphasis on the 26% 30% exploitation of research results

Figure 4: Beneficiaries' judgements on comparative aspects

■ 1 - agree to full extend

#### Compared to... ... national/regional programmes, the M-ERA.NET aims at more ambitious research and innovation projects ... national/regional programmes, the M-ERA.NET provides access to more 20% 17% competent partners (with relevant know-how) ... national/regional programmes, the M-ERA.NET puts more emphasis on 23% 20% the exploitation of research results ... other funding programmes on regional / national / transnational level. 31% M-ERA.NET consortia more often cover the whole innovation chain ... EU Framework Programmes, the M-ERA.NET rules are simpler 21% 26% 20% ... EU Framework Programmes, the M-ERA.NET is more attractive to 25% 14% newcomers ... EU Framework Programmes, the M-ERA.NET puts more emphasis on the 28% 22% exploitation of research results ■ 1 - agree to full extend ■ 6 - not agree

#### Comparison of geographical levels of funding programmes

Figure 5: Proposers' judgements on comparative aspects

For all responses, the positive answers (ranging from 1 to 3) by both beneficiaries and proposers dominate, though for a clear pattern, proposers tend to be more negative. Rare comments, mostly by proposers with little experience in transnational/international funding, revealed that comparing the programmes was not purposeful for them.

The findings are as follows:



- M-ERA.NET projects request more ambitious research and innovation than national/regional projects
- The M-ERA.NET programme provides access to more competent partners
- The exploitation of research results is more emphasised than in national/regional programmes
- It is also said that M-ERA.NET consortia more often gather partners representing the whole innovation chain
- Participation rules in M-ERA.NET are simpler than those of the EU Framework Programmes
- M-ERA.NET is more attractive for newcomers than the EU Framework Programmes (Note: This backs the interpretation of the findings from the experience level.)
- And, same as for national/regional programmes, the M-ERA.NET is considered to put more emphasis on the exploitation of research results than the EU Framework Programmes.

Our interpretation is that M-ERA.NET fills in a valid position between national/regional and EU Framework Programmes, either for providing access to more competent partners from abroad than national/regional programmes or by a reduced complexity in comparison to the EU Framework Programmes.

#### 3.1.4 Service Quality of M-ERA.NET – and the Involved National/Regional Agencies

For the following graph, again both respondent groups were asked about their experiences with the application process of M-ERA.NET. The interpretation of the answers is given after the second graph.

#### Excperiences regarding the application process

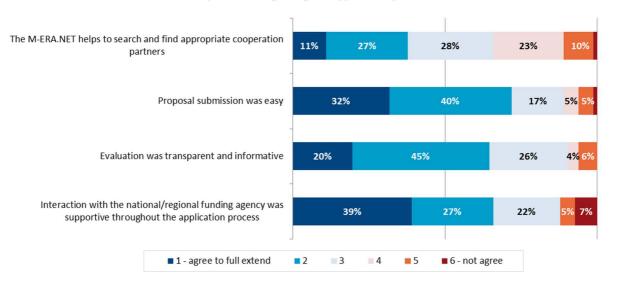


Figure 6: Beneficiaries' judgements on the application process



#### Excperiences regarding the application process

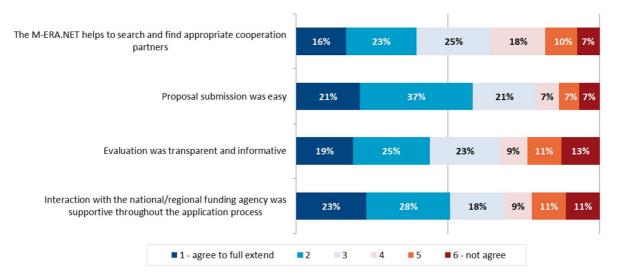


Figure 7: Proposers' judgements on the application process

As for the previous two questions, for all responses, the positive answers (in the range from 1 to 3) by both beneficiaries and proposers dominate. Again, proposers were more negative.

The findings are as follows:

- Support with searching and finding appropriate project partners is more often judged positively than negatively; however, there are more respondents who obviously see room for improvement.
- The set-up and implementation of the proposal submission scheme has generally received good support.
- Differentiating answers were given for the transparency and information degree of the evaluation.
   Reflecting the likely disappointment of proposers whose proposals were finally not selected for funding, the answer is plausible. From the high support from beneficiaries, there seems to be no need for changes in the current set-up of the evaluation.
- Finally, while a majority sees the support by the national/regional funding agencies largely
  positively, 12% of beneficiaries and 22% of proposers are not satisfied. (See similar comment for
  the following graph)

#### 3.1.5 M-ERA.NET Project Quality

Beneficiaries were also asked about their perceptions towards several aspects in the implementation phase of their projects.



#### All project partners are committed to the project The consortium is stable during the project implementation 70% 16% All project partners are important (i.e. had meaning-ful roles) to 68% implement the project The project's objectives are realistic (i.e. budget, effort, time) Project management is effective 57% 35% The financial resources are sufficient 30% 27% 44% The project duration is appropriate 32% Interaction with the national/regional funding agency is supportive 43% 12% 30% during the project implementation Outcomes are/will be shared fair among the partners according to their 66% inputs (prior and during the project implementation) ■ 1 - agree to full extend ■ 6 - not agree

#### Excperiences regarding the implementation of research projects

Figure 8: Research project quality

Between 2 and 7% of the respondents (which are about 2 to 6 individual persons) were very critical in all answers while a large majority is very positive (with answers 1 and 2 always higher than 50%, sometimes bypassing 90%). Two answers deserve specific attention: 1) Financial resources were considered less positive, i.e. insufficient, and 2) the interaction with the network partners also received more critical remarks, which is in line with suchlike remarks in the previous question on the application process.

A more detailed analysis was performed for patterns regarding the critically assessed network partners (funding agencies). Though a few agencies were mentioned across a number of countries (e.g. Austria, Germany, Portugal), the two countries France (2 agencies) and Romania were criticised more often than others.

The following question was solely posed to proposers, i.e. whether at all and to which extent the project ideas presented in their proposals were or are about to be realised elsewhere.



#### 3.1.6 Sustainability of transnational cooperation project consortia

Did you already succeed in realising your project ideas, which were not selected for funding under an M-ERA.NET call for proposals, elsewhere?

(Multiple answers are possible)



Figure 9: Alternatives to M-ERA.NET

The finding suggests that in more than 50% of cases, the realisation of the project ideas is or shall be realised, either outside any funding programme or in other funding programmes. For a quarter, the decision is still pending and less than one fifth will no longer pursue the realisation at all.

It should be noted that the interpretation of the responses is somewhat limited, partly because too many response options were offered, partly because multiple answers were allowed. For any forthcoming assessment, it is proposed to split the question into two distinct ones, allowing only one answer at a time.

The question to beneficiaries regarding continued co-operations revealed clear answers:

# Do/would you continue cooperating with M-ERA.NET project partners

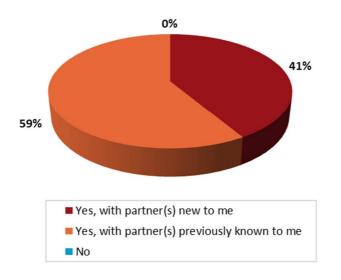




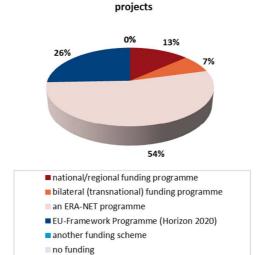
Figure 10: Sustainability of cooperation structures in projects

All funded partners would like to continue cooperating, 59% with previously known, but 41% also with new partners.

#### 3.1.7 Preferred Funding Scheme

The following question for any preferred funding scheme was differently answered by beneficiaries and proposers respectively.

Prefered funding scheme for implementing funded research



\_\_\_\_\_

Figure 11: Beneficiaries' preferred funding scheme

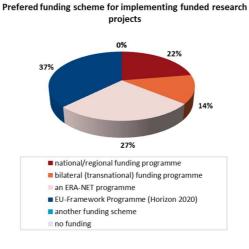


Figure 12: Proposers' preferred funding scheme

More than half of the beneficiaries, but only 27% of the proposers consider an ERA-NET programme as their preferred funding scheme. While proposers consider the EU Framework Programme as their



first choice, this is the second preference for beneficiaries. National/regional programmes come in as the third and bilateral funding programmes as the fourth preference.<sup>3</sup>

#### 3.2 Network and Call Consortium Members

#### 3.2.1 Questions and Scores

The network members received an invitation to participate in a web survey, hosted on the M-ERA.NET website. Its single aspects and questions were based on earlier, similar approaches in the MNT-ERA.NET assessment, and recently discussed approaches of the ERA-LEARN consortium<sup>4</sup>.

Most of them consisted of statements, addressing aspects of interest to participating organisations in ERA-NETs.

In the first part of the survey, so-called "additionality" aspects were explored, the learning and implementation about good programme management and impacts on "interoperability" of funding programmes. These statements were assessed according to their gradual truth – with Likert scales ranging from 1 (fully agree) to 6 (do not agree at all).

In the second part, the impacts of the cooperation on the funded projects themselves were addressed: was there a widening in research scope? Faster, cheaper or better performed projects? These statements were assessed according to their gradual truth – with Likert scales ranging from 1 (fully agree) to 6 (do not agree at all).

As an additional point, adequacy, efficiency and effectiveness of the network activities were in focus, with one general statement to agree/disagree with, and free text for different categories of improvement potentials (additional activities, better performance, stop of activities).

As a last point, drivers for the resilience of the network – and barriers to sustained participation were explored. Several potential aspects were asked to be classified as drivers or barriers.

N was 30, representing two thirds of the organisations that participated in calls.

3

We admit that the question was contradictorily phrased as the option "no funding" does not make sense if the question asks for preferred schemes for implemented "funded research projects". This error is a small shortcoming only, as no answers for these options were given.

See Assessment Design in the attachment. However, single aspects and some scales were altered after finalisation of the design paper.



#### 3.2.2 From Learning to Structural Impact (programmes)

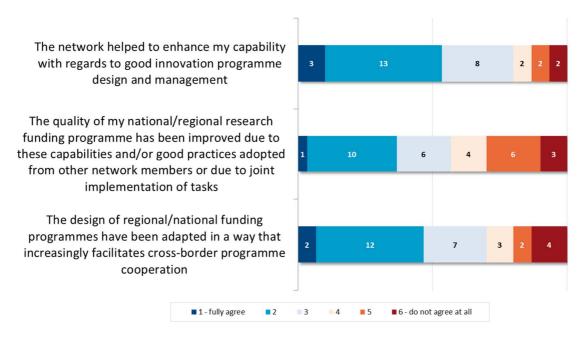


Figure 13: Learning, capability and change towards interoperability (long term participation)

24 out of 30 responders stated to have learned from others about good innovation programme design and management – one of the strongest positive responses in an otherwise less clear response behaviour. More than two thirds claimed that this had an impact on the quality of their respective funding programmes. This is a rather remarkable impact, hard to determine in cost/benefit assessments, but hinting at strong benefits for many of the participating parties. Lastly, structural impact has been stated for aspects of "interoperability" with other funding programmes for the purpose of international cooperation.

#### 3.2.3 Benefits from and through Cooperation (Research Area and Projects)

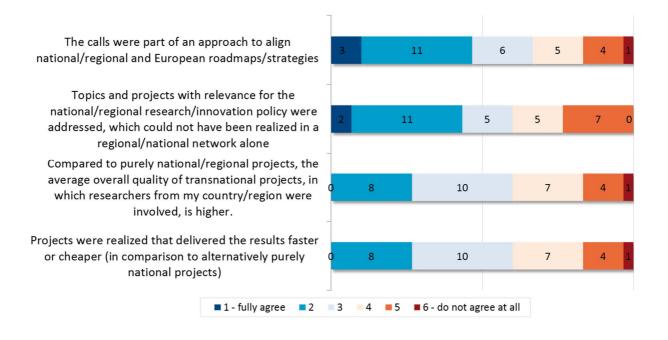




Figure 14: Benefits from and through cooperation (research area and projects)

A rather indecisive, only mildly positive average response has been received when funding programme representatives were asked about potential benefits from M-ERA.NET participation: Only two thirds agreed that their participation in calls was related to an internationalisation approach. Only 60% agreed that topics and projects were realised which could not have been realised in a regional/national network. Does this mean all others could have done it just as well or even better in national projects? Similarly, on average rather indifferent assessments were given with regard to the (R&I) quality, the speed and the cost of the research projects realised within the network.



#### 3.2.4 Benefits through and from Cooperation - by Country/Region Size

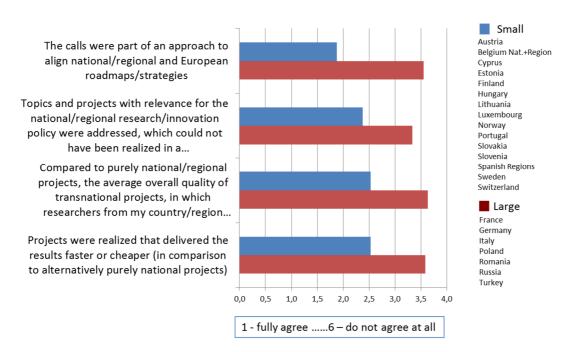


Figure 15: Benefits from and through cooperation (research area and projects) – by country size

Call participants from small countries or regions perceive higher benefits from cooperation than call participants from large countries. Assuming more restrictions to excellence and scope of R&I in small countries than in large countries, this is quite an expected result. However, participants from large countries assess most effects even slightly negatively (below 3.5). These responses are remarkable and are not supported by other data: Facts about monetary added value benefits (see chapter) show that the many little benefits of the large countries' programmes add up to considerable benefits in total.



#### 3.2.5 Benefits through and from Cooperation - by Approach

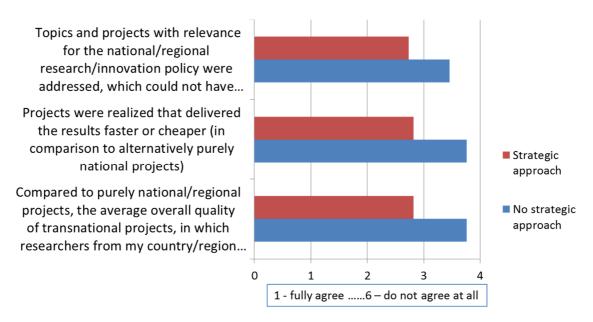


Figure 16: Benefits from and through cooperation (research area and projects) - by approach

M-ERA.NET participation is evaluated better when realised in the frame of a strategic approach for internationalisation. It may be concluded that participating programmes should become more aware of their reasons for participating in this network on the one hand, and that this participation should be part of a coordinated regional/national approach for internationalisation.

#### 3.2.6 Drivers and Barriers to Sustained Participation in M-ERA.NET

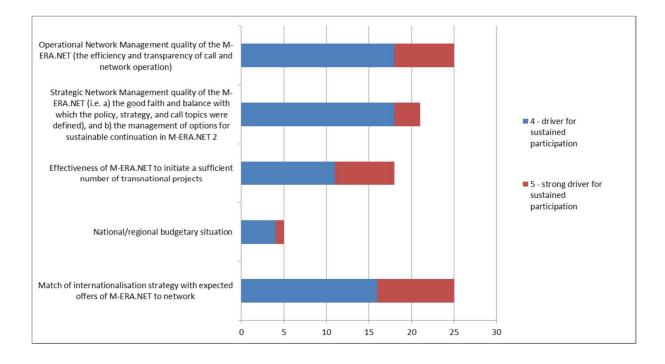


Figure 17: Drivers and barriers to sustained participation in M-ERA.NET (n=27 responses from parties which continue participation in M-ERA.NET)



In this figure, some aspects are analysed which may drive a participation in a network for transnational R&I projects. Only responses from programmes were counted here, which intend to continue their participation in the upcoming cofund phase (n=27), and only positive or strong positive responses (4 driver and 5 strong driver on a scale from 1 to 5).

Again, the match of M-ERA.NET with the internationalisation strategy plays an important role here, and the good operational management quality of network and calls is obviously a convincing driver for participation.

Three parties, which stop their participation in M-ERA.NET, answered the questionnaire. For at least two of them, a lack of matches between internationalisation strategy and offers of M-ERA.NET, budgetary situations, and strategic network quality acted as barriers or strong barriers.



#### 3.2.7 Network Activities & Management

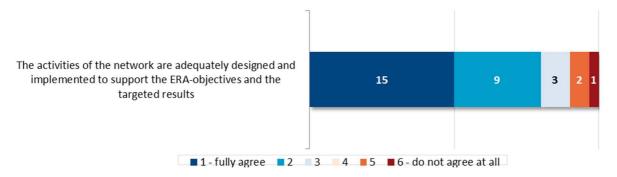


Figure 18: Assessment of network management and activities

The network activities and its management are considered an asset by the applicants, 80% agree or fully agree that the activities were adequately designed and implemented to reach the objectives of the network. Obviously, it was considered excellent in a way that it has even been functioning as a driver for sustained participation (see previous chapter).

A number of free text comments mention the good network management quality. However, respondents also give hints for improvement or criticise, e.g. with regard to:

- Oversubscription (high variation of oversubscription depending on the programmes' initiative to control applications or to generate funds, small budgets by some programmes)
- The absence of international scientific evaluations in the preproposal phase (some ask for it others want to keep pre-proposal evaluation in their hands)
- Consortium size and coordination (interface between different tasks and their leaders, the difficulty to streamline decision processes)
- Management of calls (single responders criticise that call processes are repeatedly discussed, one responder even asked for a central management agency of calls
- Scope of the network activities (some ask for the network to only perform calls and to refrain from duplicating databases, others ask for additional activities mainly with regard to dissemination)
- Global outreach (recommendation to intensify global cooperation in basic research and to be more restrictive/strategic in competitive application development)



### 4 Statistical Analysis of Joint Calls

The network keeps an excellent database of its calls, applications and evaluations, which helped a lot in this assessment. The network is encouraged to maintain and update this treasure.

In single cases, references are made to the predecessors of M-ERA.NET, MATERA and MNT-ERA.NET.

#### 4.1 Overview over Funding Organisations in Joint Calls 2012-2014

Programmes (Name)	2012	2013	2014	2015	Total participations
AT, BMVIT/FFG-TP	Х	Х	Х	х	4
AT, FFG-BP	Х	Х	Х	Х	4
BE, FNRS			Х		1
BE-FL, FWO	Х		Х	Х	3
BE-FL, IWT	Х	Х	Х	Х	4
BE-WA, DGO6	Х	Х	Х	Х	4
BR-Sao Paulo, FAPESP				Х	1
CH, SBFI		Х	Х	х	3
CY, RPF	Х	Х	Х	х	4
DE, DFG	Х	Х	Х		3
DE, PtJ		Х	Х		2
DE, PTKA		Х	Х	х	3
DE, VDI-TZ	Х	Х	Х	х	4
EE, ETAG			Х	х	1
ES, MINECO			Х	х	1
ES-A, IDEA		Х		х	1
ES-AS, IDEPA	Х	Х	Х	х	4
ES-BC, Innobasque	Х	Х	Х	Х	4
FI, Tekes	Х	Х		х	3
FR, ANR	Х	Х	Х		3
FR-L, CR-Limousin			Х	х	2
FR-MP, RMP	Х	Х	Х		3
HU, OTKA	Х	Х	Х	х	4
IL, MATIMOP	Х	Х	Х		3
IL, MOST			Х	Х	2
IS, RANNIS	Х	Х	Х	Х	4
IT, MIUR		Х			1
IT-P, Regione Piemonte			Х		1
KR, KIAT				Х	1
LT, RCL	Х	Х	Х	х	4
LU, FNR	Х	Х	Х	х	4
LV, LAS	Х	Х	Х	Х	4
NL, NWO				Х	1
NO, RCN	Х	Х	Х	Х	4
PL, NCBiR	Х	Х	Х	Х	4
PT, FCT	Х		Х	Х	3



RO, UEFISCDI	Х	х	х	Х	4
RU, FASIE		Х	Х	Х	3
SE, VINNOVA	Х			Х	2
SI, MIZS		Х	Х	Х	3
SK, SAS	х	Х	Х	Х	4
TR, TÜBITAK	х	Х	Х	Х	4
TW, MOST- NPNT	Х	Х	Х	Х	4
UK, TSB	х	Х			2
AT, Austrian Science Fund					Consortium members without participation in Calls
ES, MADRIMASD					

Table 1: Participation in joint calls (by funding programme by call)

M-ERA.NET is a comparatively large network. In total, 44 different funding programmes participated successfully, realising at least one call in the calls 2012-2014. 19 out of those 43 funding programmes participated in every single call of M-ERA.NET, and in total 30 participated in at least 3 out of the 4 calls of M-ERA.NET.

M-ERA.NET is increasingly attracting international funding programmes: From the second to the fourth call, additional 3 organisations from non-EU/not-associated states were drawn to start their participation after the first call of M-ERA.NET.

#### 4.2 Overview over Statistics to Joint Calls 2012-2014

	Call	Participating funding organisation s	Pre- proposals	Full proposal s	Funded projects	Total funding in MEUR
MNT-ERA.NET	Call 2006	18	77	42	14	9
MNT-ERA.NET	Call 2007	19	59	36	21	14
MNT-ERA.NET	Call 2008	17	31	19	11	8
MNT-ERA.NET	Call 2009	24	89	54	29	22
MNT-ERA.NET	Call 2010	20	84	54	17	12
MNT-ERA.NET	Call 2011	16	79	50	14	11
M-ERA.NET	Call 2012	30	122	69	23	15,8
M-ERA.NET	Call 2013	32	166	90	26	22,4
M-ERA.NET	Call 2014	36	172	104	20	14,5

Table 2: Overview over calls 2012-2014 (2006-2011 for historic comparison, MNT-ERA.NET I and II only)

# M-ERA.NET has a constant base of 30+ participating programmes in the annual calls and a sustained level of 20+ funded projects per call.

The merger between MNT-ERA.NET and MATERA has resulted in a sustained high level of participation with more than 30 participants in the single calls 2012, 2013 and 2014. The statistics also show that the network has become increasingly attractive to proposers, counting more than 170 preproposals responding to the call 2014. Data of 2015 is not complete yet. However, interest in participation has further increased with more than 200 proposers in the pre-proposal stage.



#### 4.3 Total Project Cost and Total Funding 2012-2014

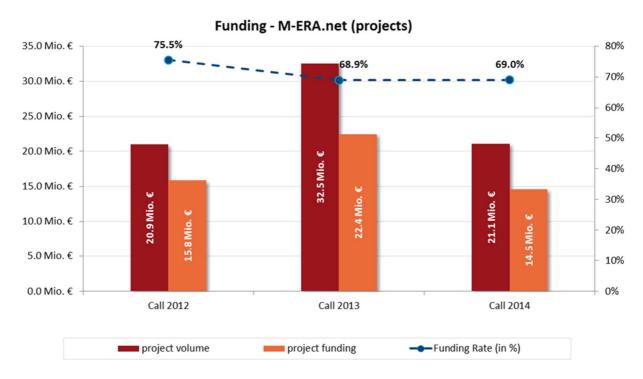


Figure 19: Total project costs and total project funding distributed per year

#### Total project funding varies considerably

The figure illustrates total project costs, total funding and number of projects. While there was a rather constant value of cumulated nominal call budget maximums of around EUR 30 million for each call, the budget was unevenly and only partially used for project funding: After an initial increase from EUR 15.8 million in 2012 to EUR 22.4 million in 2013, it declined again to EUR 14.5 million in 2014.

Funding rates decreased from app. 75% to 69%.



#### 4.4 Project Funding per Programme (2012-2014)

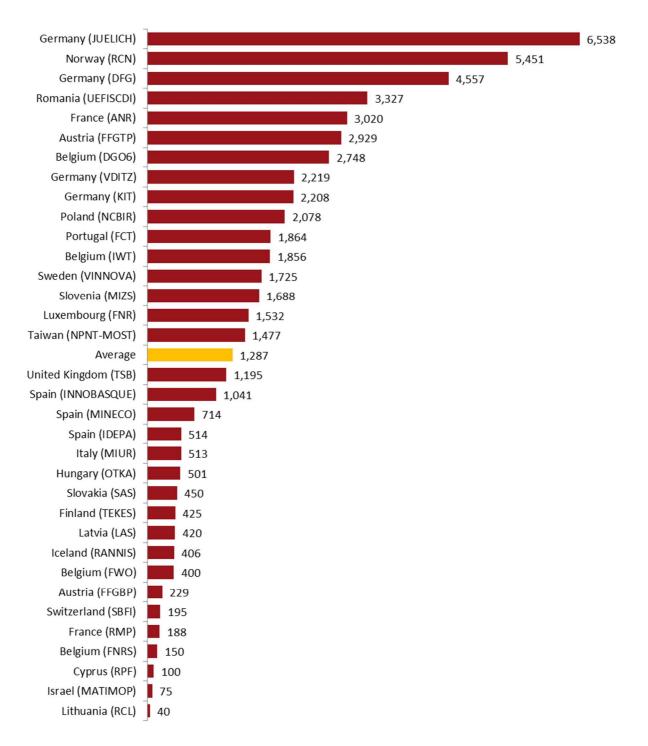


Figure 20: Project funding per funding programme 2012-2014

This table shows the total sum of organisations "recommended for funding" after the final evaluation of the 3 calls 2012, 2013, and 2014. More than EUR 15 million of the total of app. EUR 53 million were funded by the participating German programmes, followed by the Norwegian funding of almost EUR 5.4 million and Romania with EUR 3.3 million. In relation to size, the Austrian and Belgian programmes seem highly committed to M-ERA.NET – and successful in realising projects through it.



International participants account for funding considerable shares. The participation from Taiwan with roughly EUR 1.5 million is very remarkable.

#### 4.5 Success Rates 2012-2014

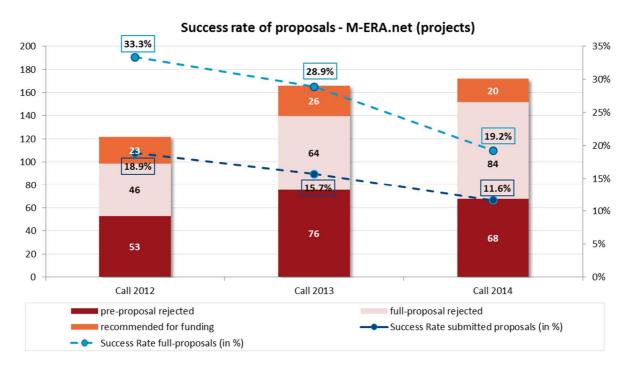


Figure 21: Number of pre-proposals, full proposals, funded projects and success rate per year

The number of funded projects stayed rather constant over the performed calls. However, while the instrument attracted more and more applicants to bring forward proposals, their success rate decreased.

The graph depicts the distribution of pre-proposals, received full proposals and finally the funded projects per call.

In addition, the graph shows two success rates: 1) the percentage share of pre-proposals which were finally funded (dark blue line) and 2) the percentage share of successful full proposals, awarded a grant through M-ERA.NET (light blue line).

The success rate of full proposals dropped significantly from 33.3% successful full proposals to 19.2%, and from 18.9% to 11.6% pre-proposal applications respectively.

The reasons for this decrease should be further analysed by the M-ERA.NET group because the former high success rate can be exploited to promote M-ERA.NET. Analysis of this subject is a constant issue in the M-ERA.NET consortium, and a workshop working group has identified causes mainly in ineffective control of early phases of national or regional applications.

96 full proposals were written by groups of researchers, and were rejected, although they passed the evaluation threshold in the full proposal evaluation. Depending on the necessary effort to bring proposals from the first idea to a status where they pass evaluation thresholds, between 5 and 15 person years of researcher capacity were certainly spent without subsequent funding. Depending on the interpretation of the threshold as such, this may either be considered a blessing of demand and productive competition, but just as well a waste of excellent research capacity.



#### 4.6 Number of Funded Applicants by Programme: Development 2012-2014

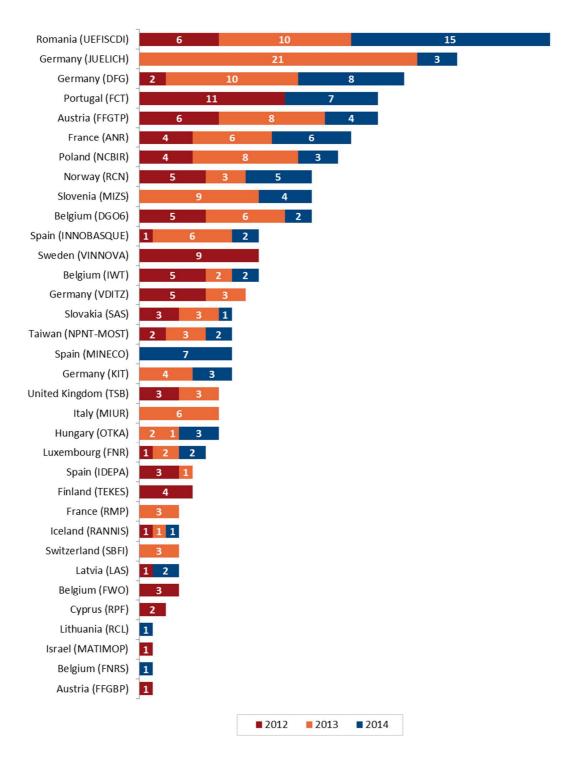


Figure 22: Number of funded project partners, by participating funding programme and call



M-ERA.NET has a strong core of active participants with good participation rates in projects – but 20% of the participating programmes never realised a single successful application.

20 of the 43 different programmes that have successfully participated in one or more of the calls, have realised almost 90% (or 270) of the 303 successful applications "recommended for funding", "contract signed" and "funding accepted". UEFISCIDI has been the most successful single programme, realising more than 30 Romanian (almost 10% of all participations!) projects.

#### 4.7 Types of Funded Applicants and their Share of Funding 2012-2014

25% of the app. 303 successful applicants actively claimed to have previous experience in ERA-NET call participation. App. 230 applicants did not claim to have had such experiences.<sup>5</sup>

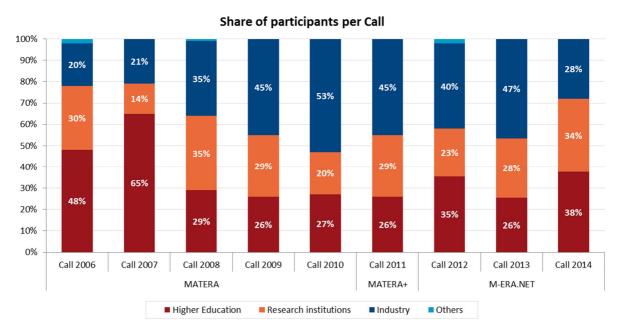


Figure 23: Funded applicants by type (2012 to 2014)

The relative number of participants from the different types of applicants is displayed here over time. On the right side of the figure, actual data of M-ERA.NET is displayed. On the left side, some historic data on calls of MATERA, the materials research oriented predecessors of M-ERA.NET is shown for comparison. Industry participation has increased in the MATERA phases, and is now decreasing again. One major cause for this development may be that important participating funding programmes only fund basic research projects (e.g. DFG, ANR) – other ones e.g. on thematic foci or evaluation structures/criteria.

\_

While this would be highly remarkable, the reason why it is not mentioned in a more prominent place here is that this data has been derived from submission platform data. There, proposers would report international experience in a non-mandatory field. It is highly questionable if all proposers did so.



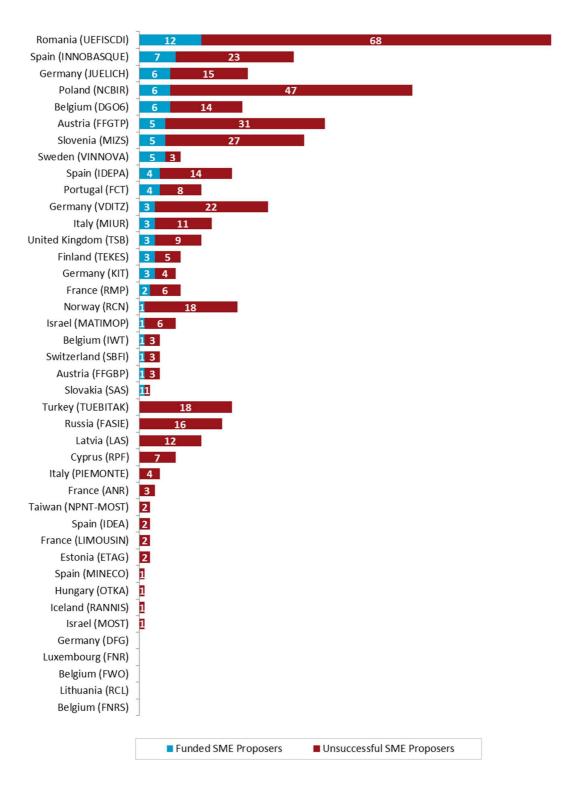


Figure 24: Funded and unsuccessful SME proposers (calls 2012-2014, including pre-proposal stage)

#### SME participation is unevenly distributed amongst participants.

In total, more than 80 SMEs were recommended for funding during the proposal evaluation of the calls 2012-2014, impressively demonstrating that M-ERA.NET may well be considered a stepping stone for internationalisation of this societally highly valuable group of private sector actors .

On the other hand, quite unsurprisingly, some programmes which otherwise have many successful proposers, but where only basic research or research organisations/universities are eligible, did not



fund any SMEs. This is the case e.g. for German DFG. 22 programmes funded at least one SME. Success rates above 30% were reached only by KIT (3 out of 7), the Swedish VINNOVA (5 out of 8), FCT (4 out of 12), Finnish TEKES (3 out of 8), and Slovakia (1 out of 2).



#### 4.8 Networking of Countries through Funded Projects 2012-2014 (Project Partner Connections by Country)

	Austria	Belgium	Cyprus	Finland	France	Germany	Hungary	Iceland	Israel	Italy	Latvia	Lithuania	Luxembourg	Norway	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Switzerland	Taiwan	United Kingdom
Austria	13																							
Belgium	4	19																						
Cyprus			1																					
Finland		2		1																				
France		4			9																			
Germany	12	9		4	27	62																		
Hungary				1	1	4	1																	
Iceland		1																						
Israel			2																					
Italy		2			9					4														
Latvia											1													
Lithuania											2													
Luxembourg	2	6			2	7				2			1											
Norway		9		1										4										
Poland	6					14		2			2				6									
Portugal		15						4						6		7								
Romania	6	4					8	3						6	10	9	25							
Slovakia	4					4	2	1		2				1	2			1						
Slovenia		4			8		2			6				2	4	2	19		8					
Spain	2	6		1	1	11	1						1	7		8	4	1	3	5				
Sweden	7				4								2							1	5			
Switzerland	9					6																3		
Taiwan	8			1		6	2							1	3			1	2	1			2	
United Kingdom		2				7														1	3			1



Figure 25: Number of partners connected to other countries in funded projects (2012-2014). The count is "1" for every single consortium partner in connection with one other partner in a project. If there is e.g. a project beween Austria and Germany with two german and 1 austrian partners, the count would be "2" on both sides.

# RTD cooperation funded by M-ERA.NET shows some preferred constellations in terms of partner countries whereas some countries or regions are not connected through any transnational projects at all.

The table shows the number of partner-to-partner-cooperations in research projects which were funded following the calls 2012-2014. The following constellations between project partners have been set up frequently:

Germany and France (27)

Romania and Slovenia (19)

Portugal and Belgium (15)

Poland and Germany (14)

Austria and Germany (12)

Spain and Germany (11)

Poland and Romania (10)

The comparatively intensive cooperation between neighbours such as Austria, Poland or France with Germany, or between Portugal and Spain was likely to be detected. Also, cooperation between some eastern European countries may have their roots in historic ties. However, increased partnerships between Spanish and German partners for example, or between Portuguese and Belgian project partners are not as easily explained. Such intensive ties should be explored further: Are these patterns of a development towards an aligned, coordinated transnational, truly European research an innovation area in thematic clusters? Can such an analysis drive cross-national roadmaps and policies for certain research topics - and adequately designed calls? Which role could M-ERA.NET play to that regard?



### 4.9 Success Rates of Applicants 2012-2014

In the table below, the success rate of proposers is listed by applicant per programme.

### Success rate of applicants - M-ERA.net (agencies)

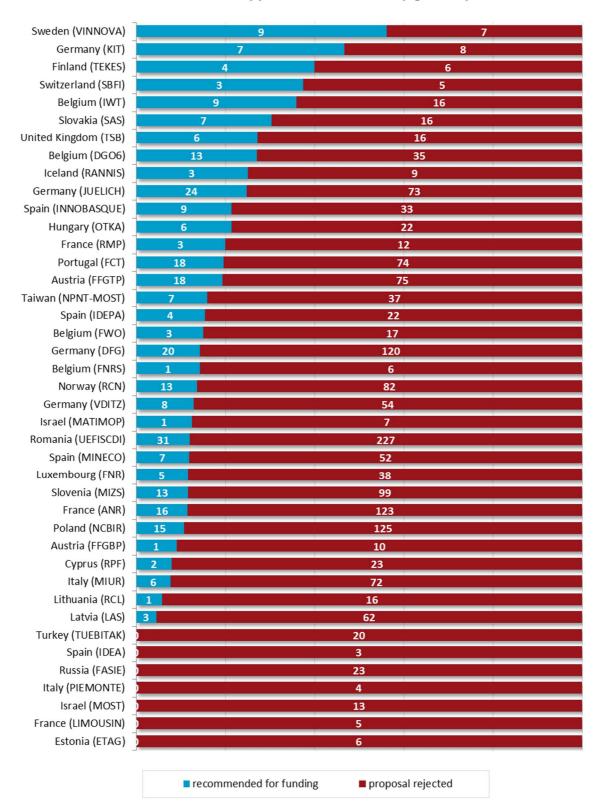


Figure 26: Count of successful applications per programme (from pre-proposal to recommended for funding)



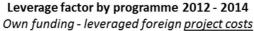
### The distribution of funded project partners per country and year varies noticeably

This graph gives an overview over the distribution of funded project partners per year and programme – and not funded applicants in comparison.

The distribution shows that some of the programmes are much better than others at bringing forward applicants in convincing proposals. While 10 participating programmes manage to bring 25% and more to a successful, funded project application, 7 funding programmes did not succeed at all in bringing forward even a single applicant. This includes programmes which participated in the calls 3, raising rather fundamental questions about the quality of the match of these funding parties with the calls of the network.



### 4.10 Leveraged National/Regional Value 2012-2014



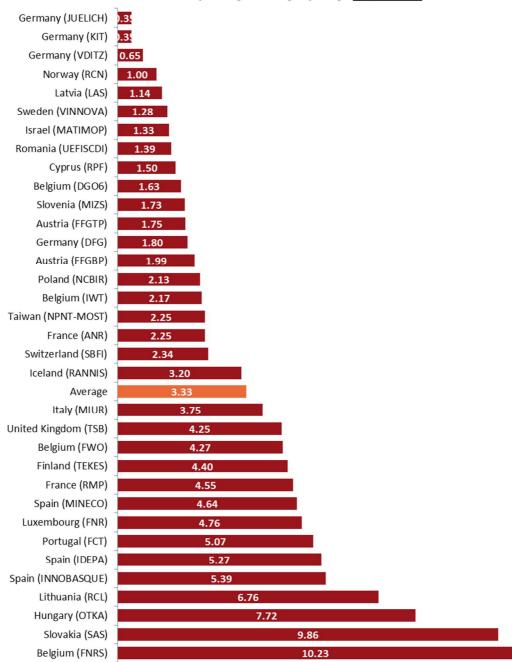


Figure 27: Leverage effect of programme investment in transnational projects: research value leveraged by invested Euro per programme (in multiples of funded Euro) added lever)



#### The vast majority of countries leveraged value amounting to multiples of their own funding

It was analysed how much value was leveraged by the "own" funding of the agencies (programmes) – counted in multiples of the own investment. This is one indicator to assess the European value added by avoiding duplication – or the indication by how many national and regional programmes can increase their impact by transnational cooperation. The assumption is that there is no need to finance a national party if you have free access to the rights and knowledge generated by another network member in the same project (which is usually the IPR regime in these). The leverage factor indicates how much value project participating programmes get access to for free when they invest in their own shares of the transnational projects. Another way of interpretation is the "savings through avoidance of duplication".

There is a smaller group of programmes that get access to results that cost at least five times as much as their own investment: Portugal, Lithuania, The Basque Country, OTKA of Hungary, SAS of Slovakia and the French minority in Belgium with the top leverage of more than 10.



### Leverage factor by programme 2012 - 2014

Own funding (red) - leveraged foreign project cost (green)

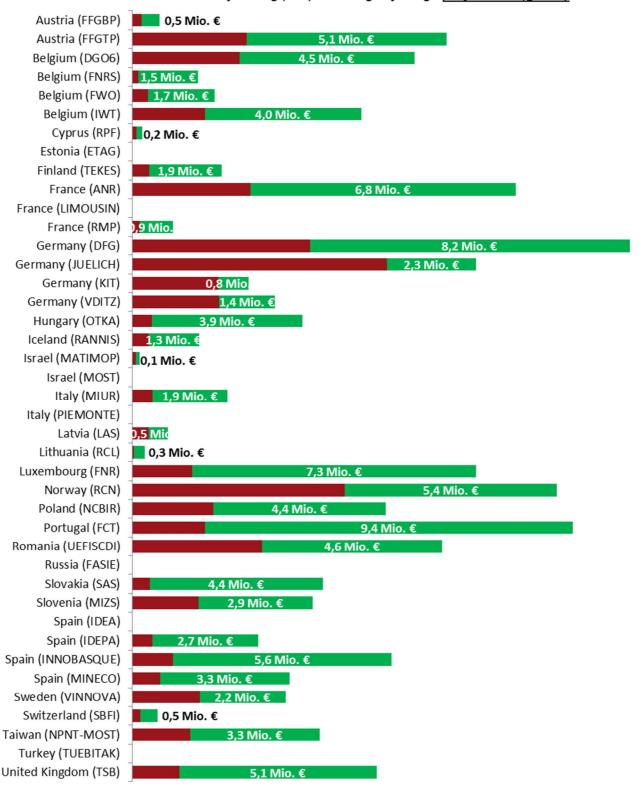




Figure 28: Leverage effect of programme investment in transnational projects: "foreign" research value leveraged by invested regional/national funding

It was analysed how much value could be leveraged by the "own" funding of the agencies (programmes) – now not counted as a leverage factor (see previous table and interpretation), but counted in Euro. The red part of the bar represents the relative regional/national funding of the participating programme, the green part indicates the relative value financed by private or public sources, and the figures on the green bar represent the equivalent in Euro attached to it. From the national perspectives, these leveraged additional project cost – or additional project values add up to an impressive EUR 110 million for the calls performed between 2012 and 2014.

Funding programmes from large countries – often with multiple national participations – naturally have a smaller leverage factor (as could be seen in the previous table). This is the case e.g. for the three lowest ranking German programmes as shown above. However, given the large investments in national sub-projects, considerable monetary benefits were achieved here, too, in the value of EUR 2.3 million research cost financed by foreign parties for JUELICH for example (with an own investment of more than EUR 7 million), and good values also realised for VDI-TZ (EUR 2.2 million investment, EUR 1.4 million foreign financing) or DFG (EUR 4.5 million investment, EUR 8.2 million foreign financing).



## 5 Appendix

# Appendix A: Preliminary overview over achieved vs. targeted objectives by M-ERA.NET

M-ERA.NET set itself some ambitious goals, laid down in the dow of the grant agreement. Major aspects of these objectives have been assessed here. However,

- not all outcomes of M-ERA.NET were realised yet at the time of the assessment most data refers only to 3 out of 4 realised calls.
- some of the aspects rated here have not been assessed in exactly the same wording as stated as objectives however, results of similar aspects were used as indication

Aspects marked in green have been achieved, yellow ones partly, and the red ones have not been achieved – or they are highly unlikely to be achieved with the 2015 call outcomes.

Aspect	M-ERA.NET objective	
total call budget (national funding) mobilised per call	EUR 35 million (+400%)	✓
joint strategic programmes	systematic multi-annual joint programming	✓
geographical coverage of joint calls/number of countries in a call	27 countries (+200%)	✓
new RTD partnerships and access to new markets (Europe)	> 10% participation of new project partners	✓
new RTD partnerships and access to new markets outside Europe	> 5% participation from outside Europe	✓
joint call procedures: clear and transparent to RTD community	80% of call applicants agree	✓
coverage of emerging topics	one single, flexible umbrella structure	✓
newcomers to transnational RTD cooperation	>10% of applicants in a joint call	✓
number of projects funded by ERA- NETs through joint calls	200 (+900%)	×
complementarities to other funding instruments	systematic analysis among RTD community, 80% agree	
realising the ERA: number of countries in the ERA-NET consortium	25 countries (+100%)	✓
leverage effect: EC contribution for the ERA-NET coordination mobilises national funding	1:50 (+900%)	×
support for the innovation chain	whole innovation chain is covered by consortium	✓



### **Appendix B: Assessment Design**

The following assessment design has been used for the coordination and acknowledgement of the research aspects and related survey questions. Single questions and some of the scales were subject to last-minute changes which are not reflected here.



# Design for the Final Assessment of M-ERA.NET

# **Revised surveys**

for

Fundación para el Conocimiento madri+d on behalf of M-ERA.NET Consortium

by

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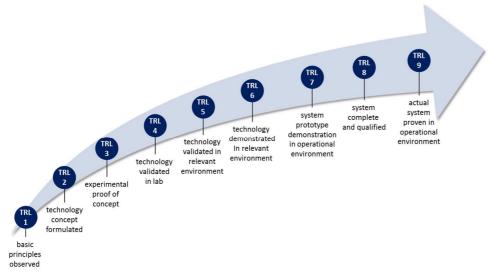
## 1 Survey questions to beneficiaries and proposers

Beneficiaries are requested to answer all questions. The subset of questions which are also addressed to proposers of not funded full proposals, are clearly marked with (P).

. <b>GENERAL INFORMATION</b>	
Project Acronym:	
Project Title:	
Name of the organisation: (P)	
Year of Project Start:	

#### 2. TECHNOLOGICAL SELF-ASSESSMENT

The newly introduced self-assessment of the Technology Readiness Levels (TRL) of projects / intended projects gives a good indication for the position of the M-ERA.NET's project portfolio, i.e. the spread between more basic to application oriented research. The following two questions will be introduced with a graph, clearly explaining the TRL concept to respondents.



Graph to explain the Technology Readiness Levels (will be displayed online)

Questions \ Scale	<b>1</b>	2	3	4	5	6	7	8	9
Which TRL level did you address with your individual project activities at the beginning of the project? (P)									
Which TRL level should be reached at the end of the project?									

### 3. TRANSNATIONAL BENEFIT

The following set of questions assesses the benefits of the M-ERA.NET as a transnational funding programme, both in relation to national/regional as well as to European Framework programmes. The range of questions expand to assessing the satisfaction of beneficiaries and proposers during the application and the implementation phases (the latter only rated by beneficiaries). In comparison to earlier assessments, the design of the questions have been changed, i.e. newly grouped and often come with finer granulated rating scales, in order to reveal more detailed results. Earlier questions were mostly taken up.



Please indicate your <b>experience level in participating in</b> programmes on a scale from 1 (extensive experience) to				l resea	irch fu	nding
Experience in participating in 1	<b>2</b>	3	4	į	5	6
national/regional research funding					1	
programmes						
European Framework programmes					1	
FP6/7/Horizon 2020)						
other transnational funding programmes						
Please rate the following comparisons of geographical	lovole d	of fundir	a prog	ramm	ae on a	a ccalo
rom 1 (agree to full extend) to 6 (not agree) in. (P)	ieveis C	) iuiiuii	ig prog	Iaiiiiii	<b>53</b> OH 6	ı Scale
Compared to	1	2	3	4	5	6
national/regional programmes, the M-ERA.NET aims				7		
at more ambitious research and innovation projects						
national/regional programmes, the M-ERA.NET						
e i e						
provides access to more competent partners (with	Ш	Ш	Ш	Ш	Ш	Ш
relevant know-how)						
national/regional programmes, the M-ERA.NET puts						
more emphasis on the exploitation of research results						
other funding programmes on regional / national /						
ransnational level, M-ERA.NET consortia more often						
cover the whole innovation chain						
EU Framework Programmes, the M-ERA.NET rules						
are simpler						
EU Framework Programmes, the M-ERA.NET is more						
attractive to newcomers						
EU Framework Programmes, the M-ERA.NET puts						
nore emphasis on the exploitation of research results						
Any comments:						
	-111-					1
Reflecting the application process of the M-ERA.NET c	aiis, pie	ease rate	e your ex	xperier	ice on	a scale
rom 1 (agree to full extend) to 6 (not agree) (P)	1	2	3	4	5	6
The M-ERA.NET helps to search and find appropriate	<u>'</u>		<u> </u>	4	<u> </u>	
cooperation partners						
Proposal submission was easy						
Evaluation was transparent and informative						
nteraction with the national/regional funding agency was						
supportive throughout the application process						
Any comments:						
Reflecting the project implementation of research project		-	W-EKA	.NEI,	piease	rate
our experience on a scale from 1 (agree to full extend) to	`_		_	_	_	_
	<u>1</u>	2	3	4	5	6
All project partners are committed to the project						
The consortium is stable during the project						
mplementation	_		_	_		



All project partners are important (i.e. had meaningful roles) to implement the project						
The project's objectives are realistic (i.e. budget, effort, time)						
Project management is effective						
The financial resources are sufficient						
The project duration is appropriate						
Interaction with the national/regional funding agency is						
supportive during the project implementation						
Outcomes are/will be shared fair among the partners						
according to their inputs (prior and during the project implementation)						
Any comments:  Do/would you continue cooperating with M-ERA.NET procontext)?  □ Yes,	ject part	ners (ei	ther in I	R&D or	any oth	er
<ul> <li>With partner(s) previously known to me</li> </ul>						
<ul> <li>With partner(s) new to me</li> </ul>						
□ No						
New: Did you already succeed in realising your project identification under an M-ERA.NET call for proposals, elsewhere? (onle (Multiple answers are possible)  Yes, outside a funding programme Yes, within a national/regional project Yes, within a transnational project Yes, within a EU Framework Programme project Yes, with a reduced budget / team / target A decision on a submitted project proposal is per It is not yet decided to follow-up on the proposed No, the realisation will no longer be pursued A different option, please specify:	nding project		e not se	ected fo	or fundi	ng
If you had the choice, which funding scheme would you p research projects? (P)  national/regional funding programme bilateral (transnational) funding programme an ERA-NET programme EU-Framework Programme (Horizon 2020) another funding scheme: no funding For which main reason?	referabl	y select	for imp	lementi	ng fund	ed



# 2 Survey questions to M.ERA-Net network partners

Org	ganisation name:									
<u>Ou</u>	treach and Performance of Network									
1.	Please assess the average amount of national annual R&D funding (in Euro) from 2012 to 2015 in your country/region for the field covered by the network (project funding and institutional funding where applicable):									
<u>Dir</u>	nensions and Extent of Impact of M-ER	RA.NET Participation								
2.	<ol><li>Considering the following statements, please indicate the gradual impact of M-ERA.NET on the European Research and Innovation Area, and the evidence level.</li></ol>									
		Gradual Impact The evidence hints on:	Evidence Level							
the res kn ex	ne transnational projects funded through e network helped the national/regional search communities to source owledge from or disseminate to cellent European Research ommunities	<ol> <li>1 - high negative impact</li> <li>2 - rather negative impact</li> <li>3 - neutral impact</li> <li>4 - rather positive impact</li> <li>5 - high positive impact</li> </ol>	<ol> <li>1 - No evidence</li> <li>2 - Little evidence/anecdotes</li> <li>3 - Some Evidence</li> <li>4 - Clear Evidence</li> <li>5 - Comprehensive evidence</li> </ol>							
the res kn	ne transnational projects funded through e network helped the national/regional search communities to source owledge from or disseminate to cellent Global Research communities	The above scales	apply to all questions							
the co	ne transnational projects funded through e network helped our regional/national mpanies to better collaborate with other mpanies in Europe and/or access uropean markets									
the co	ne transnational projects funded through e network helped our regional/national mpanies to better collaborate with other mpanies in <b>Global markets</b>									
na	ne calls were part of an approach to align tional/regional and European admaps/strategies									
pro an wa bo	ne design of regional/national funding ogrammes (including topics, rules, dates ad/or processes) have been adapted in a any that increasingly facilitates crossorder <b>programme</b> cooperation (since u started participation in the M-ERA.NET its predecessors)									



The regional/national programmes topics, rules, dates and processes have been adapted in a way that increasingly facilitates cross-border **project** cooperation (since you started participation in the M-ERA.NET or its predecessors)

Topics and projects with relevance for the national/regional research/innovation policy were addressed, which could not have been realized in a regional/national network alone

Compared to purely national/regional projects, the average overall quality of transnational projects, in which researchers from my country/region were involved, is higher.

Projects were realized that delivered the results faster or cheaper (in comparison to alternatively purely national projects)



### Looking back, please indicate the overall impression of the management of the network

### **Gradual Impact**

		Graduai iiipact
		The evidence hints on
3.	The activities of the network are adequately designed and implemented to support the ERA-objectives and the targeted results	<ol> <li>1 - high negative impact</li> <li>2 - rather negative impact</li> <li>3 - neutral impact</li> <li>4 - rather positive impact</li> <li>5 - high positive impact</li> </ol>
4.	Please name aspects of network management that could be further	er improved
5.	Please name aspects of network management that should be add	ed in the future
6.	Please name aspects of network management that should be stop	pped
Bel	navioural Additionalities	
		Gradual Impact
		The evidence hints on
7.	The network helped to enhance my capability with regards to good innovation programme design and management	<ul><li>1 - high negative impact</li><li>2 - rather negative impact</li><li>3 - neutral impact</li></ul>

8. The quality of my national/regional research funding programme

practices adopted from other network members or due to joint

has been improved due to these capabilities and/or good

implementation of tasks

4 - rather positive impact5 - high positive impact

1 - high negative impact

3 - neutral impact

2 - rather negative impact

4 - rather positive impact5 - high positive impact



### Outlook and intended participation in M-ERA-NET II

9.	My funding programme intendent the future O Yes	ds to continue a	active coopera	tion with the	M_ERA.NET	network in
	9.1. This will include O Yes	ecify:			calls	
	O No, please sp	ecify:				
	O No, please specify:					
	nich of the following aspects ERA.NET 2?	did rather dri	ve or hinder y	our motivat	tion for a part	icipation in
		tstrong barrier to sustained participation	2 barrier to sustained participation	3 neutral/no impact	4 driver for sustained participation	5 strong driver for sustained participation
10	e. Expected match of future national/regional research priorities with topics of M-ERA.NET 2 calls					
11	. Match of internationalisation strategy with expected offers of M-ERA.NET to network					
12	. National/regional budgetary situation					
13	ERA.NET to initiate a sufficient number of transnational projects					
	Management quality of the M-ERA.NET (i.e. a) the good faith and balance with which the policy, strategy, and call topics were defined), and b) the management of options for sustainable continuation in M-ERA.NET 2					
15	Management quality of the M-ERA.NET (the efficiency and transparency of call and network operation)					



16. Alternative Funding Opportunities for transnational projects								
17. Other aspects, please specify:								
Will you participate in the M-ERA.NET assessment workshop?  O Yes O No								
Can we contact you by telephone to explore some of the above mentioned aspects further?  O Yes, contact me at:								