

Part III.8 – Supplementary Information Sheet for the notification of an evaluation plan

Member States must use this form for the notification of the evaluation plan in accordance with Article 1 paragraph. 2(a) of Regulation (EU) No 651/2014 and, in the case of a notified aid scheme under assessment, as set out in the relevant Commission guidelines.

Please refer to the Commission Staff Working Document “Common methodology for State aid evaluation”² for guidance on the drafting of an evaluation plan.

1. Identification of the aid scheme to be evaluated

1. Title of aid scheme:

Regulation of the Minister of Funds and Regional Policy of 13 January 2023 on the granting of financial aid by the National Centre for Research and Development under the ‘European Funds for the Modern Economy 2021-2027’ programme

2. Does the evaluation plan concern:

- a) a programme subject to evaluation in accordance with Article 1. 2(a) of Regulation (EU) No 651/2014?
- b) the scheme notified to the Commission in accordance with Article 108(1). 3 TFEU?

3. Reference of the scheme (to be completed by the Commission):

.....

4. Please list any existing ex-ante evaluations or impact assessments for the aid scheme and ex-post evaluations or studies conducted in the past on predecessors of the aid scheme or on similar schemes. For each of those studies, please provide the following information: (a) a brief description of the objectives of the study, the methods used, the results and conclusions and (b) the specific challenges that may have arisen in evaluations and studies from a methodological point of view, e.g. the availability of data that are relevant for the evaluation of this evaluation plan. If appropriate, please identify relevant areas or topics not covered by previous evaluation plans that should be subject of the current evaluation. Please provide the summaries of such evaluations and studies in annex and, when available, the Internet links to the documents concerned.

Ex-ante evaluations:

1 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 (OJ L 187, 26.6.2014, p. 1).

2 SWD(2014)179 final of 28.5.2014.

a. **Ex-ante analysis of the feasibility of innovation projects using financial instruments in the EU Financial Perspective 2021-2027**

The objective of the study was to assess the possibility of using financial instruments to support investment in the field of innovation.

Methods: Desk research, IDI interviews, discussion panels, CAWI/CATI interviews – mixed mode, expert workshop.

Link to report: https://www.poir.gov.pl/media/109682/IF_ex_ante_FENG_29092020.pdf

Studies carried out on past effects of the aid:

1) Evaluation study on State aid granted under the Regulation of the Minister of Science and Higher Education on the conditions and procedure for granting State aid and de minimis aid through the National Centre for Research and Development

The overall objective of the evaluation study was to provide information on the direct and indirect effects of the aid.

The study is divided into two modules, the first comprising the second comprising an action involving financial instruments.

methods: Theory-based evaluation, analysis of legacy data, Propensity Score Matching, economic analysis (macroeconomic and input-output analysis), Aid Programme applicants' panel survey, Qualitative Comparative Quality Comparative Analysis (QCA), Individual Intelligences. For the measure involving financial instruments (1.3 OP Smart Growth), the quasi-counterfactual method was used due to the impossibility to select the comparative sample.

Links to reports:

https://www.ewaluacja.gov.pl/media/91867/Raportkoncowy_I_modulPP_NCBR.pdf

https://www.ewaluacja.gov.pl/media/91863/NCBR_BA_Final_24_06_2020_final.pdf

Challenges: limited availability of data to assess interventions at a relatively early stage in the implementation of R & D projects. Specification of R & D projects, the implementation of which only achieves the expected results over a longer period of time. Too early in the implementation of the study to be able to achieve all the objectives of the study, in particular indirect and long-term effects, making the evaluation mid-term.

2) Evaluation summarising the material progress and results of the IR OP and assessing the impact of the IR OP on the innovation of the Polish economy, including the impact on the achievement of the objectives of the Europe 2020 Strategy

The main objective of the study, the results of which are presented in this report, was to assess and summarise the potential results of the implementation of the IR OP that emerged by 31 December 2021 and to assess the impact of the IR OP on innovation in the Polish economy and the achievement of the objectives of the Europe 2020 Strategy to assess the extent to which the IR OP projects implement the Baltic Sea Strategy.

Methods: desk research, macroeconomic modelling, microeconomic analyses, including counterfactuals to identify direct effects of interventions; CAWI survey, IDI interviews, case studies, applicants' segmentation analysis, expert panel.

Link to report:

https://www.poir.gov.pl/media/113099/Innowacyjnosc_POIR_raport_koncowy_6_12_2022.pdf

Annex 1 Summary of ex-ante and ex-post studies in relation to the aid scheme or previous aid schemes

2. Objectives of the aid scheme to be evaluated³

2.1. Please provide a description of the aid scheme specifying the needs and problems the scheme intends to address and the intended categories of beneficiaries, for example size, sectors, location, indicative number.

Poland ranks relatively low in the innovation rankings in Europe. (24th place in the 2021 European Innovation Scoreboard). In particular, indicators from the worst assessed innovation dimensions in the ranking, such as: attractiveness of the research system or innovators. In recent years, R & D expenditure relative to GDP (GERD) has steadily increased to 1.44 % of GDP in 2021. Corporate expenditure on GERD also increased, reaching 0.91 % of GDP. However, increasing the level of R & D expenditure generated by the SME sector remains a challenge. SMEs accounted for 33.6 % of R & D expenditure in 2019. At the same time, large companies show low R & D activity compared to the EU-27, ranked 23 rd out of 27 EU countries. Innovation indicators also show the relatively low innovation activity of Polish companies. The unsatisfactory performance of Polish companies in terms of innovation can also be explained by the limited cooperation between entrepreneurs and other actors in the innovation process. Access to finance for innovative but also above-average risky companies remains an important need for support to the *venture capital fund industry*.

The Regulation of the Minister for Funds and Regional Policy of 13 January 2023 on the granting of financial assistance by the NCBR under the European Funds for the Modern Economy 2021-20274 (hereinafter referred to as the ‘assistance programme’) is part of the system for implementing the operational programme (FENG) under the European Union’s cohesion policy in Poland. The regulation covers the selected support instruments (actions) planned in the FENG in Priority 1. (“Support to entrepreneurs”) and Priority 2. (‘An innovation-friendly environment’), and Priority 3 (‘Enterprise greening’) entrusted to implement the NCBR by the relevant Agreement between the Minister of Funds and Regional Policy (FENG Managing Authority) and the NCBR (FENG Intermediate Body) in Warsaw on 28 October 2022

At the same time, the Regulation constitutes an aid scheme of the NCBR, which sets out the specific purpose, conditions and procedure for granting:

- financial aid constituting State aid to which the provisions of 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 apply Office L187 of 26.6.2014, p. 1, as amended) (hereinafter ‘State aid’ or ‘GBER aid’),

³ Beyond providing a general description of the objectives and eligibility rules of the scheme, the aim of this section is to assess how the eligibility and exclusion rules of the scheme may be used to identify the effect of aid. In some cases, the precise eligibility rules may not be known in advance. In those cases the best available expectations should be provided.

DZ.U of 27 January 2023, item 187

- financial aid constituting de minimis aid to which the provisions of Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid apply (Office L 352, 24.12.2013, p. 1, as amended) (hereinafter referred to as “de minimis aid”) and,
- financial assistance to promote the execution of important projects of common European interest as referred to in Article 107. Article 3(b) of the Treaty on the Functioning of the European Union (Office C 326, 26.10.2012, p. 47), hereinafter referred to as “aid to IPCEIs”

The envisaged categories of beneficiaries are: enterprises⁵ (including SMEs), research organisations and institutes, universities and other actors in the higher education and science system, as well as non-governmental organisations. The programme envisages⁶ targeting support primarily to large entrepreneurs. The largest measures (in terms of commitment and anticipated number of entities supported) under the NCBR aid scheme (FENG.01.01 SMART⁷) can benefit from:

- large companies (including *small mid-caps and mid-caps*),
- consortia of large companies (including *small mid-caps and mid-caps*),
- SME consortia with non-SMEs (large companies including *small mid-caps and mid-caps*)
- consortia of enterprises (other than SMEs and SMEs) with research organisations or NGOs

Support shall cover all sectors⁸. The scheme will be implemented throughout Poland and therefore companies established in any region of the country (voivodship) will be eligible for support. It should

⁵ entities engaged in an economic activity offering goods or services on the market against payment, regardless of their legal form

⁶ According to the ‘FENG Detailed Description of Priority Axes’.

⁷ Only SMEs and SME consortia with SMEs will benefit from measure FENG.01.01 SMART in the PARP aid scheme. The BGK aid scheme does not have a similar support instrument.

⁸ Excluding the provision of aid which:

(1) it is directly linked to the quantities exported, to the establishment and operation of a distribution network or to other current expenditure linked to the export activity;

2) is subject to the use of domestically produced goods over imported goods;

3) it shall be granted in the sector of:

a) in accordance with Regulation (EU) No 1379/2013 of the European Parliament and of the Council of 11 December 2013 on the common organisation of the markets in fishery and aquaculture products, amending Council Regulations (EC) No 1184/2006 and (EC) No 1224/2009, and repealing Council Regulation (EC) No 104/2000 (Office L 354, 28.12.2013, p. 1, as amended.)), hereinafter referred to as ‘Regulation No 1379/2013’, with the exception of the State aid referred to in Paragraph 2(1)(a) to (e) and (i),

b) primary production of agricultural products, excluding state aid referred to in Section 2(1)(a) to (c), (f) and (i-p),

c) the processing and marketing of agricultural products where:

— its size is determined on the basis of the price or quantity of such products purchased from primary producers or put on the market by undertakings benefiting from public aid, or

— its granting is subject to the transfer of part or all of the public aid to primary producers;

4) it serves to facilitate the closure of uncompetitive coal mines and is granted in accordance with Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines (Journal Office L 336, 21.12.2010, p. (24)

5) it falls within any of the categories of regional aid referred to in Article 13 of Regulation (EU) No 651/2014;

also be mentioned that, in the case of regional investment aid, preferences (incentives) will be applied to the permissible aid intensity, in accordance with the regional aid map for 2022-2027. The scheme will be implemented throughout Poland. Therefore, companies established in any region of the country (voivodship) will be eligible for support. At the same time, it should be mentioned that regional investment aid will benefit from preferences (incentives) in terms of permissible aid intensities, in line with the regional aid map 2022-2027.

The expected number of enterprises supported per instrument is as follows:

- Smart (FENG.01.01_ = 807 enterprises;
- Seal Of Excellence (FENG 02.09) – 32 entrepreneurs,
- Joint Research Programmes (FENG 02.11) – 30 entrepreneurs,
- BridgeUp (FENG 02.08) – 14 funds and 140 grantees,
- IPCEIs (FENG 02.10) – 2 projects,
- IPCEIs (FENG 03.03) – 3 projects (from list 9),
- Innostart – 327 companies,
- TEF AI -74 companies.

Please indicate the objectives of the scheme and the expected impact, both at the level of the intended beneficiaries and as far as the objective of common interest is concerned.

Main objectives of the aid scheme:

- enhancing business innovation, in particular improving the processes of commercialisation of research results;
- increase investment in R & D of enterprises;
- increase the share of innovative companies that will generate revenues from the sale of advanced products and services;
- improving effective cooperation between companies and scientific bodies;
- increase the level of competence, especially with regard to identified competency deficits.

6) is inextricably linked to an infringement of European Union law by virtue of the terms and conditions or methods of financing; in particular, this concerns financial assistance:

a) for which granting is subject to an obligation:

— that the trader has its registered office in a Member State of the European Union or has its principal place of business in a Member State of the European Union,

— the economic operator's use of domestically produced goods or services,

b) limiting business opportunities to exploit R & D & I results in other Member States of the European Union;

and economic activities relating to:

1) the manufacture, processing or marketing of tobacco and tobacco products;

2) the production or marketing of alcoholic beverages;

3) the production or marketing of pornographic content;

4) trafficking in explosives, weapons and ammunition;

5) games of chance, betting, gaming on machines and games on low-prize machines;

6) the manufacture or placing on the market of narcotic drugs, psychotropic substances or precursors, substitutes and new psychoactive substances.

Those objectives form part of the objectives and tasks of the NCBR, which is enshrined in the NCBR Act⁹ as an institution set up to carry out tasks relating to the scientific policy of the State, including stimulating investment by entrepreneurs in scientific activities, in particular by carrying out scientific research or development work, including in the framework of operational programmes. In this context, the promotion and expansion of R & D activities of enterprises and thus stimulating their innovation should be considered as the primary and direct objective of the aid scheme provided by the NCBR.

Detailed information on the expected results of the implementation of the Programme is provided in the table below.

Name of operation	Purpose	Consequences
Action FENG.01.01 SMART Pathway	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies (Developing and strengthening the research and innovation capacities of enterprises by carrying out R & D work, implementing innovation, in conjunction with the adaptation of companies' activities to the challenges identified in the European Green Deal and digitalisation, the development of research infrastructures, the internationalisation of activities, and the increase of human skills.
Action FENG.02.08 BRidge Up	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies	Support for R & D projects carried out by new technology companies: Start-ups, including but not limited to, but not limited to, spin-offs from scientific bodies and from researchers seeking to commercialise their inventions/technologies/results of their research in the future, as well as from the business sector.
Action FENG.02.09 Seal of Excellence	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies	Support for R & D projects awarded the Seal of Excellence certificate under the EIC Accelerator Horizon Europe.
Action FENG.02.10 IPCEI	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies	The collection of know-how by Polish entrepreneurs and their integration into value chains for disruptive technologies. Internationalisation of Polish companies through the possibility of establishing close cooperation with entrepreneurs from other EU countries active in the field of advanced technologies. Ultimately, the export of high-tech products will also be boosted. Facilitate channels of cooperation between large entrepreneurs and SMEs and the research community.
Action FENG.02.11 Joint Research Undertakings	ERDF.CP1.I – Development and strengthening of research and	Direct the activities of entrepreneurs and scientific and industrial consortia towards the implementation of R & D work on technological solutions, the need

⁹ Act of 30 April 2010 on the National Centre for Research and Development, Dz. Journal of Laws 2010 No 96, item 616

	innovation capacities and the use of advanced technologies	for which will be defined by the partners of the Joint Research Undertaking.
Action FENG.02.13 Innovative public procurement	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies	Support actions that, using the model of innovative public procurement, will develop new, innovative and disruptive technologies for the economy. The projects will support the acceleration of the implementation of R & D results, the development of innovation-friendly attitudes and the concentration of resources in areas of greatest economic and social importance.
Action FENG.02.20 INNOSTART	ERDF.CP1.I – Development and strengthening of research and innovation capacities and the use of advanced technologies	Support start-ups in the SME sector with no experience of EU-funded R & D projects. Entrepreneurs will gain experience in implementing R & D projects with a small budget. The potential of entrepreneurs to carry out R & D projects will be boosted.
Activity 2.23 FENG Co-financing of Test Centres and Technological Experimentation of Artificial Intelligence (TEF AI)	ERDF.CP1.II – Reaping the benefits of digitalisation for citizens, businesses, research organisations and public institutions	Support to increase the competitiveness of SMEs in the digital transformation of artificial intelligence. The services offered by TEF AI aim to enable entrepreneurs to experiment, test and validate AI solutions in both virtual and real-life environments. At the same time, support for the creation of the TEF will enable the cross-border testing and experimentation of AI, monitoring, validation and certification of this technology on the basis of technical, organisational and ethical standards and rules also developed in Poland. Support will be given to entities that have been selected in competitions organised under the Digital Europe Programme.
Action FENG.03.03 Hydrogen IPCEI	ERDF/CF.CP2.III – Development of smart energy systems and grids and energy storage systems outside the trans-European energy network (TEN-E)	The collection of know-how by Polish entrepreneurs and their integration into value chains for disruptive technologies. Internationalisation of Polish companies through the possibility of establishing close cooperation with entrepreneurs from other EU countries active in the field of advanced technologies. Ultimately, the export of high-tech products will also be boosted. Facilitate channels of cooperation between large entrepreneurs and SMEs and the research community. Building a hydrogen value chain in the EU that will enable it to be used in transport, energy and industry.

2.2. Please indicate the possible negative effects on the beneficiaries of the aid or on the wider economy that may be directly or indirectly linked to the aid scheme¹⁰.

The main negative effect of State aid in the R & D & I sector is the possibility of distortion of competitiveness and intra-Community trade. The two main negative developments for the beneficiaries of the aid may occur: crowding-out of private investments caused by the aid scheme (receiving public support by the beneficiaries of the Aid Programme may discourage these entities from carrying out other R & D & I projects without public support), sectoral bias (in the multisectoral scheme, the predominant aid was granted to one industry) and bias towards entities with a longer period of business (the ratio of old enterprises to new enterprises).

2.3. Please indicate (a) the planned annual budget of the scheme, (b) the planned duration of the scheme¹¹, (c) the aid instrument(s) and (d) the eligible costs.

- a. overall budget – EU FRF funding is **EUR 2560724000, for the** duration of the current regulation, i.e. until 30/06/2024, the annual budget is EUR 1280362000). The total budget including ERDF allocations and national contribution is EUR 3157508505
- b. 28/01/2023 – 30/06/2024 (the date indicated in accordance with the period of application of Commission Regulation (EU) No 651/2014 on the basis of which this aid scheme is issued. However, the relevant period for the actual implementation of the support instruments listed below is January 2021 up to the end of the financial perspective.
- c. Aid instruments:12

Measure/instrument	Specific objective	Form of support	EU ERDF allocation (EUR)	Varyos of the national contribution (EUR)	Total allocation (EUR)
Priority FENG 01 – Support to entrepreneurs					
Action FENG.01.01 SMART Pathway	CP1.I Development and strengthening research	Grant/Conditional grant State aid: Commission Regulation (EU) 1407/2013 Commission Regulation (EU) 651/2014: (a) regional investment aid (Art. 14) –	1 961 100 000	499 241 968	2 460 341 968

¹⁰ Examples of negative effects are regional and sectoral biases or crowding out of private investments induced by the aid scheme.

¹¹ Aid schemes as defined in Article 1 (1). Point (a) of Regulation (EU) No 651/2014 is excluded from the scope of the Regulation six months after its entry into force. After having assessed the evaluation plan, the Commission may decide to extend the application of the Regulation to such schemes for a longer period. Member States are invited to precisely indicate the intended duration of the scheme.

¹²these forms and the intended use of the aid will be included in the so-called Manual on eligibility of expenditure for each activity, work on documents is ongoing

	and innovation capacities and the use of advanced technologies	<p>(b) aid for advisory services in favour of SMEs (Article 18);</p> <p>(C) aid for the participation of SMEs in fairs (Article 19);</p> <p>(D) aid for research and development projects (Art. 25)</p> <p>(e) innovation aid for SMEs (Article 28)</p> <p>(F) training aid (Article 31): EUR 2 million;</p> <p>(g) investment aid enabling undertakings to go beyond Union environmental standards or to increase the level of environmental protection in the absence of Union standards (Article 36)</p> <p>(H) investment aid for early adaptation to future Union standards (Article 37)</p> <p>(I) investment aid for energy efficiency measures (Article 38)</p> <p>(J) investment aid for high-efficiency cogeneration (Article 40)</p> <p>(K) investment aid for the promotion of energy from renewable sources (Art. 41)</p> <p>(L) investment aid for energy efficient district heating and cooling (Article 46)</p> <p>(m) investment aid for recycling and re-use of waste (Article 47)</p> <p>De minimis aid may be granted provided that, together with other de minimis aid or de minimis aid in agriculture and fisheries received in the fiscal year concerned and in the previous 2 fiscal years from different sources and forms, it does not exceed the amount indicated in Regulation 1407/2013, which is currently EUR 200000 per undertaking and EUR 100000 per undertaking in the case of an undertaking active in the road haulage sector.</p>			
Priority FENG.02 An environment conducive to innovation					
Action FENG.02.08 BRidge Up	CP1.I Development and strengthening research and innovation capacities and the use of advanced technologies	Grant State aid: Commission Regulation (EU) 651/2014	100 000 000	25 000 000	125 000 000
Action FENG.02.09 Seal of Excellence		Grant State aid: Commission Regulation (EU) 651/2014 State aid for R & D projects involving industrial research and experimental development (Article 2(85) and (86))	30 000 000	12 857 143	42 857 143
Action FENG.02.10 IPCEI		Grant State aid: The Treaty on the Functioning of the European Union Aid to IPCEIs (Article 107)	133300 000	35 056 180	168 356 180
Action FENG.02.11 Joint Research Undertakings		Grant State aid: Commission Regulation (EU) 651/2014	20 000 000	14 831 460	34 831 461

Action FENG.02.13 Innovative public procurement		Grant No public aid	113 500 0 00	0	113 500 00 0
Action FENG.02.20 INNOSTART		Grant No public aid The costs of the FENG project are transferred to the level of final recipients belonging to the SME group – on a de minimis basis.	11 124 00 0,00	9 797 7 53	20 921 753
Activity 2.23 FENG Co- financing of Test Centres and Technologica l Experimentat ion of Artificial Intelligence (TEF AI)	CP1.II – Reaping the benefits of digitalisatio n for citizens, businesses, research organisatio ns and public institutions	Grant No public aid The costs of the FENG project are transferred to the level of final recipients belonging to the SME group. The beneficiary will provide services related to the activities of TEF AI Final SME recipients on a de minimis basis.	25 000 00 0	0	25 000 000
	Priority FENG.03 Greening businesses				
Action FENG.03.03 Hydrogen IPCEI	CP2.III Developme nt of smart energy systems and grids and energy storage systems outside the Trans- European Energy Network (TEN-E)	Grant State aid: The Treaty on the Functioning of the European Union <i>Aid to IPCEIs (Article 107)</i>	166 700 0 00	0	166 700 00 0

d. types of eligible costs

Type of State aid	Eligible costs
public aid for a R & D project	<p>In the case of State aid granted for a R & D project involving industrial research or experimental development, the eligible costs shall be the costs of:</p> <ol style="list-style-type: none"> 1) salaries, including non-wage labour costs, including social security and health insurance contributions, of persons employed in carrying out this project in so far as they are directly linked to its implementation; 2) apparatus and equipment – incurred within the scope and for the period during which such apparatus and equipment are used in carrying out that project; if they are not used for the duration of the R & D project, only depreciation costs over the lifetime of the project, calculated on the basis of accounting rules, shall be considered eligible costs; 3) real estate – incurred to the extent and for the period during which the property is used in carrying out that project; in the case of buildings, only depreciation costs over the duration of the project, calculated on the basis of accounting rules, and in the case of land, the costs related to the transfer of ownership or other rights in rem, the cost of using the land against payment or the capital costs actually incurred shall be considered eligible; 4) contractual research, knowledge and patents acquired or used under an external licence on an arm's length basis and the costs of consultancy and similar services used exclusively for the execution of that project; 5) additional general and other operational costs, including material, supply and product costs, incurred directly in connection with the implementation of this project. <p>2. In the case of State aid granted for a R & D project involving a feasibility study, the eligible costs are the costs of developing this study.</p>
Aid for projects awarded a Seal of Excellence quality label	<p>The categories, maximum amounts and methods for calculating the eligible costs of the R & D project or feasibility study with public aid shall be those defined as eligible under Horizon 2020 or Horizon Europe rules. The maximum amount of public aid for R & D projects involving industrial research and experimental development or feasibility studies awarded a Seal of Excellence quality label under Horizon 2020 or Horizon Europe shall not exceed the equivalent of EUR 2500000 per undertaking and per R & D project or feasibility study.</p>
Innovation aid	<p>In the case of State aid for innovation, the eligible costs shall be the costs of:</p> <ol style="list-style-type: none"> 1) the acquisition, validation and protection of intangible assets referred to in Article 28(1). 2(a) of Regulation No 651/2014; 2) the secondment by a research organisation or a large undertaking of highly qualified staff within the meaning of Article 2(93) of Regulation No 651/2014 in order to carry out R & D & I activities in newly created jobs with an undertaking to which public aid has been granted, provided that those staff do not replace other staff; 3) innovation advisory services within the meaning of Article 2(94) of Regulation No 651/2014 and innovation support services within the meaning of Article 2(95) of Regulation No 651/2014.
Start-up aid	<p>Public aid to support start-ups may be granted in the form of loans, guarantees or grants, including in the form of equity, quasi-equity investments, reductions in interest rates or guarantee fees, or a combination of these.</p>
Aid for scouting costs	<p>The eligible costs shall be the costs of initial risk identification and examination of the legal and economic situation of start-ups in order to assess the chances of commercialisation.</p>
Aid for advisory services	<p>In the case of State aid for consultancy services, the eligible costs are the costs of these services:</p> <ol style="list-style-type: none"> 1) provided by external consultants; 2) not of a continuous or periodic nature;

	<p>3) not related to the trader's operating costs, such as permanent tax consultancy services, regular legal services or advertising</p>
Regional investment aid.	<p>In the case of State aid to finance an initial investment and an initial investment in favour of a new economic activity, the eligible costs shall be the costs of:</p> <ol style="list-style-type: none"> 1) the acquisition of the right of perpetual usufruct of land and the right of ownership of immovable property, excluding dwellings; 2) the acquisition or production of fixed assets other than those referred to in subparagraph 1; 3) acquiring construction work and materials; 4) the acquisition of intangible assets, in the form of patents, licences, know-how, as well as other intellectual property rights which: <ol style="list-style-type: none"> a) will be used by the operator only in the establishment for which public aid has been received, (b) will be depreciated in accordance with accounting rules, C) they will be purchased on market terms from third parties unrelated to the trader, (D) will constitute the entrepreneur's assets and will remain associated with the project: <ul style="list-style-type: none"> — in the case of a large entrepreneur, for at least 5 years, — for a micro, small or medium-sized entrepreneur, for at least 3 years — from the end date of the project; 5) capital repayment instalments of fixed assets incurred by the entrepreneur as the beneficiary of the lease until the end of the project, up to the amount of the capital on the date on which the leasing agreement was concluded, or the capital repayment instalments of fixed assets owed to the financier under the leasing agreement, if, in the application referred to in Section 9, paragraph 9. 1 the funder shall be designated by the trader as an entity authorised to bear the cost, provided that in the case of a lease: <ol style="list-style-type: none"> a) real estate – the leasing agreement was concluded by: <ul style="list-style-type: none"> — a large entrepreneur for at least 5 years, — micro, small or medium-sized entrepreneur for at least 3 years, — from the date of the expected completion of the initial investment or the initial investment for the new activity, respectively, (b) fixed assets other than real estate – the leasing contract leads to the transfer of ownership of those assets to the lessee, excluding leasebacks.
Aid for participation in fairs	<p>The eligible costs under State aid for the participation of micro, small or medium-sized enterprises in fairs include the costs of renting, building and operating an exhibition stand during the participation of micro, small and medium-sized enterprises in a given fair or exhibition.</p>
Training aid	<p>Eligible costs include:</p> <ol style="list-style-type: none"> 1) the employment of trainers for the hours during which the trainers attend the training; 2) operational trainers and trainees directly related to the training, including travel costs, accommodation, materials directly related to the training, depreciation of tools and equipment, to the extent that they are used exclusively for the training; 3) consultancy services related to the training in question; 4) the personal trainees and the overall indirect costs incurred for the duration of the training participants attending the training.

<p>Investment aid enabling undertakings to go beyond Union environmental standards or to increase the level of environmental protection in the absence of Union standards</p>	<p>The eligible costs shall be the additional costs of this investment necessary to achieve a higher level of environmental protection than required by the applicable Union standards or to increase the level of environmental protection in the absence of Union standards, determined as follows:</p> <ol style="list-style-type: none"> 1) where the investment costs to increase the level of environmental protection can be distinguished from the total investment costs as a separate investment, the eligible costs shall be those related to the improvement of the level of environmental protection; 2) in other cases, the costs of the investment in increasing the level of environmental protection shall be determined by reference to the costs of an investment of a similar type or scope which would have been realised in the absence of State aid and the implementation of which would result in a lower level of environmental protection; the difference between the costs of both investments is environmental costs, which are eligible costs.
<p>Investment aid for early adaptation to future Union standards</p>	<p>The eligible costs shall be the additional investment costs necessary to achieve a higher level of environmental protection than required by Union standards, determined as follows:</p> <ol style="list-style-type: none"> 1) where the costs of investments in increasing the level of environmental protection can be distinguished from the total investment costs as a separate investment, those costs related to the improvement of the level of environmental protection shall be considered eligible; 2) in other cases, the costs of the investment in increasing the level of environmental protection shall be determined by reference to the costs of an investment of a similar type or scope which would have been realised in the absence of State aid and the implementation of which would result in a lower level of environmental protection; the difference between the costs of both investments is environmental costs, which are eligible costs.
<p>Investment aid for high-efficiency cogeneration</p>	<p>Eligible costs are:</p> <ol style="list-style-type: none"> 1) the additional investment costs necessary for the generation unit to operate as a cogeneration unit compared to a conventional generation unit of the same capacity, or 2) additional investment costs for retrofitting an existing cogeneration unit in order to achieve higher efficiency, where the existing cogeneration unit already meets the high efficiency threshold.
<p>Investment aid for the promotion of energy from renewable sources</p>	<p>The eligible costs shall be: the additional investment costs necessary to promote the production of energy from renewable sources, determined pursuant to Article 41(1). 6 of Regulation No 651/2014.</p> <p>Where the investment costs for the production of renewable energy can be distinguished from the total investment costs as a separate investment,</p> <p>The difference between costs where the costs of investment in the production of energy from renewable sources can be determined by reference to a similar, less environmentally friendly investment that would be likely to have been carried out in the absence of the aid,</p> <ol style="list-style-type: none"> 3) For some small installations where no less environmentally friendly investment can be identified as there are no plants of limited size,
<p>Investment aid for energy efficiency measures</p>	<p>The eligible costs shall be the additional investment costs necessary to achieve a higher level of energy efficiency, determined as follows:</p> <ol style="list-style-type: none"> 1) where the investment costs for achieving a higher level of energy efficiency can be distinguished from the total investment costs as a separate investment, those costs related to the improvement of energy efficiency shall be considered as eligible costs; 2) for investments in energy efficiency improvements in buildings referred to in Article 38(1). (3)(b) of Regulation No 651/2014, the eligible costs shall also be the costs of: <ol style="list-style-type: none"> a) installations producing electricity or heat from renewable sources integrated into the building; b) equipment for storing energy produced by a building-integrated renewable energy installation;

	<p>C) the equipment and infrastructure built into the construction of a building and for charging the electric vehicles of the occupants of that building;</p> <p>D) connected with the digitalisation of a building within the meaning of Article 2(103c) of Regulation No 651/2014, including in order to increase its smart readiness referred to in Article 2(103d) of Regulation No 651/2014, in accordance with Article 38(1) of Regulation No 651/2014. 3a(d) of Regulation No 651/2014</p> <p>— for any combined costs referred to in points (a) to (d), the eligible costs shall be the total investment costs in the different equipment.</p> <p>3) in the case of investments other than those referred to in points 1 and 2, the costs of an investment enabling a higher level of energy efficiency in the activity to be carried out shall be determined by reference to the costs of an investment of a similar type or scope that would have been carried out in the absence of public aid and the implementation of which would result in a lower level of energy efficiency; the difference between the costs of both investments is the costs related to energy efficiency improvements, which are eligible costs.</p>
Investment aid for energy efficient district heating and cooling	<p>The eligible costs shall be:</p> <p>1) in the case of a generation unit, the additional costs necessary to construct, expand or upgrade one or more generation units in order to operate as an energy efficient district heating and cooling system compared to a conventional generation unit; the investment must be an integral part of an energy efficient district heating and cooling system;</p> <p>2) in the case of a distribution network, the costs of constructing, extending or upgrading the distribution network.</p>
Investment aid for waste recycling and re-utilisation	<p>The eligible costs shall be determined in accordance with Article 47. 7 of Regulation No 651/2014, i.e.: investment costs needed to realise an investment leading to better or more efficient recycling or reuse activities compared to conventional a process related to re-use and recycling activities with the same capacity as would have been created in the absence of the aid.</p>
Aid to IPCEIs	<p>For aid to IPCEIs, the eligible costs are the costs of:</p> <p>1) feasibility studies, including preliminary technical studies;</p> <p>2) obtain the permits, permits or concessions necessary for the execution of the project;</p> <p>3) apparatus and equipment, including installations and means of transport, incurred to the extent and for the period during which such apparatus and equipment are used in the execution of the project; if they are not used during the lifetime of the project, only depreciation costs over the lifetime of the project, calculated on the basis of accounting rules, shall be eligible;</p> <p>4) real estate – incurred to the extent and for the period during which the property is used in carrying out that project, including the costs related to the transfer of ownership or other rights in rem, the cost of using the property for consideration or the capital costs actually incurred, and, in the case of buildings and constructions, the costs of their depreciation over the duration of the project, calculated on the basis of accounting rules;</p> <p>5) other operational costs, including supply, energy, materials and products, necessary for the execution of the project;</p> <p>6) the acquisition, validation and protection of intangible assets in the form of patents, licences, know-how and other intellectual property rights;</p> <p>7) contractual research, knowledge and patents acquired or used under a licence granted on market terms by third parties not linked to the entrepreneur and the costs of consultancy and similar services used exclusively for the purposes of the project;</p> <p>8) salaries, including non-wage labour costs, including social security and health insurance contributions, of persons employed in carrying out the project in so far as these salaries are directly linked to its implementation;</p>

	<p>9) administrative costs, including overheads, incurred directly as a result of the R & D & I activities, including those relating to a first industrial application project and, in the case of an infrastructure project, incurred during the construction of that infrastructure;</p> <p>10) constituting capital expenditure necessary for the implementation of the project, including the costs of acquiring ownership of immovable property or the right of perpetual usufruct of land, the costs of acquiring or producing other fixed assets, including the costs of installation or commissioning, and the costs of purchasing construction works and materials, and operating costs, including energy costs, in the case of State aid for the implementation of a project for the first industrial use, if:</p> <p>a) it is the result of R & D & I, which may be carried out by an entity other than the one that carried out the activity if ownership of the results is obtained and the R & D & I activities and the first industrial application are covered by the project and jointly notified to the European Commission,</p> <p>b) it contains a significant research, development or innovation component which is an integral and necessary part of the proper implementation of the project and the costs constituting the operating expenditure are related to that element;</p> <p>11) other inextricably linked to the implementation of the project, excluding costs representing operating expenditure not covered by point 10.</p>
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2.4. Please provide a summary of the eligibility criteria and the methods for selecting the aid beneficiaries. In particular, please describe the following: (a) the methods used for selecting the beneficiaries (e.g. scoring), (b) the indicative budget available for each group of beneficiaries, (c) the likelihood of the budget being exhausted by certain groups of beneficiaries, (d) scoring rules when applying a scoring to the scheme, (e) aid intensity thresholds, (f) criteria that the granting authority will take into account when assessing applications.

Title of the action and form of support	Beneficiaries	Method of selection	Budget (allocation) EUR	Scoring principles	Intensity thresholds	Criteria
<p>Action FENG.01.01 SMART Pathway</p> <p>Grant/ conditional grant (pursuant to Article 57 CPR)</p> <p>(Financing divided into the repayable part and the non-reimbursable)</p>	<p>entrepreneurs, enterprises (including SMEs as consortia), research organisations and institutes, universities and other actors in the higher education and science system, NGOs</p>	<p>Competition</p>	<p>1 961,1 million</p>	<p>The minimum national innovation is the result of R & D output (0/1/2/3/12 points); The potential of innovation for market transformation (0/3/5); Eco-innovation at country level (0/1/2 points); Digital innovation at country level (0/1/2 points); Cooperation in relation to the project (0/2 points); Societal importance of</p>	<p>80 %</p>	<p>Mandatory criteria common to the project (YES/NO assessment)</p> <p>1 Eligibility of the applicant; 2 The project has an incentive effect; 3 Coherence of the project; 4 The applicant's capacity to implement the project financially; 5 The project complies with the horizontal principles of equal opportunities and non-discrimination; 6 The project complies with the principle of sustainable</p>

part (share of the repayable and non-reimbursable parts in the amount of co-financing, as well as rules for calculating the amount to be reimbursed depending on the financial results of the project and the size of the enterprise).				innovation (0/2 points) For large entrepreneurs, the project must include at least Module R & D. For SMEs, the project must include at least Module R & D or commercialisation. The other modules (innovation deployment, R & D infrastructure, digitalisation, greening of businesses, internationalisation, competences) are optional.		development; 7 Cooperation between entrepreneurs other than SMEs (only for large enterprises); 8 The project includes a mandatory module; 9 Compliance with the scope of the selection procedure (dedicated calls) In addition, there are separate criteria for each module. Ranking criteria: (see scoring) Conclusive criteria: Minimum national innovation is the result of R & D results 2) The potential of innovation to transform the market; (3) The applicant is a member of the National Key Road 4) Unemployment rate in the district where the project is located
Action FENG.02.08 BRIDGE Up grant	Business support institutions	Competition	100 million	b.d.	80 %	b.d.
Action FENG.02.09 Seal of Excellence grant	Companies	Competition	30 million	b.d.	70 %	b.d.
Action FENG.02.10 IPCEI grant	Companies	Competition	133.3 million	None. Evaluation YES/NO	100 %	Mandatory criteria (YES/NO assessment): 1. Eligibility of the applicant; 2. Eligibility of the project; 3. Compliance with the National Smart Specialisation; 4. The results of the project; 5. Project management; 6. Project budget; 7. The project complies with the horizontal principles of

						equal opportunities and non-discrimination; 8. Sustainable project
Action FENG.02.11 Joint Research Undertakings grant	Enterprises, Science and Education Institutions	Competition	20 million	b.d.	80 %	b.d.
Action FENG.02.13 Innovative public procurement grant	Public administration; the target group: entrepreneurs, science and education institutions, Business Support Institutions	Non-competition mode	113,5 million	bd	100 %	bd
Action FENG.02.20 INNOSTART grant	Public administration; the target group: enterprises (including SMEs),	Competition	Million	bd	100 %	
Activity 2.23 FENG Co-financing of Test Centres and Technological Experimentation of Artificial Intelligence (TEF AI) grant	Science and education institutions, Enterprise, Business Support Institutions	Competition	25 million	None. Evaluation YES/NO	100 %	Mandatory criteria (YES/NO assessment): 1.Eligibility of the applicant; 2.Eligibility of the project; 3.Project indicators; 4.Project budget; 5.The project complies with the horizontal principles of equal opportunities and non-discrimination; 5.Sustainable project
Action FENG.03.03 Hydrogen IPCEI grant	Enterprises (large, SMEs)	Competition	166.7 million	None. Evaluation YES/NO	100 %	Mandatory criteria (YES/NO assessment): 1.Eligibility of the applicant; 2.Eligibility of the project; 3.Projects; 4. Project management; 5.Project budget; 6.The

						project complies with the horizontal principles of equal opportunities and non-discrimination; 7.Sustainable project
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2.6. Please mention specific constraints or risks that might affect the implementation of the scheme, its expected impacts and the achievement of its objectives.

At the operational level, risks associated with the lengthy process of signing project contracts may be identified, such as organisational changes within the institution (obtaining the necessary powers of attorney). Termination of project contracts may also affect the achievement of the indicators. Similarly, risks related to the low supply of valuable projects can be identified. R & D projects themselves also have a high level of risk (project failures).

The achievement of the objectives of the programme may also be affected by the current economic situation and the related situation and condition of enterprises – both beneficiaries and potential beneficiaries of the programme. Also, the worsening perception of barriers related to R & D & I by entrepreneurs may have a negative impact on the success of the aid programme.

External factors of a general nature include potential legislative changes affecting the conduct of interventions, as well as external shocks (pandemics, armed conflicts, disruption of supply chains, market disruptions).

3. Evaluation questions

3.1. Please indicate the specific questions that the evaluation should address by providing quantitative evidence of the impact of aid. Please distinguish between (a) questions related to the direct impact of the aid on the beneficiaries, (b) questions related to the indirect impacts and (c) questions related to the proportionality and appropriateness of the aid. Please explain how the evaluation questions relate to the objectives of the scheme.

The research questions for the evaluation of State aid have been presented in relation to two perspectives of the objectives of the aid scheme:

1. The objective of the evaluation of the aid scheme,¹³ which is to assess the direct and indirect (positive and negative) effects of the implementation of the aid scheme and the appropriateness and proportionality of the State aid
2. Objective and priorities of the Operational Programme – Funds for the Modern Economy 2021-27 (FENG) under which State aid is provided by the NCBR. This is mainly the following: **Developing and**

¹³Common methodology for State aid evaluation, European Commission, SWD(2014) 179 final, 28.5.2014

strengthening research and innovation capacities and the use of advanced technologies (CP1.I) and to complement the development of smart energy systems and grids and energy storage systems outside the Trans-European Energy Network (TEN-E) (CP2.III)

The evaluation of the NCBR aid scheme will focus primarily on assessing the impact of aid granted on R & D & I activities. The main objective of the FENG programme for the components implemented through the NCBR is to develop and strengthen the research and innovation capacities of enterprises by carrying out R & D work, implementing innovation, in conjunction with the adaptation of companies' activities to the challenges identified in the European Green Deal and digitalisation, the development of research infrastructure, the internationalisation of activities and the development of human resources. **The R & D & I area is therefore an essential component of support for the NCBR assistance programme.**

In the key aid instrument NCBR – FENG 01.01 – SMART – all beneficiaries are obliged to carry out tasks under the R & D module, i.e. to benefit from State aid for R & D work. The other modules under this instrument are complementary and the beneficiary may or may not use them. (these are also modules falling under the broad R & D & I area: Implementation of R & D results, R & D infrastructure; Digitalisation; Greening businesses; Internationalisation; Competences). In other activities of the FENG, the beneficiaries implement R & D projects. At this stage of the implementation of the programme, it is not possible to determine the share of costs allocated to R & D State aid for other types of aid, given that it is not known which choices will be made by the beneficiaries and from which modules of action FENG 01.01 will be used.

However, the budget allocated to the various activities of the FENG falling within the scope of the evaluation, including the type of State aid, confirms the relevance of the concentration of the planned evaluation on Priority 1. ("Support to enterprises"), Measure FENG.01.01 SMART. State aid The planned aid under Priority 1 of the aid scheme amounts to more than ¾ of the total budget (cf. Table 2.3). Taking into account only GBER compatible State aid, this share increases to almost 93 %

CP1.1. FENG: developing and enhancing research and innovation capacities and the uptake of advanced technologies

Direct effects: impact of the implementation of the NCBR assistance programme on beneficiaries		
Research question	Indicators	Link to the objectives of the NCBR Assistance Programme
1. How did the aid affect the amount of R & D expenditure of the beneficiaries? <ul style="list-style-type: none"> • How has the aid affected the sector structure of R & D? • Has the value of R & D expenditure transferred to and from the higher education sector increased? 	Change in total R & D expenditure (internal and external) before and after support Change in the value of R & D expenditure (internal and external) incurred or obtained from the higher education sector (before and after the acquisition)	PP objective: increase in investment in R & D of enterprises

	<p>Share of (internal and external) R & D expenditure by industry, higher education, government, other sectors.</p> <p>(Total R & D expenditure (PLN thousand); Total expenditure on internal R & D activities (PLN thousand); Total expenditure on external R & D activities (PLN thousand)</p>	
<p>2. Did the aid affect the scope of R & D activities undertaken by the aid beneficiaries, including digital technologies and sustainability transition) – incentive effect?</p> <ul style="list-style-type: none"> • Has the aid contributed to increasing the number of R & D projects carried out by the beneficiaries? • Has the aid contributed to increasing the value of private involvement in R & D? • Did the implementation of the Aid Programme have the effect of disbursing private investments that have not been supported? (negative direct effect) 	<p>Number of R & D work carried out under the Aid Programme (indicator for PP beneficiaries only)</p> <p>Number of all R & D projects carried out by the beneficiary (including private funds) (indicator for PP beneficiaries only)</p> <p>Share of R & D projects implemented under the Aid Programme in general in the beneficiaries' R & D projects</p> <p>Private investment complementing public support to enterprises [change before and after the support] (In-house R & D expenditure of enterprises i.e. <i>measures controlled by the reporting entity and used for R & D activities at its discretion, e.g. own resources, bank loans, tax credits</i>)</p> <p>Change in total R & D expenditure (internal and external) before and after parity</p> <p><i>(In the event of crowding out of private investment, the number of privately funded R & D projects for projects supported by public aid will be reduced)</i></p> <p>Use of R & D relief [yes/no]</p> <p>Share of entities supported under the aid scheme benefiting from the R & D relief</p>	<p>PP objective:</p> <p>increase investment in R & D of enterprises;</p> <p>increase the share of innovative companies that will generate revenues from the sale of advanced products and services;</p>
<p>3. What effects of commercialisation/implementation of R & D results in the group of beneficiaries have the aid (including digital technologies and sustainability transformation)?</p> <ul style="list-style-type: none"> • Has the aid contributed to an increase in the number of patent applications by the beneficiaries? 	<p>Number of R & D outputs implemented (indicator for PP beneficiaries only)</p> <p>Share of projects completed with R & D results implementation (indicator for PP beneficiaries only)</p> <p>Revenue from R & D results implemented (indicator for PP beneficiaries only)</p> <p>Number of patent applications filed</p> <p>Number of patent property rights acquired</p> <p>Share of patenting companies among PP NCBR beneficiaries?</p>	<p>PP objective:</p> <p>enhancing business innovation, in particular improving the processes of commercialisation of research results;</p> <p>increase the share of innovative companies that will generate revenues from the sale of advanced products and services;</p>

<p>4. Did the aid have an impact on the economic situation of the beneficiaries?</p> <ul style="list-style-type: none"> • Has the aid contributed to changes in qualitative and quantitative sales? • Has the aid contributed to increasing employment of R & D workers in companies? <p>1.</p>	<p>Net turnover of all products and services</p> <p>Fixed capital formations and intangible assets for which multiple or continuous use in R & D activities is assumed</p> <p>Value of the research apparatus</p> <p>Number of all full-time equivalent employees at year-end</p> <p>Number of R & D staff employed (in terms of number of posts) at year-end</p> <p>Increase in research jobs in supported enterprises</p> <p>Number of firms placing new products or services on the market</p> <p>Revenues from new or improved products or services put on the market</p> <p>Export your own products or services [yes/no]</p>	<p>PP objective:</p> <p>increase the share of innovative companies that will generate revenues from the sale of advanced products and services;</p> <p>increase the level of competence, especially with regard to identified competency deficits.</p>
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Indirect effects: impact of the implementation of the PP NCBR on the environment		
Research question	Indicators	Link to the objectives of the NCBR Assistance Programme (cf. point 2.1)
<p>1. Did the aid have the effect of diffusion of knowledge and innovation in the economy?</p> <ul style="list-style-type: none"> • Has the aid contributed to increased cooperation between entrepreneurs and scientific bodies (including on digital technologies and the transition to sustainability)? • Did the aid scheme affect entities other than the beneficiaries? 	<p>Cooperation with research unit prior to the project</p> <p>Cooperation of enterprises with research centres/scientific entities in the project</p> <p>Number of scientific units, worked with during the implementation of the project</p> <p>Funds provided by beneficiaries (total and scientific bodies) in the framework of their external R & D activities</p> <p>Costs of foreign services outsourced to a group of beneficiaries</p> <p>Number of enterprises that obtained technology rights or licenses resulting from the co-financed project</p> <p>Number/participation of projects that benefit from the possibility to increase the intensity of the PP due to effective cooperation or wide dissemination of results</p>	<p>PP objective:</p> <p>improving effective cooperation between companies and scientific bodies;</p> <p>increase the level of competence, especially with regard to identified competency deficits.</p>
<p>2. How has the implementation of the assistance programme affected the main macro-economic indicators related</p>	<p>National GDP level</p> <p>Total and R & D expenditure of enterprises,</p>	<p>Making the country's economy more competitive</p> <p>PP objective:</p>

to R & D activities (net impact of the assistance programme)?	<p>Share of project expenditure in total R & D expenditure in the business sector</p> <p>Total innovation inputs and enterprise groups</p> <p>Share of project expenditure in total expenditure on innovation activities in the enterprise sector</p> <p>Employment in R & D</p>	<p>enhancing business innovation, in particular improving the processes of commercialisation of research results;</p>
3. In the implementation of the Aid Programme, can there be negative effects on the selection of beneficiaries affecting competition, i.e. sectoral bias (in the multisectoral scheme, the predominant aid was granted to one sector) and bias towards incumbent entities (the ratio of old enterprises to new undertakings)? (indirect negative impact)	<p>Enterprises benefiting from aid, broken down by duration of activities</p> <p>Enterprises benefiting from aid, broken down by size (micro, SME, large)</p> <p>Shares of individual industries according to PKD/OECD or KIS in total aid volume and BERD</p> <p>Industrial R & D inputs according to PKD/KIS</p>	<p>PP objective: (sectoral approach)</p> <p>enhancing business innovation, in particular improving the processes of commercialisation of research results;</p> <p>increase investment in R & D of enterprises;</p>

3. Appropriateness and proportionality of the State aid NCBR		
Research question	Indicators	Link to the objectives of the NCBR Assistance Programme
<p>Have the most effective aid rules and mechanisms been chosen?</p> <p>Would other aid delivery mechanisms and modalities or types of support be more appropriate to achieve the target (including targets related to the scope of use of digital technologies and the transition towards sustainability)?</p> <p>Are the assumptions underlying the approval of the aid scheme still valid?</p>	<p><i>Qualitative expert assessment of the timeliness of the programme and its assumptions in line with the principles of theory-based evaluation and the reconstructed logic of the support logic</i></p>	<p>Adequacy of the mechanism adopted to increase the competitiveness of the country's economy and the achievement of the specific objectives of the aid programme</p>
<p>5. Was the aid proportionate to the achievement of the objective it pursued?</p> <p>6. Was it possible to achieve the same results with less public aid or other form of state aid (loans instead of subsidies)?</p>	<p>Revenue from R & D results implemented/Revenue from commercialisation of R & D results</p> <p>Difference between total investment in projects and revenues from R & D outputs implemented/revenue from commercialisation of R & D results</p> <p><i>(It was assumed that the aid will be proportional if the revenue from the implemented results of the works achieved after 5 years after the end of the project – with a mid-term</i></p>	<p>PP objective:</p> <p>increase the share of innovative companies that will generate revenues from the sale of advanced products and services;</p> <p>enhancing business innovation, in particular improving the processes of commercialisation of research results;</p>

	<i>measurement of approximately 2 years after the end of the project – is higher than the expenditure on the project).</i>	
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4. Results indicators

4.1. Please use the following table to describe which indicators will be built to measure outcomes of the scheme, as well as the relevant control variables, including the sources of data, and how each result indicator corresponds to the evaluation questions. In particular, please mention (a) the relevant evaluation question, (b) the indicator, (c) the source of data, (d) the frequency of collection of data (for example, annual, monthly, etc.), (e) the level at which the data is collected (for example, firm level, establishment level, regional level, etc.), (f) the population covered in the data source (for example, aid beneficiaries, non-beneficiaries, all firms, etc.):

The recommended set of indicators included in the list was drawn up, inter alia, on the basis of the Common Methodology for State Aid Evaluation and the experience of evaluation programmes in the area of R & D & I, in particular: Evaluation study on State aid granted under the Regulation of the Minister of Science and Higher Education on the conditions and procedure for granting State aid and de minimis aid through the National Centre for Research and Development (previous aid scheme granted through NCBR- SA.41471(2015/N))¹⁴

The evaluation plan of the NCBR aid scheme shall include an assessment of the direct and indirect effects and the appropriateness and proportionality of all FENG measures under which public aid will be provided through the NCBR. The counterfactual evaluation will be carried out only for the SMART Facility (Measure FENG.01.01). This is due to the size of the allocation, the expected number of beneficiaries, which only for this instrument allows this approach to be used methodologically. For actions/sub-measures for which counterfactual methods cannot be used, the evaluation will be carried out using theory-based evaluation using qualitative methods.

This list is a basic set of evaluation data that can be adapted accordingly by the evaluator for analyses based on the actual data of the beneficiaries of the aid scheme and the selected control group.

¹⁴https://www.ewaluacja.gov.pl/media/91867/Raportkoncowy_I_modulPP_NCBR.pdf;
https://www.ewaluacja.gov.pl/media/91863/NCBR_BA_Final_24_06_2020_final.pdf

Evaluation question	Indicator	Source	Frequency (frequency of data collection (e.g. yearly, monthly, etc.))	Level (level at which data is collected (e.g. company, institution, regional level, etc.))	Population (population covered by the data source (e.g. aid beneficiaries, non-beneficiaries, all companies, etc.).)
Direct effects: impact of the implementation of the NCBR assistance programme on beneficiaries					
<p>1. How did the aid affect the amount of R & D expenditure of the beneficiaries?</p> <p>How has the aid affected the sector structure of R & D?</p> <p>Has the business sector's cooperation with science and higher education increased?</p>	<p>Change in total R & D expenditure (internal and external) before and after support</p> <p>Change in the value of R & D expenditure (internal and external) incurred or obtained from the higher education sector (before and after the acquisition)</p> <p>Share of (internal and external) R & D expenditure by industry, higher education, government, other sectors.</p> <p>(Total R & D expenditure (PLN thousand); Total expenditure on internal R & D activities (PLN thousand); Total expenditure on external R & D activities (PLN thousand)</p>		<p>Core data for counterfactual testing, both for beneficiaries and for the control group, i.e. not effective applicants, will be obtained from the Central Statistical Office in 2026). The data will be obtained for subsequent years falling within the scope of the analysis.</p> <p>Formal cooperation with the Central Statistical Office is required due to the lack of access to microdata due to statutory provisions on statistical confidentiality.</p>	micro-data at entity level	<p>Beneficiaries of the aid scheme (the counterfactual analysis will be carried out only for Priority I beneficiaries due to the projected population size, which allows for a meaningful and statistically correct analysis)</p> <p>Control group – non-beneficiary entities; alternatively, as a basis for selecting the control group, all companies reporting to the Central Statistical Office (if it is not possible to select a control group from a group of unsuccessful and non-beneficiaries applicants).</p> <p>The selection of the control group and the group of beneficiaries will consist of selecting entities with similar characteristics in the period prior to the granting of</p>
2. Did the aid affect the scope of R & D activities undertaken by the aid beneficiaries (including digital	<i>Number of R & D work carried out under the Aid Programme (indicator for PP beneficiaries only)</i>	<p>Basic data</p> <p>The Central Statistical Office (including forms PNT-01,PNT-02, SP)</p>	<p>Supplementary data – collected in NCBR</p>		

<p>technologies and sustainability transition) – incentive effect</p> <p>* Has the aid contributed to an increase in the number of R & D projects carried out by the beneficiaries?</p> <p>* Has the aid contributed to increasing the value of private involvement in R & D</p> <p>* Did the implementation of the Aid Programme have the effect of disbursing private investments that have not been supported? (negative direct effect)</p>	<p><i>Number of all R & D projects carried out by the beneficiary (including private funds) (indicator for PP beneficiaries only)</i></p> <p><i>Share of R & D projects implemented under the Aid Programme in general in the beneficiaries' R & D projects</i></p> <p>Private investment complementing public support to enterprises [change before and after the support] (In-house R & D expenditure of enterprises i.e. <i>measures controlled by the reporting entity and used for R & D activities at its discretion, e.g. own resources, bank loans, tax credits</i>)</p> <p>Change in total R & D expenditure (internal and external) before and after parity</p> <p><i>(In the event of crowding out of private investment, the number of privately funded R & D projects for</i></p>	<p>collects these 15 data annually by the Central Statistical Office for each entity.</p> <p>Complementary data</p> <p>Data collected in NCBR in funding applications – basic data on the entity. (LSI – Local IT system)</p> <p>Data on the degree of achievement of direct result and output indicators allowing data to be collected for the calculation of indicators marked <i>in blue</i>. Data for each project annually in the interim reports on the implementation of the project and the report on the use of project results. These indicators will be used without comparison with</p>	<p>The data will be obtained for a group of all beneficiaries at the start-up phase of the project.</p> <p>Data on the degree of achievement of output and direct result indicators – annually at project level, only for a group of beneficiaries and successively as the project implementation period comes to an end from reports on the use of project results during the durability period (without control group)</p>	<p>support, so as to ensure a parallel trend. (Taking into account the uncertainty about the characteristics of the final beneficiaries of the aid scheme at this stage, the final selection of variables will be proposed after testing the different variable systems to achieve the best and optimal match)</p> <p>In the case of the assessment of direct effects, the value of the increase in the indicator in the situation before receiving support and at the moment of the cut-off – defined by time of evaluation in a group of entities – of the beneficiaries of the aid scheme and the control group selected. This will result in an estimate of the net effect (except for the indicators indicated for which</p>
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15SP (Annual Company Survey), mandatory for companies with more than 9 employees; carried out on a representative sample of companies in Poland

PNT-01 (Report on Research & Development (R & D)), is carried out annually among those with a higher level of innovation and R & D; It shall include information aligned with the international standards contained in the Frascati Manual

PNT-02 (Report on Industrial Innovation), annually; includes only firms in section PKD C (manufacturing); relates to the innovation activities carried out by the undertaking, including in particular the protection of intellectual property and new or improved products and business processes implemented by the undertaking during that period; it is a short version of the biennial Extended Innovation Survey (CIS).

	<p><i>projects supported by public aid will be reduced)</i></p> <p>Use of R & D relief [yes/no]</p> <p>Share of entities supported under the aid scheme benefiting from the R & D relief</p>	<p>the control group (only for beneficiaries of the aid scheme)</p> <p>Supplementary data:</p> <p>UOKiK – Data on the amount of state aid granted to entities by means of aid instruments/programmes and the use of State aid – SHRIMP database</p>			<p>the effect will be estimated only for the group of beneficiaries of the NCBR aid scheme. For these indicators it will not be possible to obtain data for the control group)</p> <p>In addition, the data obtained from the UOKiK will make it possible to take account of the fact that companies obtain other types of support offered under the FENG programme, e.g. under the PARP or BGK aid schemes.</p>
<p>3. What effects of commercialisation/implementation of R & D results within the group of beneficiaries have the aid (including in digital technologies and sustainability transition?)</p> <p>* Has the aid contributed to an increase in the number of patent applications by the beneficiaries?</p>	<p><i>Number of R & D outputs implemented (indicator for PP beneficiaries only)</i></p> <p><i>Share of projects completed with R & D results implementation (indicator for PP beneficiaries only)</i></p> <p><i>Revenue from R & D results implemented (indicator for PP beneficiaries only)</i></p> <p>Number of patent applications filed</p> <p>Number of patent property rights acquired</p> <p><i>At the patenting companies division among the beneficiaries of PP NCBR?</i></p>				
<p>4. Did the aid have an impact on the economic situation of the beneficiaries?</p> <p>* Has the aid contributed to changes in qualitative and quantitative sales?</p>	<p>Net turnover of all products and services</p> <p>Fixed capital formations and intangible assets for which multiple or continuous use in R & D activities is assumed</p> <p>Value of the research apparatus</p>				

<p>* Has the aid contributed to increasing employment of R & D workers in companies</p>	<p>Number of all full-time equivalent employees at year-end</p> <p>Number of R & D staff employed (in terms of number of posts) at year-end</p> <p>Increase in research jobs in supported enterprises</p> <p>Number of firms placing new products or services on the market</p> <p>Revenues from new or improved products or services put on the market</p> <p>Export your own products or services [yes/no]</p>				
Indirect effects: impact of the implementation of the PP NCBR on the environment					
<p>Has the aid resulted in diffusion of knowledge and innovation in the economy?</p> <p>* Has the aid contributed to increased cooperation between entrepreneurs and scientific bodies (including on digital technologies and the transition towards sustainability)?</p> <p>* Has the aid scheme affected entities other than the beneficiaries?</p>	<p>Cooperation with research unit prior to the project</p> <p>Cooperation of enterprises with research centres/scientific entities in the project</p> <p>Number of scientific units, worked with during the implementation of the project</p> <p>Funds provided by beneficiaries (total and scientific bodies) in the framework of their external R & D activities</p>	<p>Basic data:</p> <p>The Central Statistical Office (including forms PNT-01, PNT-02, SP) collects these data annually by the Central Statistical Office for each entity.</p> <p>Expertise from:</p> <p>— representatives of the institutions responsible for the implementation and management of the PP NCBR,</p>	<p>CSO core data – sourced in 2026). The data will be obtained for subsequent years falling within the scope of the analysis.</p> <p>Formal cooperation with the Central Statistical Office is required due to the lack of access to microdata due to statutory provisions on statistical confidentiality.</p>	<p>micro-data at the level of the entity – beneficiaries and selected entities cooperating with PP NCBR beneficiaries</p> <p>The environmental impact of the implementation of the PP NCBR will be assessed using an approach called theory-</p>	<p>Beneficiaries of the NCBR aid scheme.</p> <p>Entities not directly benefiting from the aid scheme but cooperating with beneficiaries and potentially benefiting indirectly (e.g.: Scientific bodies, co-operates)</p> <p>The analysis does not involve a control group</p>

	<p>Costs of foreign services outsourced to a group of beneficiaries</p> <p>Number of enterprises that obtained technology rights or licenses resulting from the co-financed project</p> <p>Number/participation of projects that benefit from the possibility to increase the intensity of the PP due to effective cooperation or wide dissemination of results</p>	<ul style="list-style-type: none"> — beneficiaries and unsuccessful applicants of PP NCBR, — representatives of scientific bodies or other entities cooperating with the beneficiaries of the PP NCBR, — R & D experts <p>Supplementary data:</p> <p>Data collected in NCBR in funding applications – basic data on the entity. (LSI – Local IT system)</p> <p>Data on the extent to which direct result and output indicators have been achieved and on the use of the possibility to increase the intensity of the PP. Data for each project annually in the interim reports on the implementation of the project and the report on the use of project results.</p>	<p>Expertise – once for the preparation of the final report (2026) In view of the logic of the aid scheme itself and the expected time for the indirect effects of the scheme to become apparent, it will not be appropriate to obtain expert information at the earlier stages of the implementation of the NCBR aid scheme.</p> <p>Supplementary data – collected in the NCBR successively on a continuous basis during the period of implementation of the aid scheme</p> <p>Data on the achievement of output and direct result indicators – data collected annually at project level, only for a group of beneficiaries and successively as projects are completed from reports on the use of</p>	<p>based evaluation using perspectives:</p> <ul style="list-style-type: none"> — the authority responsible for the implementation of the Assistance Programme, — enterprises benefiting from the NCBR aid scheme — representatives of the unsuccessful NCBR aid scheme — other entities cooperating with the beneficiaries 	
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			project results during the durability period (without control group)		
2. How has the implementation of the assistance programme affected the main macro-economic indicators related to R & D activities (net impact of the assistance programme)?	<p>National GDP level</p> <p>Total and R & D expenditure of enterprises,</p> <p>Share of project expenditure in total R & D expenditure in the business sector</p> <p>Total innovation inputs and enterprise groups</p> <p>Share of project expenditure in total expenditure on innovation activities in the enterprise sector</p> <p>Employment in R & D</p>	<p>Basic data: CSO (basic indicators on the country's macroeconomic situation and R & D activities)</p> <p>NCBR – aggregated data for beneficiaries of the NCBR aid scheme (LSI and CST)</p> <p>Supplementary data:</p> <p>UOKiK – Data on the amount of state aid granted to entities benefiting from the support of the NCBR aid scheme from other aid instruments/programmes, including PARP and BGK j-SHRIMP database</p>	<p>One-off,</p> <p>the analysis will cover the period of implementation of the NCBR aid scheme and the prediction for several years ahead; data for analysis will be collected on an annual basis</p>	<p>Macroeconomic data collected at country level</p> <p>Data on the NCBR aid scheme collected at NCBR level (aggregated from micro-data on entities – beneficiaries of the aid scheme)</p> <p>Control of the participation of beneficiaries of the NCBR aid scheme in other aid schemes under the FENG, including the support offered by PARP and BGK, in order to assess the real impact of the NCBR indirect programme</p>	<p>All companies in the country</p> <p>Macroeconomic analysis using macroeconomic modelling for key macro-economic indicators</p>
3. Are there any negative developments in the implementation of the Aid Programme concerning the selection of beneficiaries affecting	Enterprises benefiting from aid, broken down by duration of activities	Basic data: CSO (basic data on the total population of enterprises, including R & D expenditure of R & D by industry)	One-off, the analysis will cover the period of implementation of the NCBR's aid	Data on the population of enterprises at country level	Beneficiaries of the NCBR aid scheme. The population of economic operators

competition, i.e. sectoral bias (in the multisectoral scheme, the predominant aid was granted to one sector) and bias towards incumbent entities (the ratio of old enterprises to new enterprises)?(negative indirect impact)	Enterprises benefiting from aid, broken down by size (micro, SME, large) Shares of individual industries according to PKD/OECD or KIS in total aid volume and BERD Industrial R & D inputs according to PKD/KIS	NCBR – aggregated data for beneficiaries of the NCBR aid scheme (LSI and CST) Supplementary data: UOKiK – Data on the amount of state aid granted to entities – SHRIMP database	scheme together; data on entities collected on a continuous basis over the period of implementation of the aid scheme	Data on the NCBR aid scheme collected at NCBR level (aggregated from micro-data on entities – beneficiaries of the aid scheme)	as a reference group for the analysis. The analysis does not involve a control group
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Appropriateness and proportionality of State aid

1 Are the most effective aid rules and mechanisms chosen? *Are other aid delivery mechanisms and rules or types of support more appropriate to achieve the target (including targets related to the scope of use of digital technologies and the transition towards sustainability)? *Are the assumptions underlying the approval of the aid scheme still valid?	<i>Qualitative expert assessment of the timeliness of the programme and its assumptions in line with the principles of theory-based evaluation and the reconstructed logic of the support logic</i>	Basic data: 1. Expertise from: — representatives of the institutions responsible for the implementation and management of the PP NCBR and other public programmes supporting R & D activities of enterprises — beneficiaries and unsuccessful applicants of PP NCBR, — R & D experts 2. CSO – data on R & D activities in Poland Supplementary data: Data collected in NCBR: Data on the achievement of direct result and output indicators, FENG interim reports and data for each project each year in the progress reports on the implementation of the project and the report on the use of	One-off, the analysis will cover the period of implementation of the NCBR's aid scheme together; project data and project results collected successively on a continuous basis during the implementation period of the aid programme and successively as the project period comes to an end from reports on the use of project results during the durability period	FENG project and programme level Country level (GUS data)	The analysis does not require the presence of a control group. Expertise and analysis of legacy data and evaluation results will be used
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		project results (one time 2 years after the end of the project)			
<p>2. Was the aid proportionate to the achievement of the objective it pursued?</p> <p>* Was it possible to achieve the same results with less public aid or other form of state aid (loans instead of subsidies)?</p>	<p>Revenue from R & D results implemented/Revenue from commercialisation of R & D results</p> <p>Difference between total investment in projects and revenues from R & D outputs implemented/revenue from commercialisation of R & D results</p> <p><i>(It was assumed that the aid will be proportional if the revenue from the implemented results of works achieved 5 years after the end of the project – with a mid-term measurement of approximately 2 years after the end of the project – would be higher than the expenditure on the project)</i></p>	<p>Basic data:</p> <p>Data collected in NCBR:</p> <p>Monitoring data on the value of projects and the value of funding (public aid granted)</p> <p>Data on the achievement of result indicators (e.g.: <i>Revenue from R & D results implemented</i>)</p> <p>Data for each project annually in the interim reports on the implementation of the project and the report on the use of project results – 2 years after the completion of the project.</p> <p>Supplementary data:</p> <p>1. Expertise from:</p> <ul style="list-style-type: none"> — representatives of the institutions responsible for the implementation and management of the PP NCBR and other public programmes supporting R & D activities of enterprises — beneficiaries and unsuccessful applicants of PP NCBR, — R & D experts 	<p>One-off,</p> <p>the statistical analysis will cover the period of implementation of the NCBR's aid scheme together; project data and project results collected successively on a continuous basis during the implementation period of the aid programme</p> <p>I will only be able to obtain full data for the analysis for a group of projects completed around 2 years before the deadline for submission of the final evaluation report. The analysis for the other projects will be incomplete. The effect of revenues from the implementation of R</p>	<p>FENG project and programme level</p> <p>Country level (GUS data)</p>	<p>Population of PP NCBR beneficiaries.</p> <p>Statistical analysis does not require the presence of a control group.</p> <p>Expertise and analysis of legacy data will be used</p>

		2. CSO – data on R & D activities in Poland	& D results supported by the PP NCBR cannot yet be observed.		
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4.2. Please explain why the chosen indicators are the most relevant for measuring the expected impact of the scheme.

The proposed indicators are mostly derived from data collected in official statistics or data required at the stage of application for funding or mandatory reporting on project implementation. They are therefore objective and reliable and collected in a standardised manner. This approach will make it possible to carry out a sound impact assessment. The indicators relating to R & D activities collected in statistics of the Central Statistical Office are those recommended in the Frascati Manual¹⁶. The approach to measuring R & D activities and the scope of data proposed in the evaluation of the aid programme is an approach in line with this manual and corresponds to accepted international standards for the acquisition and presentation of R & D data and the measurement of S & T & I activities.

In addition, the selected indicators were used and their usefulness for evaluation studies tested in practice in the framework of the evaluation of the aid scheme NCBR SA.41471(2015).

5. Envisaged methods to conduct the evaluation

5.1. In light of the evaluation questions, please describe the envisaged methods to be used in the evaluation to identify the causal impact of the aid on the beneficiaries and to assess other indirect impacts. In particular, please explain the reasons for the choice of these methods and the rejection of other methods (e.g. reasons related to the nature of the scheme).

A. Legacy data analysis

The assessment of direct and indirect effects and the appropriateness and proportionality of all FENG actions providing public aid through the NCBR will be carried out using as much as possible the available administrative data and the results of the studies and analyses carried out.

The counterfactual evaluation will only be carried out for the SMART Pathway Facility (Measure FENG.01.01). This is due to the size of the allocation and the expected number of beneficiaries, which allow this approach to be used in a methodologically correct way only for this instrument. For the

¹⁶OECD (2018), *Frascati Manual 2015: Recommendations on the acquisition and presentation of R & D data, Measurement of S & T & I*, OECD Publishing, Paris/GUS, Warsaw, <https://doi.org/10.1787/9788388718977-pl>.

other actions for which counterfactual methods cannot be used, the evaluation will be carried out using theory-based evaluation TBA using qualitative methods.

The main sources of data used are:

- Micro-data from beneficiaries on their R & D and innovation activities. Data shall be obtained on the basis of or in accordance with the GUS (PNT) templates so that it is possible to compare the results against aggregated sectoral and macro-economic data of the Central Statistical Office.
- Micro-data – data collected in LSIs and CSTs on applicants and beneficiaries from applications for funding, reports and payment claims
- CSO data – on the basis of the data, statistical and econometric analyses based on publicly available official statistics on in particular the value of R & D expenditure in the economy in terms of GDP (BERD, GERD) will be carried out.

B. Counterfactual Impact Evaluation (CIE)

Counterfactual analyses will be carried out at the beneficiary companies and in the beneficiary pairs and appropriately selected control cases (in the matching model – PSM). The effects/impact will be presented as DID (Difference in differences between a control group and a group of beneficiaries/impacted by the programme. The core group will be the beneficiary companies of measure FENG 01.01 (expected N=807); The data of the above-mentioned entities will be available in the CST2021/LSI resources and official statistics resources on the basis of GUS PNT 01 forms (or, in addition, SP and PNT-02). The control group will be companies – non-beneficiaries (a properly selected group of unsuccessful applicants or non-participants). The data of the above-mentioned entities will be available in the CST2021/LSI resources only inefficient applicants) and in the resources of official statistics on the basis of GUS forms PNT-01 (or, in addition, SP and PNT-02). The selection of the sample (PSM) will take into account the characteristics of the enterprises relevant to the likelihood of participation in the programme and its effects available in administrative databases (data sources).

The relatively short time horizon of the survey and the timing of the measurement of indicators in the Central Statistical Office should be taken into account. It takes time, i.e. at least a few years after the end of the intervention, to disclose the effects of the aid in terms of R & D activities, and in particular the translating of co-financing into effects on the viability of firms. At the time of the survey (in 2026), data from the Central Statistical Office for the full reporting year 2024 will be available. The sample of NCBR aid applicants will include companies that applied for funding in 2023 and 2024. Both of these time horizons **will make it necessary to measure the effects within (maximum) two years after the start of the projects. This is a very short prospect even for measuring the most direct effects.**

The counterfactual analysis is intended to determine the net effect of the intervention. The net impact of an intervention is an indication of the difference between the hypothetical state in which the beneficiaries would find themselves in the absence of the aid compared to the observable state

as a result of the grant of the aid. The counterfactual study will aim to provide information on the direct effects of the NCBR's support. The key question to be answered by this evaluation is whether there is an intervention effect and, if so, whether it is positive or negative and what is its scale. Counterfactual methods require the identification of the hypothetical situation that would have occurred had the intervention not occurred (counterfactual) and to refer it to what actually happened. The survey will be carried out by comparing the situation of beneficiaries and non-beneficiaries (mainly unsuccessful applicants). In order to make the approximation of the counterfactual situation correct and reliable beneficiaries and non-beneficiaries of the NCBR should be similar (e.g. companies with a similar size of employment, in a similar sector, with similar duration in the market, etc.) and should be different only in the fact that some have received public support from the NCBR and the other not. The selection of relevant actors for benchmarking is crucial for the reliability of results. In order to increase credibility, the analysis will be complemented by an initial measurement of the effect indicator prior to the start of support. Previous experience of the NCBR has shown that several different methods of matching NCBR beneficiaries and non-beneficiaries are best suited in parallel. The detailed selection of the methodology will be established at the stage of developing the methodology and adapted to the different groups of beneficiaries and non-beneficiaries and to the possibility of obtaining relevant input data. At this stage, it is possible to identify the basic range of tools that will be used to carry out this evaluation, in particular:

- **Approximation matching techniques propensity score matching (PSM).**

These methods consist of creating a single indicator (markers) for which the units being compared are to be similar. PSM is a well-established and widely used method used in evaluation studies. The approach is based on a comparison of the performance of programme participants with comparable non-beneficiaries. The differences in performance between the two groups will be attributed to the impact of the programme. The statistical matching is intended to mimic randomised control trial (RTC), i.e. random selection, recognised as a gold standard in the examination of intervention effects. This approach is considered as the best choice when the RCT scheme is not feasible. This method is used to select the beneficiaries of the interventions concerned, which are as similar as possible to those that have not received support under the PP NCBR (so-called: "statistical twins"). The purpose of this analysis is to identify the net effects of the intervention in terms of, inter alia: employment, revenues, R & D activities. A key condition for the reliability of analyses is to match the beneficiaries of such non-beneficiary firms, which have as similar characteristics as possible, i.e. they can influence both the selection processes for public support and the value of impact indicators. In this way, the so-called selection burden can be controlled. Based on the results of the estimation of variables characterising beneficiaries and non-beneficiaries selected for the model of beneficiaries and non-beneficiaries, 'statistical twins' are selected in pairs or groups that are compared to the changes the intervention has caused. Observed differences are defined as the effect of the intervention.

- **Difference in Difference method (DID)**

Given the limited size of the sample of beneficiaries of NCBR programmes, especially in the context of SMART support to large companies, it may be impossible in many cases to find twin companies. In such cases, the DID approach will be used to compare the situation of the supported entities before and after the granting of the aid. The DID methodology consists of measuring the net impact of interventions on beneficiaries by comparing the difference in the values of the individual variables for

beneficiaries and non-beneficiaries of the control group, taking into account the differences in these variables before the aid is granted. The method will be used to analyse the development of counterfactual scenarios – the economic situation in the market where the intervention took place (the difference in time in the market affected by the Aid Programme) and compare it with the development of the same variable over the same period in a comparator market that was not influenced by the factor under examination.

The use of the methodology is limited by the assumption that differences between experimental and control groups are stable over time. In order to limit the negative impact of non-compliance with this condition on the results of the study, it is advisable to select similar entities to a control and experimental group (e.g. due to the size or core industry of the entity).

The detailed econometric identification strategy to be used to delineate the impact of aid under the Programme from other factors will be established at the methodological report stage. In addition, due to the widespread use of other support programmes offered by other institutions, the NCBR plans to obtain data on the amount and type of support provided to the entity under other aid programmes through the SHRIMP database managed by UOKiK and to build an appropriate econometric model. The rationale for the proposed approach is based on the experience of implementing counterfactual analyses using the PMS matching method and assessing the effects using the DID method for the evaluation of the NCBR 2014-2020 aid scheme. The experience and lessons learned from that study provide a basis for planning analyses in the current evaluation plan.

In the counterfactual study for the evaluation of the NCBR 2014-2020 aid scheme, the selection of the control group using the PMS method took into account the following administrative data:

- 1. Data from the NCBR internal systems – LSI – identifying the entity and the metric and characterising data obtained from the attachment to the application for funding, such as: whether the company cooperates with science, export, or R & D; employment status)*
- 2. Data from the UOKiK SHRIMP database – the total amount of State aid received*
- 3. Data from the Central Statistical Office Registers*

Participation of companies in Śląskie Province
Participation of companies in Mazowieckie Province
Participation of companies in Małopolskie Province
Share of firms investing in internal R & D activities
Share of firms investing in external R & D activities
Share of firms investing in R & D activities
Share of profit-making firms
Share of non-zero share of revenue from export sales in total revenue
Share of revenue from export sales in total revenue
Participation of SMEs
Share of small firms
Share of medium-sized enterprises
Share of firms investing in R & D activities
R & D expenditure
Salaries
Average salary
Number of persons employed
Employment per FTE

Productivity at work
Participation of undertakings in section C of the PKD
Participation of companies in section M of the PKD
Participation of undertakings in section J of the PKD
Revenue source dispersion indicator by PKD
Net revenues from sales
PCA 20
PCA 25
PCA 27
PCA 28
PKD 46
PCA 62
Participation of undertakings with legal form: public limited company
Participation of undertakings with legal form: zo.o.
Income tax
Share of companies that have introduced new or substantially improved products
Share of companies that have introduced new or substantially improved services
Value of other public support
Share of applicants who submitted their first application in 2015
Participation of KIS companies in innovative technologies and industrial processes
Expenditure on machinery and technical equipment

The selection of the control group using the PSM methodology varied according to the estimated outcome indicators. Although it would always be possible to use the control group set up among the so-called unsuccessful applicants for comparisons (given the possibility of taking into account, inter alia, unobservable incentive factors for the implementation of the investments in question), this was not always possible. The pool of such entities in parts of the agreements was too small (often smaller than the group of beneficiaries), which prevented a satisfactory level of similarity with the group of beneficiaries

The effects were estimated using the classical DID (difference-in-differences) procedure used for analyses on aggregated data, i.e. averages in the experimental and control groups. This technique is referred to as the double difference due to two types of comparison:

- *between the beneficiaries and the control group;*
- *between pre- and post-intervention groups (in this study for 2014-2018).*

In estimating the effects of the 2014-2020 NCBR aid scheme, the following indicators from the Central Statistical Office (GUS) registers PNT –01 (and, in addition, SP and PNT –02) were used:

Share of firms investing in R & D activities
Share of firms investing in internal R & D activities
Share of firms investing in external R & D activities
Net revenues from sales
Net sales of finished goods
Net income from sales of goods and materials
Average number of posts
Number of persons employed
Share of entities carrying out export activities
Net revenue from export sales of products
Share of revenue from export sales in total revenue
Total R & D expenditure (PLN thousand)
Total internal R & D expenditure (PLN thousand)

Total expenditure on external R & D activities (PLN thousand)
Value of internal expenditure attributable to own funds (PLN thousand)
Number of patents obtained in the UPRP
Number of patents obtained in foreign patent offices
Total number of applications in national and foreign UPs (inventions, industrial designs, utility designs and trademarks)
Total number of UPRP applications (inventions, industrial designs, utility designs and trademarks)
Number of applications in the UPRP: inventions
Number of applications in the UPRP: industrial designs
Number of applications in the UPRP: utility models
Number of applications in the UPRP: trade marks
Number of notifications in foreign OPs
Staff involved in internal R & D (FTE) activities
R & D personnel
Total funds transferred to scientific bodies
Total funds transferred to national scientific bodies
Funds transferred to the scientific units of the PAN and research institutes
Funds provided to national universities
Funds transferred to higher domestic countries
Total revenues from sales of new or improved products placed on the market in the last 3 years
Total number of applications in national and foreign UPs (inventions, industrial designs, utility designs and trademarks)
Total number of UPRP applications (inventions, industrial designs, utility designs and trademarks)
Number of applications in the UPRP: inventions
Number of applications in the UPRP: industrial designs
Number of applications in the UPRP: utility models
Number of applications in the UPRP: trade marks
Number of notifications in foreign OPs
Share of operators who have introduced new or improved products in the last 3 years
Share of entities that have introduced new or improved services in the last 3 years
Share of entities that have introduced new or improved goods or services in the last 3 years
Share of total revenue from sales of new or improved products placed on the market in the last 3 years, as a proportion of total sales
Investment in innovation activities

In this evaluation of the NCBR aid scheme in the FENG 2021-2027, we plan to map the methodological approach used to use counterfactual analyses to assess direct effects from the plan for evaluation of the aid scheme of the NCBR 2014-2020.

Given the uncertainty at this stage of the implementation of the 2021-27 NCBR aid scheme as regards the structure of applicants and beneficiaries of the scheme, for the final decision on the adopted indicators for the PMS+DID, the final decision will be decided at the methodological report stage and after verification of the feasibility of the analyses and the usefulness of the proposed indicators and variables.

C. Theory Based Evaluation (TBE)

An evaluation of the impact of interventions based on the TBA methodologies will allow to measure the effectiveness of the interventions and to assess the extent to which the overall objective of the Assistance Programme has been achieved. The evaluation will be carried out on the basis of quantitative and qualitative analyses. Using this approach, particular emphasis will be placed on the issue of reconstruction and verification of the theory of amendment of the aid scheme and of the various FENG measures falling within the scope of the scheme. The contribution analysis recommended for complex interventions and causal relationships will be used. This approach will give us the opportunity to:

- Clarify the relationship and interrelationship between the NCBR's aid scheme and other factors affecting the programme;
- Specific dependencies and impacts on the NCBR's aid scheme of other factors
- Establish to what extent the programme was actually necessary and/or sufficient to address the problem
- Assess the likely contribution of the programme to the expected results.

Theory-based evaluations will complement the results of a counterfactual impact evaluation in a complementary manner. It will be complemented by information on how the expected effects of the intervention actually materialise and identify causal dependencies that make individual actions actually delivering their intended effects. The TBE approach will therefore be a substantive complement to an impact evaluation based on a counterfactual approach in this evaluation. This approach will also be used to assess theory of change for those activities that cannot be covered by counterfactual analyses due to methodological constraints (low population size assumptions, difficulty in selecting the control group).

1. The starting point will be to replicate theories of change in a cause and effect (logical model), which explains the principles of intervention and how the intended results are achieved (or not). The process of reconstructing the programme theory will be mainly conceptual and iterative – i.e. the theory of change is reconstructed and improved throughout the evaluation. Data for this phase will come from the following sources:

- programme documentation, application documents of the selected sample of beneficiaries, including information on the objectives of the intervention, inputs, conditions
- a review of literature, reports, evaluation results containing information on the causal/effectual relationships of each type of intervention, justification, intended or achieved results
- Interviews with representatives of the managing authority and intermediate authority – for replicating the intentions of the interventions designed
- Interviews with applicants/potential applicants – to assess the adequacy of the intervention logic in view of the situation and the needs of the recipients

2. Verification. The studies carried out – the empirical phase – will make it possible to properly identify the results achieved and the impact of interventions in relation to inputs and results, thus showing the links between the causes and the effects of the intervention. The evaluation will use the following sources of information and methods to verify theory of change:

- analysis of legacy data from the FENG monitoring system collected in the LSI and CST system on material progress, financial progress, achieved project indicators and outcomes
- analysis of legacy data, including statistical data, evaluation results, reports, reports on the implementation of the programme/actions, audit reports, possibly sources of external organisations (GUS, OECD, European Commission),
- case studies of selected co-funded projects, which will be carried out according to a standardised scenario for assessing the contribution of support to the project and the results observed

- interviews and panels with experts on smart growth and efficient commercialisation of R & D outputs to verify the findings of previous phases and verify information obtained from, inter alia, beneficiaries.

5.2. Please describe precisely the identification strategy for the evaluation of the causal impact of the aid and the assumptions on which the strategy relies upon. Please describe in detail the composition and the significance of the control group.

A general description of the methodologies used is provided in points 4.2. and 5.1. to establish methodological details such as the size of the test group and the control group and a detailed strategy for selecting respondents will only be possible during the implementation phase of the Programme, after observation and analysis of the applications submitted, the distribution of points in the ranking list, the characteristics of the applicants, etc.

5.3. Please explain how the envisaged methods address potential selection bias. Can it be claimed with sufficient certainty that observed differences in the outcomes for the aid beneficiaries are due to the aid?

The application of the above counterfactual methods and the appropriate selection of the control group will minimise the risk of sectoral bias effects being classified as intervention effects. In addition, general sectoral trends will be identified in detail through the use of data from official statistics mainly based on data from the Central Statistical Office. The reliability of the results and the relevance of linking the observed changes in beneficiaries to the fact that they have received support from the NCBR will also improve the obtaining of data on the amount and type of support provided to undertakings selected for examination under other Aid Programmes using the SHRIMP database managed by the UOKiK.

A detailed econometric identification strategy to be used to demarcate the impact of aid under the Programme from other factors and the relevant econometric models will be established at the methodological report stage.

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5.4. If relevant, please explain how the envisaged methods intend to address specific challenges related to complex schemes, for example schemes that are implemented in a differentiated manner at regional level and schemes that use several aid instruments.

Not applicable

6. Gathering data

6.1. Please provide information on the mechanisms and sources used to collect and process data on the aid beneficiaries and the envisaged counterfactual scenario¹⁷. Please provide a description of all the relevant information that relates to the selection phase: data collected on aid applicants, data submitted by applicants and selection outcomes. Please also explain any potential issue as regards data availability.

Given the positive experience of the NCBR in obtaining data to date, it is planned to maintain the existing system. Data from successful and ineffective applicants will be multi-stage acquisition, i.e.:

At the aid application stage:

- using the information contained in the grant application;
- using data from GUS forms PNT-01 Report on Research and Development (R & D) annexed to the grant application.

During the project implementation phase and during the durability period or after the submission of an ineffective application for funding (for the control group):

- using data from GUS forms PNT-01 Research and Development (R & D) Report to be obtained from beneficiaries at least once a year.
- using periodic, final and implementation reports (using project results) for beneficiaries with signed co-financing agreements at least once a year during the implementation of the project or after the fulfilment of milestones, and up to 5 years after its completion;
- In addition, data from both beneficiaries and unsuccessful applicants will be collected in addition using qualitative and quantitative methods, in particular for those FENG activities falling under the Aid Programme for which counterfactual testing will not be carried out.

In order to carry out counterfactual research, access to data on entities not subject to public intervention, which can be a control group for the entities tested, is crucial. In particular, it is important to collect data on entities that have applied for but have not received support. The catalogue of basic information on these entities will be collected in the central IT system SL and the local NCBR LSI system. FENG implementation system institutions under local systems are required to collect project ranking lists, competition scoring information, etc. Linking all the data collected as well as using the resources of the Central Statistical Office will make it possible to apply various selection techniques for counterfactual testing (including propensity score matching, difference-in-difference, regression discontinuity design). The preparation of the final report in the part related to the implementation of counterfactual analyses of the study will precede the development of a series of feasibility studies. They will make it possible to verify compliance with the methodological requirements in terms of sample sizes and the quality of the information obtained, as well as the number of measurements carried out on the same entities. Feasibility studies will be carried out at the level of both the methodological report and the implementation of the mid-term report. The possibilities for using data from three main sources will be explored:

- (a) the NCBR monitoring system and the SL and CST databases;
- (b) GUS data;

¹⁷ Please note that the evaluation might require sourcing of both historical data and data that will become progressively available during the deployment of the aid scheme. Please identify the sources for both types of information. Both types of data should preferably be collected from the same source as to guarantee consistency across time.

(C) other data obtained in the course of the study.

The study will also use other sources of information:

1. historical data collected as part of the monitoring and evaluation process of the Financial Perspective 2007-2013,2014-2020
2. data from other evaluation studies carried out in areas of intervention similar to the FENG
3. data on the amount and type of state aid granted to entities from the SHRIMP database managed by UOKiK.
4. primary data (quantitative and qualitative) obtained during the research process, as supplementary data; used primarily for the implementation of the theory-based evaluation.

In addition, in order to limit the risk of receiving the relevant data from successful applicants, appropriate provisions were introduced in the grant agreements requiring beneficiaries to make the above-mentioned data available both during and after project implementation.

Data from the Central Statistical Office will be obtained on the basis of existing rules which have worked well in practice. The model of cooperation with the Central Statistical Office has been tested, inter alia, by the Ministry of Funds and Regional Policy in relation to the 2007-2013 perspective, as well as by the NCBR for the evaluation of the NCBR 2015-2020 aid scheme.

As in the past, a contract will be concluded with the Central Statistical Office for the purposes of the counterfactual analysis. The NCBR will entrust the Central Statistical Office with carrying out counterfactual analyses in close cooperation with the evaluation contractor (the external evaluator and the NCBR evaluation unit). This cooperation model allows for the use of micro-data collected in the official statistics system without compromising statistical confidentiality (any action requiring access to microdata is then carried out by the staff of the Central Statistical Office). In addition, this solution reduces evaluation costs and reduces the burden on beneficiaries (no need to collect quantitative data directly from beneficiaries).

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6.2. Please provide information on the frequency of the data collection relevant for the evaluation. Are observations available on a sufficiently disaggregated level that is to say at the level of individual undertakings?

With the exception of data obtained at the stage of the application for funding, in accordance with current practice, monitoring data from beneficiaries will be collected on the basis of reporting data obtained during the project implementation period on an annual basis. Further data sources used will be: a final report at the end of the project and a report on the use of the results of the project after 2-3 years after the completion of the project. In addition, information for the analysis of qualitative and quantitative data will be collected systematically during the implementation period of the survey.

Data on unsuccessful applicants will be collected at different intervals, as defined in the timetable in point 7. The agreement to use the applicant's statistical data irrespective of the final outcome of the application process will be part of the grant application. The evaluator will also use data collected by the Central Statistical Office (including GUS forms PNT-01 – R & D report). Due to the provisions on statistical confidentiality, data from the Central Statistical Office will only be transmitted in aggregated form. CSO data will be collected in annual cycles.

6.3. Please indicate whether the access to the necessary data for conducting the evaluation might be hindered by laws and regulations governing confidentiality of data and how

those issues would be addressed. Please mention possible other challenges related to data collection and how they would be overcome.

Access to data may be hampered by rules on statistical confidentiality. According to Article 10 of the Public Statistics Act, individual traceable data collected in statistical surveys are strictly protected. These data may only be used for statistical studies, reports and analyses, as well as for the preparation by the President of the Central Statistical Office of the sampling frame for statistical surveys; the sharing or use of these data for purposes other than those specified in the Public Statistics Act is prohibited (statistical secrets). Therefore, the staff of the Central Statistical Office, on the basis of an agreement with the NCBR, will carry out the relevant analyses on the basis of the data specified by the NCBR and the final results of the analyses will be transmitted to the NCBR in aggregated form.

Another restriction is the provisions of the Personal Data Protection Act of 10 May 2018. In the light of these provisions, the acquisition and confidentiality of data on beneficiaries are governed by the provisions of the grant agreement, according to which beneficiaries are required to provide the NCBR with well-defined reporting data. In addition, the agreement to use the applicant's statistical data irrespective of the final outcome of the application process will be part of the grant application.

In order to ensure the confidentiality of the data, the NCBR and the selected evaluator will be responsible for compliance with the relevant rules on the protection of trade secrets and personal data. The publication of micro-data or aggregated data will be done in a form that does not infringe the relevant provisions. These issues will be governed by the contract for the evaluation study.

The data contained in the evaluation reports will be presented in aggregated and anonymised form which makes it impossible to identify individual entities.

6.4. Please indicate whether surveys of aid beneficiaries or of other undertakings are foreseen and whether complementary sources of information are intended to be used.

The survey covers aid beneficiaries and other entities that have not received support, mainly ineffective applicants. A detailed list of data sources is provided in Section 4 and point 6.1.

7. Proposed timeline of evaluation

7.1. Please indicate the proposed timeline of the evaluation, including milestones for data collection, interim reports and involvement of stakeholders. If relevant, please provide an annex detailing the proposed timeline.

	YEAR				
	2023	2024	2025	2026	30.06.2027
Test phase					
Start of the Assistance Programme					

The collection of NCBR monitoring data at the funding application stage					
Collection of data from the Central Statistical Office (macroeconomic, contextual)					
Collection of NCBR monitoring data at the stage of periodic reports (data on indicators and progress of projects)					
Selection of an external aid programme evaluator					
Signing of an agreement/agreement with the Central Statistical Office on cooperation on the use of GUS data for counterfactual analysis					
Collection of CSO data for counterfactual analysis – cooperation with the Central Statistical Office					
The NCBR's monitoring data collection at the stage report on the use of project results (data on project indicators and results, including revenues from the implementation/commercialisation of project results)					
Collection of expert data for the use of the theory-based evaluation approach					
Preparation of the draft final evaluation report					
Submission of the final report for evaluation to the Commission six months before the end of the Assistance Programme					

7.2. Please indicate the date by which the final evaluation report will be submitted to the Commission.

The Aid Programme shall enter into force on 28 January 2023. The period expires on 30 June 2027 in 2023, it is planned to start collecting data for evaluation studies (both microeconomic data for: Beneficiaries and applicants – data from applications for funding and annexes, and macroeconomic data from previous years from the Central Statistical Office. The selection of an external assistance programme evaluator is planned in 2025. Work on the final report is planned to start in 2025 and 2026 and to sign a cooperation agreement with the Central Statistical Office. In 2026, it is planned to present a draft and a final version of the final report. The report must be sent to the Commission six months before the end of the Aid Programme. The final evaluation report of the Programme will be submitted by 30 December and 2026.

7.3. Please mention factors that might affect the envisaged timeline.

Changes to the planned timetable for the evaluation of the NCBR's aid scheme may be made in the event of changes to the duration of the aid scheme.

8. The body conducting the evaluation

8.1 Please provide specific information on the body conducting the evaluation or, if not yet selected, on the timeline, procedure and criteria for its selection.

The evaluation of the Assistance Programme will be coordinated by representatives of the National Centre for Research and Development. The evaluator evaluating the Programme will be selected on the basis of an open, competitive and non-discriminatory public procurement.

The role of the NCBR's Evaluation Unit will be to prepare and coordinate the study from the public procurement side and to ensure the feasibility of implementing counterfactual methods (work to collect and access relevant data). The entity will not take an active part in carrying out the study and in drawing up an evaluation of the Programme in the form of a report.

The Evaluation Unit's tasks related to the evaluation of the Assistance Programme will include in particular:

- coordinating the evaluation activities of the main actors involved in the evaluation process of the Assistance Programme;
- ensuring that operational/support evaluations are carried out where the results of the monitoring of progress towards the achievement of the objectives of the Regulation show significant deviations from the objectives initially set or where proposals for amendments are made, as well as evaluations to identify a changing macroeconomic context;
- coordinating the implementation of the objectives of the evaluation plan of the aid scheme;
- design of evaluation studies, including formulation of objectives and research questions, and propose evaluation methodologies
- outsourcing of evaluation studies;
- providing financial resources for carrying out evaluations;
- obtaining and collecting relevant data from the monitoring system;
- forwarding the evaluation results to the Evaluation Unit of the MA FENG, as well as to the European Commission;
- making the results of evaluations publicly available;
- cooperation with the National Evaluation Unit, the FENG MA Evaluation Unit and the European Commission in evaluations initiated at their initiative;
- monitoring the implementation of the recommendations resulting from the evaluations carried out.

The evaluator will be an external body to the National Centre for Research and Development, with relevant experience and competence in evaluation. The selection of the entity will be made on the basis of an open, competitive and non-discriminatory tendering procedure. The evaluator will be responsible for the final wording of the evaluation of the Programme in the form of a written report, both mid-term and final reports. .

In order to ensure the quality of the evaluation study and to meet the deadlines set out in the timetable, the evaluation team should comply with the following conditions:

1. each member of the evaluation team has provided a minimum of three services worth PLN 150 thousand each consisting of an evaluation study of publicly funded projects during the last 5 years before the tender period and, if the duration of the activity is shorter, during that period;
2. the leader of the evaluation team shall have at least 5 years' experience in carrying out evaluation studies, with at least three evaluation studies of programmes or projects or legal acts concerning the development of the R & D sector or public aid in the past 5 years;
3. the evaluation team shall include a state aid specialist with at least 3 years' experience in the last 10 years and who has participated in at least three evaluation studies of programmes or projects or legal acts relating to State aid;
4. the evaluation team shall consist of a specialist econometric specialist, specialised in counterfactual methods, with at least 3 years' experience over the last 10 years in this field, who has carried out at least three counterfactual tests/analysis;
5. the evaluation team is composed of a specialist in quantitative methods (with experience in quantitative surveys using statistical institutes' databases). The main role of this specialist will be to carry out analyses on statistics other than the above-mentioned expert, who has at least 3 years' experience in the last 10 years in this field and who has participated in at least three evaluation studies using quantitative methods.

In view of the high number of counterfactual analyses in the evaluation study, it is recommended that at least two members of the team have experience of conducting tests using this method.

8.2 Please provide information on the independence of the body conducting the evaluation and on how possible conflict of interest will be excluded during the selection process.

The evaluation is carried out under the responsibility of the NCBR Evaluation Unit, which consists of evaluation experts from the National Centre for Research and Development Studies, Analysis and Evaluation Section, which is a functionally independent unit within the NCBR structure. The independence of the evaluation process is guaranteed by the functioning of the Evaluation Unit outside the NCBiR section responsible for programming and implementing the Assistance Programme.

Under the criteria of independence, experience and ability, the following conditions will have to be met in the selection of the evaluator:

- the evaluation team must not have a capital or personal link with the institution commissioning the evaluation study or with the beneficiaries of the aid scheme – it must be completely independent;
- The criteria for selecting the evaluation team refer to the experience of individual team members (described above) in carrying out analyses similar to those required by the PP evaluation and participating in studies that are thematically similar to its scope.
- Members of the NCBR's reevaluation unit shall submit, under criminal liability, the declaration of interests required by public procurement law.

8.3 Please indicate the relevant experience and skills of the body conducting the evaluation or how those skills will be ensured during the selection process.

The evaluation unit of the NCBR, composed of evaluation experts from the Section for Studies, Analysis and Evaluation of the National Centre for Research and Development, have the experience and evaluation skills acquired during the evaluation of the programmes implemented by the NCBR, including the evaluation of the NCBR's assistance programme in 2015-2020 in accordance with the Evaluation Plan SA.41471(2015/N). Most of the staff of the evaluation unit have at least several years of experience in evaluating publicly funded programmes, including from the 2007-2013 and 2014-2020 perspectives of the EU. NCBR staff involved in research under the IR OP also have long-standing experience in analysing and evaluating the effectiveness of public interventions related to innovation and entrepreneurship support. The team is composed of experts with a variety of complementary qualifications (economic sciences, geography, spatial planning, sociology and psychology) who are upgrading their skills through training on recent research trends. Experts gained experience in both the public administration, science and research sectors. They therefore have experience not only in commissioning and supervising evaluation studies, but also in managing projects carried out at the request of public administrations or in directing scientific projects, preparing independent publications and reports on NCBR's own studies. The Centre's staff have knowledge and experience not only in carrying out economic analyses and evaluating the impact of public interventions on the socio-economic development of the country, but also knowledge and experience of programming instruments supporting business innovation and research support programmes in Poland. These qualifications and skills guarantee the quality of the evaluations carried out by the NCBR.

8.4 Please indicate which arrangements the granting authority will make to manage and monitor the conduct of the evaluation:

Monitoring of the progress of the implementation of the NCBR 2023-27 assistance programme will be carried out using the central CST IT system, which collects comprehensive monitoring data for all cohesion policy programmes and the local NCBR LSI system, which collects data on applications and projects implemented through the NCBR. Knowledge of the links between the data characterising the different levels of implementation and the scope of data in the different forms of the system allows data to be reported in systems that are useful for evaluation processes. Data can be used for statistical compilations, graphs and reports.

An important complement to the data from the FENG monitoring system, particularly useful for the implementation of counterfactual evaluations, including macroeconomic forecasting, is the data collected by the Central Statistical Office. Special attention should be paid to the online STRATEG database, with a wide range of data enabling development policy programming and monitoring. It brings together indicators used to monitor the implementation of operational programmes and development strategies in force in Poland (at national, supra-regional and regional level) and in the European Union.

In order to ensure ongoing and continuous monitoring of the evaluation, the evaluation contractor will be required to:

- Forwarding a weekly report on the implementation of the analytical and research work (by email) to the evaluation unit of the NCBR.
- Close cooperation with the Contracting Authority (the NCBR Evaluation Unit) at each stage of the contract performance. In exceptional cases, where the Contracting Authority considers that the deadline for performance of the contract is at risk, it may invite the Contractor to meet in advance on 1 working day.
- Answering the Contracting Authority's questions on the state of play of the study and its individual elements at any time during the evaluation process.

8.5 Please provide information, even if only of an indicative nature, on the necessary human and financial resources that will be made available for carrying out the evaluation:

Resources for activities related to the evaluation of the Assistance Programme, including personnel costs, studies, data availability and dissemination of information, will be provided by the NCBR, including the technical assistance of the FENG programme for evaluation. The amount of resources used for evaluation studies in a given year will be determined in the framework of the periodic evaluation plans, including the FENG evaluation plan. The NCBR's evaluation unit employs a total of 7 persons per 6 posts. They are also involved in the evaluation process of operational programmes other than FENG and a number of national and international programmes implemented through the NCBR.

9. Publicity of the evaluation

9.1 Please provide information on the way the evaluation will be made public, that is to say, through the publication of the evaluation plan and the final evaluation report on a website:

In order to maintain the transparency of the evaluation study, both this evaluation plan and any evaluation study reports on the impact of the Assistance Programme will be placed electronically on the websites of the National Centre for Research and Development and in the evaluation database of the National Evaluation Unit, thus ensuring public access to information. In parallel to the report,

a summary of each evaluation report (in Polish and English) will also be produced in the form of a concise, accessible description and a summary of the main conclusions and recommendations.

The final evaluation report, together with information on the evaluation study itself, will be published at: <https://www.gov.pl/web/ncbr/ewaluacje-->. Key results, such as information about the course of the study, will also be placed on the NCBR's social media and during meetings/conferences. The study report will also be sent to the Commission (DG REGIO) using the SFC system.

9.2 Please indicate how the involvement of stakeholders will be ensured. Please indicate whether the organisation of public consultations or events related to the evaluation is envisaged:

As the evaluation of the NCBR aid scheme will form part of the evaluation plan of the FENG programme and its results will serve the correct quality and effectiveness of its implementation and implementation, the monitoring process will involve the actors involved in the management and implementation of the FENG programme. The FENG Follow-up Committee and the Steering Committee on the evaluation of the FENG Follow-up Committee (FENG) will be set up on the basis of experience from the EU Financial Perspective 2014-2020. The main objective of the SC's work will be to coordinate the evaluation process of this programme. It will be composed of representatives of all institutions of the FENG implementation system.

The tasks of the Steering Committee shall be:

- acceptance of the project/revision of the Evaluation Plan before transmission to GR;
- opinion on documents – description of the subject matter of the contract to be selected by the evaluation contractor;
- receiving evaluation outputs;
- acceptance of recommendations and how they are implemented in the organisation;
- monitoring the implementation of the recommendations.

In addition, the FENG Follow-up Committee and the FENG Monitoring Committee will provide a forum for consultation of the results and findings of the study. Evaluation. Members of the Working Party will be representatives of KM FENG and other external experts invited by GR KM FENG President. The Working Party will have the task of consulting on the outcome of the proceedings and the findings of the FENG Evaluation System with partners outside the FENG implementation system. The issues presented, discussed and agreed by GR KM FENG will be presented to the FENG MC.

The tasks of the FENG Follow-up Committee Working Group will be to:

- identification of evaluation topics;
- consulting questions and research scopes;
- consultation of draft interim and final reports on studies;
to give an opinion on the conclusions/recommendations of the studies, as well as on how to implement them.

In addition, the operational tasks to be discussed/worked by the SC and GR will be carried out by a Task Force composed of selected staff of the evaluation units.

The detailed tasks of the above-mentioned entities will be set out in the FENG Evaluation Plan, which is under preparation and should be adopted by the Commission no later than September.

All information about the study and its results will be made public as described in point 9.1.

9.3 Please specify how the evaluation results are intended to be used by the granting authority and other bodies, for example for the design of successors of the scheme or for similar schemes:

The results of the evaluation will be used by the NCBR to assess the effectiveness of the support provided, including in the context of the programming of further business support measures and the implementation of improvements aimed at increasing the effectiveness of support in ongoing activities. The data collected for the evaluation of the Assistance Programme will be used for the evaluation of the Structural Funds by the NCBR and the FERF Programme Managing Authority. In order to use the results of the evaluation of the NCBR's aid scheme, the following actions will be taken:

1. consulting stakeholders (in particular the addressees of individual recommendations) the conclusions and recommendations made in each evaluation report;
2. forward a table of recommendations from each evaluation study to all addressees, as well as the members of the FENG Monitoring Committee,
3. introduction of recommendations into the public IT database of the Recommendation Implementation System;
4. monitoring the state of implementation of recommendations and reporting on progress on the implementation of recommendations
5. Consultation of reports and conclusions with representatives of all authorities (including managing authorities) involved in the implementation of similar instruments, including through the FENG programme

9.4 Please indicate whether and under which conditions data collected for the purpose or used for the evaluation will be made accessible for further studies and analysis:

All data collected by the NCBR in the course of the evaluation study may be made available for further research and analysis under the following conditions:

- provide anonymised data for which it will not be possible to identify the entity;
- signing a data entrustment and confidentiality agreement;
- transmission of aggregated data, without micro-data being made available

The NCBR accepts that data at beneficiary level will be made available, but only to other public bodies for the evaluation of the Structural Funds. The publication of micro-data or aggregated data will be done in a form that does not infringe the relevant provisions.

The NCBR will not be able to provide data held by the Central Statistical Office on entities selected for counterfactual analyses (both core and control groups) due to the need to maintain statutory statistical confidentiality. The NCBR will not itself have access to the micro-data of these entities.

9.5 Please indicate whether the evaluation plan contains confidential information that should not be disclosed by the Commission:

The evaluation plan does not contain confidential data

10. Other information

10.1 Please indicate here any other information you consider relevant for the assessment of the evaluation plan:

Distinctions of the NCBR aid scheme in relation to the PARP and BGK schemes:

- a) type of support instruments – grant instruments (for innovation/technology transfer modules in the form of conditional grants), for other non-repayable grant modules;
- b) demand-side approach – instruments implemented without financial intermediaries; the instruments require the pre-financing of tasks carried out by the beneficiaries themselves from their own resources
- c) earmarking of support – the predominant R & D component, in addition to R & D work, other areas such as: implementation work, human resources support or measures implementing environment-friendly solutions)
- d) target group – large companies (including *small mid-caps and mid-caps*) and consortia of large companies with other companies and consortia of companies with scientific bodies
- e) the specificity of support in the NCBR's aid scheme resulting from the NCBR's statutory¹⁸ objectives and tasks – i.e. an institution set up to carry out State scientific policy tasks, including stimulating investment by entrepreneurs in carrying out scientific research or development work. In this context, supporting and expanding R & D activities of enterprises and indirectly stimulating their innovation should be considered as the primary and direct objective of the aid scheme provided by the NCBR.

Ensure a sound assessment of the net effects of the NCBR programme:

In order to ensure a sound assessment of the direct and indirect effects of the use of support under the NCBR's aid scheme, detailed microdata collected in administrative registers, which can be obtained for each entity on the basis of a unique identifier, will be used for the purposes of this study: NIP or REGON from the Central Statistical Office (concerning, inter alia, the scope of R & D activities and the condition of entities) and UOKiK (data on the amount of State aid granted to entities benefiting from the support of the NCBR aid scheme from other aid instruments/programmes, including PARP and BGK and the purpose of the aid). This will allow the evaluation to control the scale of the impact of other aid schemes, including the support offered by PARP and BGK, in order to assess the real impact of the NCBR programme. Given the selection of cases (PSM) to the control group in the examination of direct net effects, this will allow for comparisons of cases which will not differ significantly also in terms of the use or non-use of other aid schemes in Poland in the last few years. It must be assumed that the possibility of selecting a control group only taking account of those who have not benefited from support from other aid schemes may result in the fact that it is not possible to select representative groups to enable the analyses to be carried out.

¹⁸ Act of 30 April 2010 on the National Centre for Research and Development, Dz. Journal of Laws 2010 No 96, item 616

In view of the above, as a control group, undertakings which are not beneficiaries of aid offered under the NCBR aid scheme or any other form of aid of a similar nature (e.g. offered under the FENG by PARP, possibly BGK) will be selected in the first place for the purposes of examining the counterfactual effects of the NCBR's aid scheme, while at the same time being similar due to key characteristics (inter alia, in terms of revenue, sector of activity, region of operation, market experience, financial situation). In the absence of such a possibility, those which will not differ significantly in terms of the use or non-use of other aid schemes in Poland in the last few years.

At the same time, the NCBR envisages the possibility of cooperating with PARP and BGK in assessing the indirect effects of the NCBR programme itself and the NCBR, PARP and BGK programmes together on the macroeconomic situation, as well as the net impact of each programme on the macroeconomic situation, controlling the support provided by the other institutions' assistance programmes. To this end, the three institutions (NCBR, PARP and BGK) will seek to use a common large-scale macroeconomic model for the evaluation of assistance programmes. This would make it possible to estimate the indirect impact according to a single methodology. This impact is understood as the deviation of the values of the macro indicators, taking into account the impact of (a) all aid programmes in total or (b) the NCBR's own value from the value of these indicators in the event of a counterfactual situation – (a) the absence of aid schemes or (b) the absence of an NCBR programme.

In the event of the implementation in Poland of additional programmes with a similar scope and common general objective under the FENG, which is 'to stimulate innovation in the Polish economy', the current evaluation plans (for NCBR, PARP and BGK) could be replaced by an overall evaluation covering several of the above-mentioned State aid schemes (or selected elements of the evaluation plans of individual institutions could be implemented jointly/jointly – e.g. modelling the macroeconomic impact of all aid from the three programmes, including the indirect effects of the assistance of the institution concerned; joint organisation of analytical work, involving public data/GUS resources, for counterfactual evaluation of micro-economic impacts, including the effects of direct assistance to the institution and/or in general). This option would only be considered for efficiency reasons and implemented if the timetable for the implementation of the additional State aid schemes were compatible with the scheme in question and if the modified assessment would not create an additional administrative burden. In this case, the key elements of the evaluation plan will be maintained and the evaluation calendar will be updated (adapted). The planned evaluation reports would then include an overall analysis of the impact of the examined funding programmes under the FENG.

The financial assistance of the NCBR assistance programme is part of the 2021-2027 EU Cohesion Policy implemented in Poland under the FENG Operational Programme under the Partnership Agreement between the Commission and the PL authorities for the period 2021-2027. In view of the above, the time horizon of this evaluation plan has been adapted to the period during which the operational programmes under EU cohesion policy in Poland will be implemented. The plan for the evaluation of the aid scheme is also complementary to the FENG evaluation plan supervised by the Minister of Funds and Regional Policy (MA FENG).

Commitments:

We undertake to carry out an evaluation as planned to be submitted to the Commission and to inform the Commission of any elements which may seriously jeopardise the implementation of the plan.

We commit to suspend the scheme if the final evaluation report is not submitted in due time and quality.

We confirm that we will take into account the results of the evaluation when designing any subsequent aid measure with a similar objective/objectives.

10.2 Please list all documents attached to the notification and provide paper copies or direct internet links to the documents concerned: