

Results of M-ERA.NET Call 2020

236 pre-proposals were submitted, requesting 153 Mio EUR funding in total.

146 pre-proposals were recommended for a full-proposal submission. 144 full-proposals were submitted.

119 full-proposals passed the full-proposal evaluation, requesting around 86 Mio EUR funding.

Depending on national/regional budgets and rules the national/regional funding organisations finally **selected 42 full-proposals for funding** corresponding to requested funding of 32.3 Mio EUR. This is the highest amount of selected full-proposals for funding M-ERA.NET has ever achieved in a non-cofunded call.

These projects are allocated to the call topics as follows:

- Functional materials: 12 funded projects
- High performance composites: 7 funded projects
- Innovative surfaces, coatings and interfaces: **10** funded projects
- Materials for Additive Manufacturing: 8 funded projects
- Modeling for materials engineering and processing: 4 funded projects
- New strategies for advanced material-based technologies in health applications: 1 funded project

The total success rate (selected full-proposals vs total submitted pre-proposals) is 16.6 % (Fig. 1). For the different topics the rates of success vary:

Functional materials	19.0%
High performance composites	14.3%
Innovative surfaces, coatings and interfaces	22.2%
Materials for Additive Manufacturing	19.0%
Modeling for materials engineering and processing	18.2%
New strategies for advanced material-based technologies in health applications	6.7%

The success rate for the second stage (selected full-proposals vs. total submitted full-proposals) is 28.4 %.

Functional materials	30.0%
High performance composites	22.6%
Innovative surfaces, coatings and interfaces	38.5%
Materials for Additive Manufacturing	29.6%
Modeling for materials engineering and processing	25.0%
New strategies for advanced material-based technologies in health applications	25.0%

The success rates (selected full-proposals vs total submitted pre-proposals) per organisation type are shown in Fig. 2. The success rate for universities is 14.6%, for research organisation is 18.8%, for SMEs 19.6%, and for large companies 28.2%.





Fig 1: Number of participations: selected full-proposals compared to rejected pre-proposals for all six call topics.



Fig 2: Number of participations: selected full-proposals compared to rejected proposals for all organisation types.



The success rates per individual national/regional funding organisation (number of selected full-proposals vs number of submitted proposals) are shown in Fig. 3.



Fig 3.: Total number of participations: success rate from pre-proposal phase to selected full-proposals.



The total project volumes and corresponding requested funding per call topic are shown in Fig. 4.

The topic with the highest amount of requested funding is "functional materials" with 9.3 Mio EUR. This is followed by the topic "Innovative surfaces, coatings and interfaces" with 7.7 Mio EUR. For the topics "High performance composites", "Materials for Additive Manufacturing", "Multiscale modelling for materials engineering and processing Multiscale modelling for materials engineering and processing" and "New strategies for advanced material-based technologies in health applications" 5.5 Mio EUR, 5.7 Mio EUR, 2.6 Mio EUR and 1.2 Mio EUR funding are requested, respectively.



Fig 4.: Selected full-proposals: total project volumes and requested funding (EUR) per call topic.

The distribution of total project costs and requested funding per organisation type is shown in Fig 5.

In the selected full-proposals research organisations (13.3 Mio EUR) and universities (11.1 Mio EUR) request the highest amount of funding. A small ratio of 24 % of the total funding is requested by enterprises and other organisations: 16,0 Mio EUR funding by SMEs, 6.5 Mio EUR funding by large enterprises and 0.6 Mio EUR funding by others.





Fig 5.: Selected full-proposals: total requested funding and total planned costs (EUR) per organisation type.

Out of 42 recommended projects, the majority of the coordinators are from research organisations (21 projects) and universities (15 projects). Three projects are coordinated by SMEs and three projects are coordinated by a large company (Fig. 6).



Fig 6.: Selected full-proposals: number of coordinators per organisation type.



The selected projects start from Technology Readiness Level (TRL) 1 (basic principles observed)) to some extent TRL 6 (technology validated in relevant environment) (Fig. 7).



Most of them start with TRL 2 (technology concept formulated) or TRL 3 (experimental proof of concept).

Fig 7.: Selected full-proposals: number of applicants per start Technology Readiness Level.

The TRL targeted on the end of the project are between TRL 3 and TRL 7 (system prototype demonstration in operational environment), see Fig. 8.

Most projects indicate a two or three step advance of the TRL, resulting in a broad distribution of the end-TRL between TRL 4 (Technology validated in lab) and TRL 6 (technology demonstrated in relevant environment).



Fig 8.: Selected full-proposals: number of applicants per target Technology Readiness Level



The requested funding of selected full-proposals per funding organisation is illustrated in Fig. 9.



Fig 9.: Select full-proposals: requested funding per funding organisation (EUR).



Fig. 10 shows the distribution of applicants of successful full-proposals per topic and per country.

