

## Results of M-ERA.NET Call 2021

The M-ERA.NET Call 2021 was launched on 15 March 2021. 45 funding agencies from 32 countries participate with a total budget of approximately 60 million €, including an EU contribution.

- 493 pre-proposals were submitted, requesting 403 Mio EUR funding in total.
- 174 pre-proposals were recommended for a full-proposal submission. 171 full-proposals were submitted and 170 were sent to M-ERA.NET central evaluation.
- 151 full-proposals passed the full-proposal evaluation, requesting around 134 Mio EUR funding.

Depending on national/regional budgets and rules the national/regional funding organisations finally selected 70 full-proposals for funding corresponding to requested funding of 69.9 Mio EUR. This is the highest amount of selected full-proposals for funding an ERA.NET has ever achieved in a cofunded call.

These projects are allocated to the call topics as follows:

- Functional materials: 23 funded projects
- High performance composites: **8** funded projects
- Innovative surfaces, coatings and interfaces: **16** funded projects
- Materials for Additive Manufacturing: 8 funded projects
- Modeling for materials engineering and processing: **6** funded projects
- New strategies for advanced material-based technologies in health applications: 9 funded project

The total success rate (selected full-proposals vs total submitted pre-proposals) is 14.2 % (Fig. 1). For the different topics the rates of success vary:

Functional materials	14.1%
High performance composites	11.6%
Innovative surfaces, coatings and interfaces	15.5%
Materials for Additive Manufacturing	13.6%
Modeling for materials engineering and processing	15.8%
New strategies for advanced material-based technologies in health applications	14.8%

The success rate for the second stage (selected full-proposals vs. total submitted full-proposals) is 40.3 %.

Functional materials	45.1%
High performance composites	29.6%
Innovative surfaces, coatings and interfaces	45.7%
Materials for Additive Manufacturing	33.3%
Modeling for materials engineering and processing	42.9%
New strategies for advanced material-based technologies in health applications	45.0%

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 13.3%, for research organisation is 14.7%, for SMEs 16.6%, and for large companies 19.3%.





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.



With 11 of the EU-13 (widening) countries (except Malta and Cyprus) participating in the Call 2021, researchers from EU-13 countries play a substantial role: 24% of the funded applicants (fig. 4) and 21% of the project coordinators come from EU-13 countries. 20% of the total project funding is contributed by funding agencies from EU-13 countries.



Fig 4.: Number of participants from EU-13 countries in selected full-proposals.

The total project volumes and corresponding requested funding per call topic are shown in Fig. 5.

The topic with the highest amount of requested funding is "functional materials" with 30.1 Mio EUR. This is followed by the topic "Innovative surfaces, coatings and interfaces" with 17.7 Mio EUR. For the topics "New strategies for advanced material-based technologies in health applications", "Materials for Additive Manufacturing", "High performance composites" and "Multiscale modelling for materials engineering and processing" 10.7 Mio EUR, 9.7 Mio EUR, 7.2 Mio EUR and 6.7 Mio EUR funding are requested, respectively.



Fig 5.: 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 6.

In the selected full-proposals universities (30.2 Mio EUR) and research organisations (29.3 Mio EUR) request the highest amount of funding. A small ratio of 14.3 % of the total funding is requested by enterprises and other organisations: 7.7 Mio EUR funding by SMEs, 2.3 Mio EUR funding by large enterprises and 0.2 Mio EUR funding by others.



Fig 6.: Selected full-proposals: total requested funding and total planned costs (EUR) per organisation type.

Out of 70 recommended projects, the majority of the coordinators are from universities (35 projects) and research organisations (29 projects). Four projects are coordinated by a large company and two projects are coordinated by SMEs (Fig. 7).



Fig 7.: 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 4 (technology validated in lab) (Fig. 8).



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

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

The TRL targeted on the end of the project are between TRL 1 and TRL 7 (system prototype demonstration in operational environment), see Fig. 9.

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 9.: 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. 10.

Fig 10: Select full-proposals: requested funding per funding organisation (EUR).