

Call for Proposals
of the German Federal Ministry of Education and Research (BMBF) on
“Organization of Work in European Collaboration Networks (EuKoNet)”
within the Research Program
“The Future of Value Creation – Research on Production, Services and Work”

dated February 24, 2023

(Excerpt)

1 Funding Goal, Funding Purpose, Legal Basis

Sustainable, healthy, and digital transformation of economy is one of the big challenges faced by the European Union. Every technological breakthrough and every societal change increase the dynamics and the complexity of value creation. Individual organizations are more and more dependent on the performance of volatile partnerships.

Most networks for the creation of value added already extend beyond national borders. To master challenges, such as the lack of skilled workers, demographic change, scarcity of resources, and growing global competitive pressure, it is vital to strengthen the close collaboration between science, industry, politics, and social partners in Europe.

As a consequence, work environments of the people will change. New work requirements, work conditions, and work surroundings correspondingly require new, dynamically improved forms of work, both between employees of the same organizations and between those of different ones. Harnessing competencies and experiences of the work force is vital to actively implement this change.

People who work in systems to create value added are confronted with multiple challenges resulting from rises in Europe-wide collaboration, dynamic spectra of tasks, spatially and temporally distributed work, diffuse responsibilities, and complex coordination. Employees and executives have to meet high requirements regarding personal and organizational flexibility.

1.1 Funding Goal

This funding initiative of the Federal Ministry of Education and Research (BMBF) is aimed at researching the challenges of a dynamic work environment in more detail, with use cases in European collaboration networks being applied as examples. On this basis, solutions are developed for both participating network parties and employees.

Other important goals are application of the research results beyond the above mentioned prototypical use cases, active transfer of research findings, and tailor-made communication to appropriate audiences outside the scientific community.

The funding initiative is part of the ESF plus program “Future of Work” which itself forms part of the research program “The Future of Value Creation – Research on Production, Services and Work” (in German):

https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/5/31662_Zukunft_der_Wertschoepfung.pdf?__blob=publicationFile&v=7.

1.2 Funding Purpose

The purpose of this funding initiative is to develop concepts, methods, and instruments for the sustainable organization of work in European collaboration networks, which take the high dynamics of systems for the creation of value added and business conditions into account. Potential results may be pre-competitive digital cooperation networks (demonstrators) and the development of human-centered role and procedural models as well as of the corresponding competence and qualification profiles. They are expected to solve the addressed research needs, to be of economic and social use even after the end of the project, and may deliver new products, services or work processes.

The funding has the following purposes:

- 1) Development and implementation of models, methods, and instruments for daily collaboration in international networks.
- 2) Development and implementation of comprehensive concepts for competence-enhancing organization of work under permanent change.
- 3) Transfer of above mentioned results to companies, organizations, and society using tailor-made, appropriate means.

Concrete indicators (social, economic, ecological) are used to assess the solutions developed in close-to-practice use cases. In addition, the effect of methods and instruments developed on employees and the organization in the model areas studied will be evaluated.

The findings must contribute to improving work conditions in the European Union in daily business, to securing jobs over a long term or to generating new jobs, and to enhancing competitiveness.

2. Subject of Funding

Funding will be granted to collaborative, pre-competitive research projects (joint projects) focusing on new instruments and methods for human-centered work in European collaboration networks.

Work shall remain future-oriented, productive, innovative, and social under the conditions of a dynamic, transnational network for the creation of value added. New forms of collaboration in international networks may decisively contribute to an increase in personal and organizational resilience and European sovereignty. Experts in human factors, work science, industrial ergonomics, together with representatives of other disciplines, companies, their staff, and transfer and social partners, are encouraged to develop innovative approaches for this purpose (e.g. concepts, methods, instruments, prototypical environments). The prototype solutions must be validated in concrete business scenarios. Users must be integrated in research projects by appropriate participation formats. Solutions must be evaluated under conditions that are as close to reality as possible. In addition, the findings shall be generalized and advanced for broad use in the European Union. Results must be developed in the following two areas:

- Innovative methods and instruments for collaboration in international networks, including
 - collaborative knowledge management in changing networks, instruments for inter- and transdisciplinary work and for enhancing diversity in innovation processes; instruments to assess collaboration processes,

- culture-sensitive concepts for collaboration on the regional, national, and international levels and for the further development of process knowledge in Europe,
 - digital means of support enabling transdisciplinarity, interaction, autonomy, and trust-based collaboration in networks, including digital platforms and ecosystems,
 - hybrid solutions to improve complementary competencies in international networks in a profitable way,
 - sustainable and secure exchange between the management and the operational level using appropriate digital equipment, innovative appreciation and working time models.
- Organizational framework for competence-enhancing organization of work in collaboration networks, including
 - Comprehensive, innovative measures for adaptive participation and decision processes, branch-specific and unconventional forms of work distribution to support creativity, trust, and diversity,
 - harnessing the potential of self-determined and autonomous work (creative freedom), instruments to introduce comprehensive collaboration management, strategies for assigning “diffuse” responsibility,
 - transparent and participative organization of permanent change that take company structures, individual skills, work culture, and the needs of collaborating partners into account,
 - proactive design of human-centered, innovative and resilient forms of organization for digitally supported collaboration,
 - strategies for proactive maintenance of expertise in view of rapidly changing activities and to cope with the lack of skilled workers, biography-sensitive approaches to planning transformation processes in business, reference models for viable learning and training cultures,
 - participation of employees in collaboration management for self-determined implementation, test environments for the interaction between agile and stable forms of work, trust-based incentive systems for collaboration.

In both areas, examples of implementation in concrete, business-oriented use cases must be presented. For this purpose, comprehensive principles for the design of socio-technical systems must be considered from the perspectives of human factors, engineering, and organization. Work in the above mentioned areas is also associated with new governance and participation cultures. Concepts which solely address the adaptation of individual behavior patterns in an isolated way will not be sufficient. In view of the challenges of collaboration in networks, of digital transformation and of a fluid work environment, the following results are expected for the above areas and use cases:

- Exemplary, pre-competitive IT solutions for the technical implementation of a digital collaboration network (demonstrator) adapted to the above use cases.
- Human-centered procedural models adapted to the use cases, in which roles, responsibilities, and competencies are clearly defined. The employees are to be given concrete guidance for the further development of their processes and structures in a “fluid work environment”.

- SME-specific solutions for work-integrated learning and for promotion of innovation capabilities of and within work networks
- Adequate competence and qualification profiles to cope with the technical and personal challenges.
- Guidelines, best practices, success stories, etc. derived from the use cases.

Major criteria for evaluating the results are the prototypical implementation of the solutions developed in at least two use cases and their validation under the aspects of European networking and collaboration as well as management of the challenges of a fluid work environment. The organizations involved are supposed to further adapt, optimize, and extend the solutions developed.

Funding will be granted to high risk and application-oriented European joint projects that are based on an innovative approach and require the sharing of work and interdisciplinary mutual interaction of companies, universities, and research institutions.

The solutions and methods developed in the project, including the validation and test results, must be incorporated in recommendations for other companies. As regards the planned exploitation of project results, viable concepts and comprehensive procedures must be presented for the direct transfer of knowledge and findings.

3. Beneficiaries

The prerequisite for funding is the collaboration of several independent partners from science and industry in joint research projects that provide solutions which by far exceed the state of the art. For the transfer of these results, associated participation of e.g. networks and social institutions is welcomed. Project proposals from all economic sectors and branches may be submitted. Proven expertise in the area of human factors, work science, industrial ergonomics is required.

Funding can be applied for by state and non-state universities, industrial companies, and non-university research institutions. At the time of payment of the approved funding, existence of a business establishment or office (company) or of another institution for work of the beneficiary (university, research institution) in Germany is required. Funding will not be granted to regional authorities.

Chambers, guilds, social partners, and associations are important for the transfer of results. Their participation as associated (non-funded) partners is explicitly welcomed.

Participation of small and medium-sized enterprises (SME) in this funding initiative is explicitly welcomed.

European research collaborations under EUREKA are expected. EUREKA offers German alliances the opportunity to integrate foreign partners for cross-border collaboration, see also <https://www.eurekanetwork.org> and <https://www.eureka.dlr.de>. Funding of German partners is subject to the provisions of this announcement. Foreign partners may be funded by the respective country. In certain cases, all-German consortia may apply, provided that they are supported by associated partners from other EEA nations.

4. Special Funding Prerequisites

Funding will be granted to R&D projects that are aimed at developing tools and models in the fields of human factors, work science and industrial ergonomics for the resilient and humane

organization of work in European networks in the two areas specified above. A well-balanced participation of partners from science and industry/social partners is expected.

A project duration of up to three years is envisaged.

Only proposals will be considered that include the concrete implementation of the solutions during the course of the project with at least two use cases. Upon the completion of the project, these results shall be transferred quickly and without any additional funding to existing businesses in the EEA.

The partners of a joint project are expected to conclude a cooperation agreement in writing about their collaboration. All collaboration partners, including research institutions as defined by Article 2 (No. 83) of the General Block Exemption Regulation, ensure that no indirect aids go to companies involved in the collaboration. As a consequence, the provisions given in No. 2.2 of the EU Framework must be observed. Prior to the decision to fund a joint project, a general agreement on other criteria given by BMBF must be concluded.

7. Procedure

7.1 Integration of a Project Management Agency, Application Documents, Other Documents, and Use of the Electronic Application System

The procedure for German applicants is described below. Foreign partners are referred to their national advisory offices.

BMBF has authorized the following Project Management Agency (Projektträger) to manage the funding initiative:

Projektträger Karlsruhe (PTKA)
Karlsruher Institut für Technologie (KIT)
Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen, Germany

Contact person:

Dr. Raymond Djaloeis

Phone: +49 721 608-24620

Email: raymond.djaloeis@kit.edu

Any changes will be published in the Federal Gazette or in another appropriate way.

It is recommended to contact the responsible Project Management Agency.

For the project outlines and applications for funds, the electronic application system “easy-Online” must be used (<https://foerderportal.bund.de/easyonline>).

7.2 Two-stage Application Procedure

The application procedure consists of two stages.

7.2.1 Submission and Selection of Project Outlines

In the first stage, a project outline agreed upon by the partners must be submitted to the Project Management Agency in electronic form via easy-Online <https://foerderportal.bund.de/easyonline/>

by August 1, 2023.

Select the templates provided there to write your application. Choose the following menu items:

Ministerium: BMBF, or Bundesministerium für Bildung und Forschung (if applicable, accept conditions of use).

Fördermaßnahme: ZdW: Europäische Kollaborationsnetzwerke (EuKoNet).

Upload your project outline and the copy of the EUREKA proposal (apply here: <https://www.eurekanetwork.org/open-calls/network-projects-germany-2023>) in the form of PDF files.

The submission deadline is not considered as a cut-off date. However, project outlines submitted after that date may not be considered.

It is recommended to directly contact the Project Management Agency PTKA before submitting the project outlines.

The project outline consists of a maximum of ten DIN-A4 pages (line spacing 1.5, character Arial, size at least 11 pt, without cover page, annexes, and directories). The proposal must be structured as follows:

- a) Initial situation (incl. state of the art) and corresponding R&D demands as well as motivations and needs of companies and partners involved.
- b) Goal, concluded from the above mentioned state of the art, use cases and established results and findings from national or European research programs; novelty of the project idea and expected gain of knowledge must be highlighted.
- c) Description of the planned solution approach, the required research, and state of own preliminary work regarding the proposed project. Presentation of how the work packages are shared in the project.
- d) Estimation of costs or expenses, concrete and transparent planning of the work, time, and personnel expenditure in person-months, description of management structures, dependencies, milestones, their criteria, and expected intermediate results. To prevent critical situations when staff changes in the course of the project, the annual personnel expenditure per project partner should not be below twelve person-months, if possible.
- e) Potentials of broad usage – in particular for medium-sized enterprises – and transfer of the results to industry, society, science contexts, in professional training/academic education, and by professional organizations and intermediaries (transfer concept and draft science communication concept). The economic and social relevance as well as the prototypical, pre-competitive character of the project must be clearly visible, e.g. by the active support of the project by potential users.
- f) Presentation of the project partners (for all industry partners, organizations, and associations, short (tabular) presentation of the company/organization, affiliation to a group, and number of employees).

The applicants are free to add further data that may be of relevance to the evaluation of their proposal.

A template for the project outline is given on the website <https://www.zukunft-der-wertschoepfung.de/bk-eukonet/>.