

**Federal Ministry
of Education and Research**

Announcement

of regulations governing funding of projects on the study of the Universe within the
framework programme “Exploration of the Universe and Matter – ErUM”

of 21 September 2021

*This is a courtesy translation of the German announcement. The content of the English
translation is not legally binding.*

1 Aim, purpose of funding, legal basis

1.1 Aim of funding

Large-scale facilities used for basic scientific research form a core component of Germany's research infrastructure. The “Exploration of the Universe and Matter – ErUM” framework programme¹ of the Federal Ministry of Education and Research (BMBF) is therefore aimed at continuously increasing the performance of large-scale scientific facilities while broadening the range of user-driven application. Consideration is given to both the European and the international context of further development in the area of large facilities².

As part of the framework programme “Exploration of the Universe and Matter – ErUM”, the BMBF intends to support research and development projects that deal with the study of the Universe.

The measure is aimed at promoting basic research in ground-based astrophysics and astroparticle physics using selected large-scale research facilities in which the Federal Government is significantly involved. The large-scale facilities used for basic physics research form a core component of Germany's research infrastructure. In accordance with the BMBF action plan “ErUM-Pro”, this funding measure will serve to shape the research infrastructures on the basis of the Federal Government's priorities for research policy. The large-scale facilities for basic scientific research will be used to develop and utilize pioneering new technologies with wide-ranging practical applications. They enable scientific excellence in the exploration of the Universe and are the first step in ensuring that innovation pipelines in Germany are continuously well-supplied. The insights obtained at these facilities become the starting point for innovations. The type of research that is only possible at large-scale facilities thus plays an important role in implementing the Strategy for the Future of Research and Innovation³ and also works to further strengthen Germany's outstanding position in the global competition. In line with the Strategy for the Future of Research and Innovation, the aim is therefore to continually enhance the performance and range of uses of large-scale scientific facilities.

The main objectives of this funding measure are to:

¹ <https://www.bmbf.de/bmbf/de/forschung/naturwissenschaften/erforschung-von-universum-und-materie/erforschung-von-universum-und-materie.html>.

² See for example “[ESFRI Roadmap 2018 – Strategy Report on Research Infrastructures](#)”.

³ https://www.bmbf.de/bmbf/de/forschung/zukunftsstrategie/zukunftsstrategie_node.html.

- enable excellent research at large facilities used for studying ground-based astrophysics and astroparticle physics;
- expand the possibilities for scientific and industrial use of these facilities and increasing their performance;
- develop the basis for next-generation research infrastructures;
- generate the expertise needed to develop and efficiently use the large facilities in Germany.

1.2 Funding purpose

In order to achieve the funding objectives, the purpose pursued by the measure is to:

- develop and build efficient instruments or improve existing instruments;
- develop new research methods;
- develop key components; and
- accelerate innovation processes through the transfer of scientific and technical results from basic research into industry.

In addition to this, the measure aims to:

- foster transregional cooperation between university teams in association with the large-scale research facilities and
- ensure the appropriate use of the large-scale facilities by recruiting and training early-career researchers.

The BMBF attaches high priority to Germany's sustainable development in accordance with the "2030 Agenda for Sustainable Development"⁴. The aim is therefore to further increase the contribution of research at large facilities to sustainable development worldwide.

The measure is aimed at projects whose implementation is of special interest to the Federal Government. It is complementary to the funding activities of the Deutsche Forschungsgemeinschaft (DFG).

The topics and priorities of the research are based on the outcomes of the "Universe 2023 – 2026" prism process on 6 May 2022 and the corresponding recommendations by the Council of German Observatories (RDS) and the Committee for Astroparticle Physics (KAT), as well as the strategy paper drawn up by the RDS and the KAT in 2022 entitled "Astrophysics and astroparticle physics in Germany – a working paper by KAT and RDS for ErUM-Pro (2023 – 2026)". In line with the national roadmap for research infrastructures, they are likewise based on the position paper "Perspectives of astrophysics in Germany 2017 – 2030" and the "European Astroparticle Physics Strategy 2017 – 2026".

1.3 Legal basis

The Federal Government will award grants in accordance with these funding regulations, Sections 23 and 44 of the Federal Budget Code (BHO) and the administrative regulations adopted thereunder as well as the BMBF's regulations governing applications for expenditure-based grants (AZA) and/or cost-based grants (AZK). There is no legal entitlement to a grant. The granting

⁴ <https://www.bmz.de/de/agenda-2030>.

authority will decide freely after due assessment of the circumstances within the thresholds of the budget funds available.

Under these funding regulations, state aid will be granted on the basis of Article 25(1) and (2)(a, b and c) of the General Block Exemption Regulation (GBER) of the European Commission.⁵ Funding is provided in accordance with the Common Provisions set out in Chapter I GBER, in particular taking account of the definitions given in Article 2 of the Regulation (cf. Annex for the requirements of state aid legislation applying to these funding regulations).

2 Object of funding

This funding measure primarily focusses on work that uses synergies between astrophysics, astroparticle physics and particle physics, which are being funded through other BMBF measures, in order to help find answers to key questions on the origin and development of the Universe and its elements, the nature of matter, energy, space and time, and the fundamental laws of nature. The measure is centred on research and development projects which will provide tangible contributions to the issues mentioned above and which fit into the following fields:

I. Development and construction of innovative instruments

Support is aimed at apparatus developments, the construction and commissioning of new observation instruments and detection systems and fundamental advances in the instrumentation of large telescopes and cosmic ray detectors. Preference will be given to projects which produce fundamental breakthroughs in astrophysics and astroparticle physics research and which make optimal use of the specific strengths of the large-scale research facilities.

II. Designing new research techniques and methods

The focus is on projects that develop new experimental and observation techniques and new evaluation methods, including innovative new information and communication technologies and new research data management methods, which make optimal use of the possibilities of the instruments and/or large research facilities and which make lasting improvements to their scientific efficiency. Together with the development of apparatus, this also involves extending the range of uses of the large-scale research facilities and opening up new fields of application. Funding will be granted in particular to methods for tapping into little used or completely new spectral, energy or frequency ranges, to the development of multi-messenger methods as well as to the methodical development of globally distributed data infrastructures. In this context, high priority is given to work that will provide decisive new momentum for research in astrophysics and astroparticle physics.

III. Development of key components and basic technologies

Funding will be granted for the development of critical components and basic technologies which form the starting point for innovative instruments, detectors and research techniques and which

⁵ Commission Regulation (EU) No 651/2014 of 17 June 2014 Declaring Certain Categories of Aid Compatible with the Internal Market in Application of Articles 107 and 108 of the Treaty on the Functioning of the European Union (OJ L 187 of 26 June 2014, p.1) in the version of the Regulation (EU) 2017/1084 of 14 June 2017 (OJ L 156 of 20 June 2017, p.1), Regulation (EU) 2020/972 of 2 July 2020 amending Regulation (EU) 1407/2013 as regards its prolongation and amending Regulation (EU) 651/2014 as regards its prolongation and relevant adjustments (OJ L 215 of 7 July 2020, p.3) and Regulation (EU) 2021/1237 of 23 July 2021 amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union (OJ L 270 of 29 July 2021, p.39).

can significantly improve the scientific performance of research instruments and analysis platforms.

The funding is primarily aimed at relevant projects involving the following large-scale scientific facilities:

- Telescopes and telescope facilities operated by the European Southern Observatory (ESO) (with priority given to the Extremely Large Telescope (ELT) and also to other instruments at the Paranal Observatory such as the VLT/VLTI and VISTA)
- Cherenkov Telescope Array (CTA)
- Millimetre/submillimetre astronomy (primarily: ALMA)
- Large facilities for investigations of the centimetre wavelength range or new types of large research facilities using radio waves such as MeerKAT and LOFAR and the ongoing development of these facilities in preparation of SKA.

In addition to this, in well-justified cases, funding may also be awarded to projects involving other large-scale research facilities as part of an international collaboration, provided that these projects make significant contributions to our understanding of astrophysical and cosmological processes. Preference will be given to the following areas:

- High-energy astrophysics (primarily: developments at the Pierre Auger Observatory)
- Neutrino properties (primarily: LEGEND, KATRIN) and work on the advancement of neutrino telescopes (primarily: IceCube)
- Dark matter (primarily: XENONnT, CRESST-III, DARWIN)
- Experimental research and development work on the next generation of gravitational wave detectors.

Priority will be given to projects that provide decisive impetus to the study of the Universe through new or enhanced possible uses of large-scale scientific facilities.

This also includes the following cross-sector topics:

- projects relating to digitalization: establishing and expanding research data management systems and developing international data infrastructures (eScience, e.g. virtual observatory);
- projects that are closely related to the work and topics of the above-listed large-scale research facilities and experiments or which directly contribute to their success or to the efficient use of the facilities.

Ideally, the projects are closely connected with training for junior researchers and their involvement in research at large-scale facilities. The assignment of junior research group leaders, junior professors and researchers at comparable career levels as project leaders and the involvement of project leaders in higher education teaching are expressly welcome.

Accompanying measures

- In order to strengthen Germany's innovative capacity, support will be given to translating the ideas and findings from the funded work into innovative products and services. Ancillary project funding may also be awarded to measures that serve to make the interface between science and industry more efficient.
- Applications for funding can be submitted for establishing an ErUM research focus (ErUM-FSP) if the aim is to form a large thematic research network in order to jointly address a complex issue over a prolonged period of time. It is the aim of the BMBF that the ErUM-FSPs

will develop into high-profile thematic networks of excellence. Funding can be provided to cover the related additional need for networking, coordination and public relations work. Joint research in the ErUM context is a precondition for establishing an ErUM-FSP but not all partners are required to receive funding from ErUM-Pro.

- The aim is to increase the visibility of the study of the Universe at large-scale scientific facilities associated with the ErUM programme as well as to ensure societal participation in the findings and achievements of the research. Ancillary project funding may be awarded for suitable measures that effectively communicate the relevance of the chosen projects for both society and industry.
- Ancillary project funding may also be awarded for the development of new technologies and methods which contribute to climate and resource-saving operation and utilization of the above mentioned large-scale scientific facilities and experiments. This is expected to make a contribution to achieving the climate action goals and implementing the Sustainability Action Programme within Germany's Sustainable Development Strategy⁶.

In exceptional cases, funding can be granted to theoretical work within the scope of the measure, provided that this is directly connected with a project in one of the above-mentioned areas and will play a decisive role in the success of said project. The necessity of this contribution is to be justified explicitly in the funding application. Without exception, theoretical work must be organized in the form of research collaborations or collaborative projects together with the development of instruments or methods.

Funding will not be provided for research topics that are not related to the development of new instruments or methods, for standard equipment associated with a large-scale research facility, for projects at non-ground-based large research facilities or for the operation of research plants.

Work packages addressed in cooperation with partners from industry can be funded if either the aim is to transfer ideas and findings from the funded activities into practical application or existing industrial know-how about new methods and innovative technologies is to be used by universities for their planned activities to study the Universe as part of ErUM at large research facilities so that early exchange will stimulate innovation processes. Examples of such collaborations are:

- Cooperation between universities and commercial companies (involving participation by non-university research institutions as appropriate)
- Cooperation between academic spin-offs and their parent institutions

3 Funding recipients

Applications may be submitted by universities, non-university research institutions and commercial companies. Applicants are required to have a plant or branch (company) or another entity in Germany serving the non-commercial activities of the funding recipient (university, research institution) at the time of payment of the grant.

Research institutions which receive basic funding from the Federal Government and/or the *Länder* can only be granted project funding supplementary to their institutional funding to cover additional project-related expenditure or costs under certain conditions and provided that the involvement of the research institution is essential for ensuring the success of a collaborative project.

⁶ [Programme of sustainability measures](#) – Version of 2021 “Translating sustainability into concrete administrative actions”.

Commercial companies may receive funding as part of a collaborative project if their participation is essential for achieving the project goal.

At least one of the participants in the collaborative project must be a higher education institution.

Individual and collaborative projects may also cooperate with associated partners, that is, partners which do not receive funding. Any cooperation with associated partners must be described in the proposals for individual projects and collaborations. This applies in particular to the work and resources which the associated partner plans to contribute as part of the cooperation.

Concerning the conditions for when state aid is or is not deemed to be involved and the extent to which funding can be provided without constituting aid, please consult the Community Framework for State Aid for R&D&I.⁷

Small and medium-sized enterprises (SMEs) within the meaning of these funding regulations are companies which fulfil the requirements of the EU definition of SMEs.⁸ The applicant will declare to the granting authority its classification according to Annex I of the Commission's GBER in its written application for funding.

4 Special prerequisites for funding

All funding recipients, including those which are research institutions within the meaning of Article 2 (83) GBER, must ensure that companies do not receive any form of indirect aid. The provisions of Section 2.2 of the Community Framework for State Aid for R&D&I must be observed. Before a funding decision on a collaborative project is taken, the cooperation partners must prove that they have reached a basic consensus on further criteria stipulated by the BMBF (cf. BMBF form No. 0110).⁹

5 Type, scope and rates of funding

Funding will be awarded in the form of a non-repayable project grant.

Grants for commercial companies and for projects of research institutions which fall into the category of economic activities¹⁰ will be calculated on the basis of the eligible project-related costs. Part of these can be covered in individual cases, taking legislation on state aid into account (see Annex). The BMBF's policy requires that applicants make an appropriate contribution of their own towards the eligible costs incurred.

Grants for higher education institutions, research and science institutions and similar establishments that do not fall into the category of economic activities are calculated on the basis of the eligible project-related expenditure (in the case of the Helmholtz centres and Fraunhofer,

⁷ Communication from the EU Commission (2014/C 198/01) of 27 June 2014 (OJ C 198 of 27 June 2014, p. 1) as amended by Commission communication C(2020) 4355 final of 2 July 2020 (OJ C 224 of 8 July 2020, p. 2); in particular Section 2.

⁸ cf. Annex I of the GBER or the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (notified under document number C (2003) 1422 (2003/361/EC)) (OJ L 124 of 20 May 2003, p. 36): [<http://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32003H0361&from=DE>].

⁹ https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare, header BMBF under "Allgemeine Vordrucke und Vorlagen für Berichte".

¹⁰ For the definition of 'economic activity' please refer to No. 2 of the Commission Notice on the notion of State aid (OJ C 262 of 19 July 2016, p. 1) and No. 2 of the Community Framework for State Aid for R&D&I.

eligible project-related costs), which can be awarded up to 100% coverage in individual cases, taking legislation on state aid into account.

In the case of non-commercial research projects at universities, a flat-rate grant amounting to 20% of total expenditure will be awarded in addition to the eligible expenditure funded by the BMBF.

Expenditure/costs which serve to provide the general public with access to the planned research process and/or its results during the funding period and to enter into a dialogue with society are eligible for funding. Science communication is the provision of generally understandable information about research and science content and dialogue-oriented communication with target groups outside the scientific community.¹¹

Eligible expenditure/costs are governed by the BMBF's regulations governing applications for expenditure-based grants (AZA/ AZAP/AZV) and/or cost-based grants (AZK).

The determination of the respective eligible costs and rates of funding must take account of the requirements stipulated in the GBER (see Annex).

6 Other terms and conditions

The "Nebenbestimmungen für Zuwendungen auf Kostenbasis des Bundesministeriums für Bildung und Forschung an gewerbliche Unternehmen für Forschungs- und Entwicklungsvorhaben" (NKBF 2017) (Auxiliary Terms and Conditions for Funds Provided by the Federal Ministry of Education and Research to Commercial Companies for Research and Development Projects on a Cost Basis) will be part of the notification of award for grants on a cost basis.

Notification of award for grants on an expenditure basis will include the "Nebenbestimmungen für Zuwendungen auf Ausgabenbasis des Bundesministeriums für Bildung und Forschung zur Projektförderung" (NABF) (Auxiliary Terms and Conditions for Funds Provided by the Federal Ministry of Education and Research for the Promotion of Projects on an Expenditure Basis) and the "Besondere Nebenbestimmungen für den Abruf von Zuwendungen im mittelbaren Abrufverfahren im Geschäftsbereich des BMBF" (BNBest-mittelbarer Abruf-BMBF) for the drawdown of funds.

For the purpose of conducting progress reviews within the meaning of administrative regulation (VV) 11a pertaining to section 44 of the Federal Budget Code (BHO), funding recipients are required to provide the BMBF or reviewing institutions with the data necessary for the progress review without delay. The information will be used exclusively for the purposes of supporting research and any subsequent evaluation; it will be treated confidentially and published in anonymized form, making it impossible to trace it back to individual persons or organizations.

Funding recipients are expected to ensure open electronic access if they publish the results of the research project in a scientific journal. This can be done through publication in an electronic journal which is accessible to the public free of charge. If the results are not initially published in a journal which is electronically accessible to the public free of charge, they must be made publicly available free of charge by electronic means, following a suitable embargo period where appropriate (secondary publication). Embargo periods for secondary publication must not exceed 12 months. The BMBF expressly welcomes secondary open access publication of scientific monographs resulting from the project.

When planning and implementing the project, care must be taken that resources are deployed in an ecologically sustainable way. The conservation of resources must be taken into account when developing and building new tools or improving existing tools and when developing new

¹¹ See also BMBF guide (FAQ) on science communication.

research methods and establishing networks. This includes in particular the planning of official travel, resource-conserving use of data and sustainability considerations in the establishment of information structures.

7 Procedure

7.1 Involvement of a project management organization, application documents, other documents and use of the electronic application system

The BMBF has currently entrusted the following project management organization with implementing the funding measure:

Projekträger DESY

22603 Hamburg

Phone: 040/89 98-37 02

Fax: 040/89 94-37 02

Email: pt@desy.de

Internet: <http://pt.desy.de>

Contact persons:

Dr. Sarah Bühler

Phone: 040/89 98-50 25

Email: sarah.buehler@desy.de

Dr. Jacek Swiebodzinski

Phone: 040/89 98-50 31

Email: jacek.swiebodzinski@desy.de

Dr. Andreas Zschocke

Phone: 040/89 98-58 33

Email: andreas.zschocke@desy.de

Dr. Marc Hempel

Phone: 040/89 98-39 91

Email: marc.hempel@desy.de

Administrative issues:

Phone: 040/89 98-5076

Email: universum.pt@desy.de

Any modifications will be announced in the *Bundesanzeiger* (Federal Gazette) or in another suitable form.

Application forms, guidelines, leaflets, information and auxiliary terms and conditions are available online at

https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare%E2%80%A6

or can be obtained directly from the above-mentioned project management organization.

The electronic application system "easy-Online" must be used for drafting formal applications (<https://foerderportal.bund.de/easyonline>). This portal enables the electronic submission of the application which must be submitted in writing. An electronic document that bears a qualified electronic signature is sufficient for electronic submission.

The project description included in the annex of the full funding proposal must be written in English. The description of an individual project should not exceed ten A4 pages. Collaborative projects require the submission of a joint project description which must clearly indicate each individual partner's responsibility for the respective work packages. Joint project descriptions for collaborations of up to three partners should not exceed 15 pages. In the case of four or more partners, it should not exceed 20 pages. The project description will include a work plan (incl. a Gantt chart). In all cases, a font size of at least 11 and line spacing of no less than 1.15 must be used for the project description.

The feasibility of the project and safeguarding of the operation of the established infrastructure (hardware and software) in the medium to long term must be agreed with the operator beforehand as necessary and appropriate and described in the proposal.

Please take note of the information for applicants on the project management organization's website:

<http://pt.desy.de/bekanntmachungen/> (under the header "Universum").

7.2 Single-step application procedure

Formal funding applications must be submitted to the project management organization by 15 November 2022 at the latest using the "easy-Online" system. The deadline for submission is not a cut-off deadline.

An application for funding is only considered complete if at least the requirements of Article 6 (2) GBER (cf. Annex to these funding regulations) are fulfilled.

Funding applications for collaborative projects must be submitted in consultation with the envisaged collaboration coordinator.

It may not be possible to consider applications received after the above date.

The proposals received will be reviewed and evaluated according to the following criteria:

- Contribution of the project to the research policy goals and scientific objectives of the measure
- Scientific quality
- Scientific originality
- Prospects of success and feasibility (work, time and cost schedule)
- Expertise of the applicant

– Utilization of the results

The consideration of the ecologically sustainable use of resources in the planning and implementation of the project, with a concrete reference to at least one of the “2030 Agenda” sustainability goals, is highly desirable.

After final consideration of the application, a funding decision will be taken on the basis of the above criteria and evaluation. Funding is expected to start on 1 July 2023.

As a rule, the projects should be designed to run for a period of three years and should be structured around specific milestones. In justified exceptions, applications may also be submitted for a project period of less than three years or for up to a maximum of five years.

7.3 Relevant regulations

The approval and payment of and accounting for the funds as well as the proof and examination of the proper use and, if necessary, the revocation of the award and the reclaiming of the funds awarded are governed by Sections 48 to 49a of the Administrative Procedure Act (VwVfG), Sections 23 and 44 of the Federal Budget Code (BHO) and the related general administrative regulations, unless the present funding regulations allow deviation from the general administrative regulations. The *Bundesrechnungshof* (Germany’s Supreme Audit Institution) is entitled to carry out audits in accordance with Section 91 of the Federal Budget Code (BHO).

8 Validity

These funding regulations will enter into force on the day of their publication in the Federal Gazette (*Bundesanzeiger*). These funding regulations will be valid until the day of expiry of their legal basis for state aid, the GBER, to which a six-month adaptation period is added, that is, until 30 June 2024. If the period of the GBER is extended without relevant amendments concerning state aid rules, the duration of these funding regulations will be extended accordingly, though not beyond 31 December 2028. If the GBER is not extended but replaced by a new GBER or if relevant amendments are made to the content of the currently applicable GBER, follow-up funding regulations will be adopted which will comply with the then applicable exemption provisions and remain effective at least until 31 December 2028.

Bonn, 21 September 2022

Federal Ministry of Education and Research

Eckhart Lilienthal

Annex

The following requirements of state aid legislation apply to these funding regulations:

1 General prerequisites for funding

The aid is only lawful if all the prerequisites of Chapter I GBER and the prerequisites in Chapter III applicable to the designated category of state aid are fulfilled in line with Article 3 GBER. Applicants are hereby informed that the national courts are obliged to order the repayment of unlawful state aid in accordance with the rulings of the European courts.

State aid on the basis of the GBER will not be granted if there are grounds for exclusion under Article 1(2-5) GBER. This applies in particular if the undertaking is subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal and incompatible with the internal market.

The same applies to aid to a company which is an “undertaking in difficulty” as defined in Article 2(18) GBER. Only undertakings that were not already in difficulty on 31 December 2019, but which became or have become undertakings in difficulty during the period 1 January 2020 to 31 December 2021, are exempted from this restriction in accordance with Article 1(4)(c) GBER.

This announcement is only applicable for state aid that has an incentive effect within the meaning of Article 6 GBER. The required application for state aid in this context must contain at least the following information:

- a. name and size of the company,
- b. description of the project including its start and end dates, project location,
- c. project costs and
- d. type of aid (e.g. grant, loan, guarantee, repayable advance or capital injection) and the amount of public funding needed for the project.

In applying for funding under these funding regulations, applicants declare their cooperation:

- to comply with the requirements of state aid legislation;
- to provide the requested information and/or documentation with evidence of credit worthiness and conformity with state aid requirements;
- to cooperate in the event of a monitoring procedure initiated at/by the European Commission.¹²

Furthermore, funding recipients consent to:

- the BMBF storing all records of granted aid documenting compliance with the above requirements, for a period of ten years after aid is granted, and surrendering records to the European Commission upon request;
- the BMBF disclosing aid amounts in excess of 500,000 euros on the EU Commission's state aid Transparency public search page.¹³

¹² For example, individual cases may be monitored by the Commission in line with Article 12 GBER.

¹³ (The EU Commission's state aid Transparency public search page is available at <https://webgate.ec.europa.eu/competition/transparency/public>.) This disclosure is governed by the provisions for the publication of information required in Annex III of Commission Regulation (EU) No 651/2014 of 17 June 2014. This information includes name of the beneficiary and the amount of aid received.

Under these funding regulations, state aid is granted in the form of grants in accordance with Article 5(1 and 2) GBER.

The GBER restricts the granting of state aid for economic activities in the following areas to the corresponding maximum amounts stated below:

- 40 million euros per project for basic research (Article 4(1)(i) GBER)
- 20 million euros per project for industrial research (Article 4(1)(ii) GBER)
- 15 million euros per project for experimental development (Article 4(1)(iii) GBER)

The rules concerning cumulation set out in Article 8 GBER must be observed when determining whether these maximum amounts (notification thresholds) are respected. The maximum amounts may not be circumvented by artificially splitting up projects with related content. Partial approval up to the maximum amount of aid subject to notification is not permitted.

2 Scope/rates of funding

The following provisions of the GBER apply to these funding regulations, in particular concerning eligible costs and state aid intensities. The following eligible costs and intensities set out the overall thresholds within which eligible costs and rates of funding for projects involving economic activity can be granted.

Article 25 GBER – Aid for research and development projects

The aided part of the research project must fall completely within one or more of the following categories:

- Basic research
- Industrial research
- Experimental development

(cf. Article 25(2) GBER; definitions according to Article 2(84 ff.) GBER).

For the purpose of classifying research work as fundamental research, industrial research, and experimental development, please refer to the relevant information in no. 75 and footnote no. 2 of the R&D&I state aid Framework.

The eligible costs of each research and development project must be allocated to the relevant research and development categories.

Eligible costs:

- a. Staff costs: for researchers, technicians and other supporting staff to the extent employed on the project (Article 25 (3)(a) GBER);
- b. Costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the duration of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible (Article 25(3)(b) GBER). Additional overheads and other operating expenses (including costs of materials, supplies and similar products) incurred directly as a result of the project are also eligible.

c. (Article 25(3)(e) GBER).

The aid intensity for each beneficiary must not exceed the following rates:

- 100% of the eligible costs for basic research (Article 25(5)(a) GBER)
- 50% of the eligible costs for industrial research (Article 25(5)(b) GBER)
- 25% of the eligible costs for experimental development (Article 25(5)(c) GBER)

Insofar as the prerequisites stated in Article 25(6) GBER are fulfilled, the aid intensities for industrial research and experimental development may be increased up to a maximum 80% of the eligible costs as follows:

- by 10 percentage points for medium-sized enterprises
- by 20 percentage points for small enterprises
- by 15 percentage points if one of the following conditions is fulfilled:

a) The project involves effective collaboration

- between undertakings among which at least one is an SME, or is carried out in at least two EU Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70% of the eligible costs;
- or
- between an undertaking and one or more research and knowledge-dissemination organizations where the latter bear at least 10% of the eligible costs and have the right to publish their own research results;

b) The results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

Article 7 (1) GBER requires that the eligible costs be supported by documentary evidence which must be clear, specific and contemporary.

For the purposes of calculating aid intensity and eligible costs, all figures used must be taken before any deduction of tax or other charge.

3 Cumulation

For the purpose of complying with the maximum permissible aid intensity, the rules concerning cumulation set out in Article 8 GBER must be observed in particular. The cumulation of several aid measures for the same eligible costs/expenditure is only allowed subject to the following rules and/or in exceptional cases as specified below:

Where European Union funding centrally managed by the institutions, agencies, joint undertakings or other bodies of the Union, which is not directly or indirectly under the control of Member States and therefore does not constitute state aid, is combined with state aid (which includes resources from the European Structural and Investment Funds), only the latter may be considered for determining whether notification thresholds and maximum aid intensities or maximum aid amounts are respected, provided that the total amount of public funding granted in relation to the same

eligible costs (including centrally managed Union funds) does not exceed the most favourable funding rate laid down in the applicable rules of European Union law.

Aid with identifiable eligible costs exempted by the GBER may be cumulated with:

- a. any other state aid, as long as those measures concern different identifiable eligible costs;
- b. any other state aid, in relation to the same eligible costs, partly or fully overlapping, only if such cumulation does not result in exceeding the highest aid intensity or aid amount applicable to this aid under the GBER.

Aid without identifiable eligible costs may be cumulated with any other state aid without identifiable eligible costs, up to the highest relevant total financing threshold fixed in the specific circumstances of each case by the GBER or a decision adopted by the Commission.

State aid exempted under the GBER may not be cumulated with any de minimis aid in respect of the same eligible costs if such cumulation would result in an aid intensity or aid amount exceeding those laid down in Chapter III of the GBER.