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

Member States must use this form for the notification of an evaluation plan in accordance with Article 1 paragraph. 2 (a) of Regulation (EU) No 651/20141 and for the 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:

(3)

Financial aid granted by the Polish Agency for Enterprise Development under the European Funds for the Modern Economy programme 2021-2027 (on the basis of the Regulation of the Minister for Funds and Regional Policy of 7 November 2022, OJ Of 2022, item 2510³, and Article 6b(b). 10b of the Act of 9 November 2000 on the creation of the Polish Agency for Enterprise Development, U. of 2022, item 2080 and 2185⁴).

(2) Does the evaluation plan concern:
a) the programme to be assessed 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?

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.

¹Commission 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). 2SWD(2014)179 final of 28.5.2014.

³ Cf. https://dziennikustaw.gov.pl/DU/2022/2510

⁴ Cf. https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20001091158/U/D20001158Lj.pdf

1. Evaluation of PARP state aid under the 2014-2020 Smart Growth Operational Programme. Final report, PARP, Warsaw 2020⁵

(a) brief description of the objectives of the study

This evaluation – in accordance with the provisions of the GBER for schemes with an average annual budget of over EUR 150 million for which the obligation to draw up an evaluation plan was concerned – was a condition for PARP to grant aid under the 2014-2020 OP Smart Growth⁶, the predecessor of the FENG 2021-2027 programme.

To this end, the Agency prepared an evaluation plan for the Programme (approved by the European Commission in its decision of 8 February 72016), carried out the evaluation and sent a report to the Commission in June 2020. In October 2020, the Commission sent an opinion for this evaluation (*Final Report Assessment Fiche*), indicating that it implements the findings of the approved evaluation plan and is in line with the Guidelines on: Common methods for assessing State aid (*'report complies with the requirements of the approved evaluation plan* (...) in line with the COMP methodology with the evaluation of State aids').

The aim of the evaluation was "to identify and assess the positive and negative, direct and indirect effects of the implementation of the Programme and its individual aid instruments, within the framework of evaluation criteria and thematic areas (including evaluation questions and indicators) identified in the Evaluation Plan, including: (1) the direct impact of the aid on the beneficiaries of the support; 2) indirect effects of programme implementation (positive and negative); 3. Proportionality (including incentive effect) and appropriateness of the aid.'⁸

The evaluation presents the state of implementation of the PARP aid scheme in the OP Smart Growth and its results at the end of 2019 and the net effects between 2015 and 2018 of the selected instruments ('Research for the market', 'Innovation vouchers' and 'Go to Brand').

(b) Short description of the methods used

The methodological framework for evaluation set out two complementary approaches – a counterfactual impact evaluation. Counterfactual Impact Evaluation (CIE) and theory-based evaluation. Theory-Based Evaluation – TBE). The first focused on establishing the causal effects of support and the effectiveness of PARP's interventions in terms of its objectives ('what works/does not work?'). The second research approach was intended to explain the observed effectiveness of the intervention ('why does it work/does not work?'). The application of both approaches in practice required a variety of methods and techniques to collect and analyse data, including:

In-depth analysis of legacy data,

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⁵ Evaluation of aid scheme SA.42799 (2015/N). The study was carried out in 2018-2021 by the consortium IDEA Institute Sp. z o.o., the IDEA Development Foundation and Jagielloński University, in cooperation with experts from the PARP Department for Analysis and Strategy and the Central Statistical Office in Warsaw. The report is available at: www.parp.gov.pl/storage/publications/pdf/RK_PP_PARP_Final-PL_2020_06_25_Dostepny.pdf

⁶ Programme of financial aid granted by the Polish Agency for Enterprise Development under the Operational Programme Smart Growth 2014-2020 (ref. SA.42799 (2015/X)) hereinafter referred to as 'PARP aid scheme in the OP Smart Growth'

⁷ Cf. www.parp.gov.pl/images/Badania/Plan ewaluacji programu pomocowego PARP 190514.pdf, cf. PARP evaluation plan, Decision of 8 February 2016, Brussels, 8.2.2016, C(2016) 654 EN ACTE final ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3 - access 28.5.2020

⁸ Evaluation of PARP state aid under the 2014-2020 Smart Growth Operational Programme. Final Report, PARP, Warsaw 2020, p. 46.

Counterfactual analyses, on data from official statistics (GUS SP – 'Annual enterprise survey', for 2015-2018 and GUS PNT-02 'Industrial Innovation Report' for 2016-18), providing estimates of the values of selected economic indicators for beneficiaries of PARP aid under the OP Smart Growth, and for selected control groups; as a general rule, the control group was formed by so-called ineffective applicants, adjusted statistically to the beneficiaries using the PSM method, and the results of the programme were expressed by the double difference between the DID in the values of the economic indicators between the above-mentioned groups)⁹,

Quantitative studies of unsuccessful applicants (N=540, mixed-method of CAWI/CATI techniques),

Qualitative examination in the form of project case studies (N=20, in any case, analysis of documentation/financial reports, study visits to the beneficiary company, interviews with the company's management),

Qualitative research in the form of IDI interviews with programme stakeholders and experts (N=33, including representatives of the administration and management structures of the programme, representatives of science and industry institutions and experts assessing grant applications),

Expert workshops (N=5) with programme managers at operational level (managers of individual instruments) and strategic (OP OP Managing Authority).

(C) Results and conclusions

The most important for the future (i.e. for the successor of the POIR, i.e. the FENG 2021-2027 and the PARP aid scheme in question in the FENG) can be seen from the above-mentioned report.

the PARP's evaluation of State aid in the OP Smart Growth includes a table of recommendations(www.parp.gov.pl/storage/publications/pdf/Tabela-

rekomendacji_Dostepna.pdf). Those indications which directly refer to the FENG are reproduced below:

— The Innovation Support Programme, which succeeds the OP Smart Growth, should ensure the presence of an instrument to support firms in implementing R & D work (...). The Facility should take into account improvements (...)which will promote the importance of the R & D results to be implemented in the investments carried out.

In view of the above, it should be stressed that the FENG programme includes the instrument "Implementation of R & D results" as a mandatory module "Support for enterprises" (Priority 1. Feng), including "Support for SMEs and their consortia" (Action FENG.01.01 SSMART). The SMART Paths will support projects composed of different modules in which entrepreneurs will carry out specific development activities, including, inter alia, the 'R & D work' module and the 'Implementation of R & D results' module, which, according to the recommendation, will help to increase the importance of R & D results in ongoing pro-innovation investments.

— It is recommended that the selected instruments of the non-key assistance programme of the PARP be continued under the 2021-2027 perspective.

— including Sub-measure 2.3.1 of the OP Smart Growth (support for innovation services for SMEs provided by Business Environment Institutions) (...), taking into account selected modifications. (...) Taking into account the need to further develop BSIs, which have important roles in national/national innovation systems, it is appropriate to consider moving away (or partially departing) from the demand-driven model of support for these institutions. As it currently stands, it will not allow for a

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 $^{^9\} Cf.\ stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultstronaopisowa/6156/1/1/raport_wkazniki_ekonomiczne_parp.pdf$

sustainable business environment system. At the same time, in the case of highly specialised services provided using R & D infrastructure, support should be directed directly to BSIs, ideally consortia of these bodies with scientific bodies (...). Support should also be given to a system of BSI networking, both among themselves and with the environment, including the scientific sector.

— instruments to support the internationalisation of enterprises (...) based on the main assumptions under Sub-measures 2.3.3 of the OP Smart Growth (support for the internationalisation of entities forming cooperation links/clusters) and 3.3.3 of the Smart Growth OP (support for individual SMEs in export promotion).

It should be stressed that the proposed continuation of the above-mentioned instruments takes place in the FENG, including under the PARP aid scheme in question. On the one hand, support for "Internationalisation" will be an optional component of Modular Priority I projects implemented by SMEs and their consortia (action FENG.01.01 SSMART), which will simultaneously develop innovative R & D-based products in the programme.

under Priority II. ("Innovation-friendly environment"), support for the promotion and internationalisation of innovative SMEs (FENG.02.25 "Promotion of innovative SME brands") is planned. Priority II of the FENG also envisages the development of enterprises through support for clusters (action FENG.02.17 "Development of Cluster Offering for Businesses"), which is not strictly linked to the issue of internationalisation of SMEs.

Similarly, the support requested for innovation providers (including Innovation Centres and their partnerships and innovation clusters) providing services to SMEs was also included in Priority II (Action FENG.02.18 "Developing the offer of Innovation Centres for Business" and – mentioned above – Action FENG.2.17).

(D) Specific challenges that have emerged in assessments and studies from a methodological point of view (e.g. availability of data) that are relevant for the assessment of this evaluation plan.

1. In the context of the evaluation of the PARP aid scheme in the OP Smart Growth, an important substantive and - in some way - economic challenge has been shown to be carried out in accordance with the 'Common methods for assessing State aid' and the evaluation plan approved by the European Commission in the area of the so-called noncritical instruments of the scheme¹⁰. In that evaluation, PARP made an effective attempt to apply a relatively standardised research approach to all aid instruments of the scheme (including the verification of the theory of change, the assessment of the effectiveness and appropriateness of the instruments and the proportionality of the aid). In particular, counterfactual analyses were carried out, according to the Commission's strict methodology, in the area of two instruments of the above-mentioned non-critical group (POIR 2.3.2 "Innovation vouchers" and POIR 3.3.3 "Go to Brand"), as in the key instrument POIR 3.2.1 "Research for the market". Finally, these non-core instruments cofinanced the development activities of SMEs (respectively R & D services and participation in foreign fairs and exhibitions) on the basis of the *de minimis* rules and not state aid under the GBER. In view of the high costs of applying such an approach, together with the non-invasive category of aid intended for the market and competition (de minimis) and its financial scale in non-critical instruments, in the Evaluation Plan for the PARP aid scheme in FENG 2021-2027, we call for a greater selection of the programme instruments to be evaluated (as required by the GBER) and for the analytical and research activities to

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¹⁰ This is a group of PARP support instruments, which are contractually referred to as 'non-essential', because of their relatively small budget and range, compared to the so-called key instrument, with potentially the greatest impact on the market and competition – i.e.: POIR 3.2.1 "Research for the Market", an instrument that supported total investments in innovation by SMEs in the period 2015-2019. PLN 7 billion and whose budget represented almost 80 % of the total PARP aid programme portfolio.

be concentrated solely on the key instrument(s). This action will be in line with the Rome principle of *De minimis non curat lex and the* new indications from the Commission representatives "Be big on big and smart on small"¹¹.

2. A key methodological challenge in causal studies on aid schemes such as the PARP programme in the OPIR was to capture the short-term effects of business support during the period covered by the evaluation. The effects, in terms of increased turnover from sales profits of supported enterprises, indicating an improvement competitiveness/position on the market as a result of the intervention, in the short term from the start of the programme, are mostly not observable. At the same time, it is also not possible to use the traditional IDR-PO approach in the comparative assessment of the situation of firms, as the number of companies that have actually completed projects and/or for which sufficient time has elapsed to assess such microeconomic effects is too small and would lead to fragmentation of the assessment. In the light of the above, the evaluators' attention focused primarily on the changes directly caused by the intervention, which could be observed in the balance sheet and cash flows of the companies supported, recorded before and during the implementation of the projects. "The aid should be an incentive for certain behavioural mechanisms among undertakings, including a positive impact on their investment and business decisions. In translating this into the language of the methodology used by the European Commission for assessing the effects of public support, public support should result in an incentive effect. In particular, in its document on the methodology for evaluating State aid, the Commission points out the need to examine whether the aid had a significant impact on the behaviour of the beneficiaries of the aid (in deciding on the investment). This is one of the basic dimensions of verifying the existence of direct effects of support (short-term, ongoing). (...) the analysis of the current effects of the intervention therefore relates to whether obtaining support influences companies' decisions on the scale, timing and extent of investments made, employment and current financing decisions, as reflected in cash flow, liquidity and debt. (...)' (cf. PARP's reply to the opinion of the European Commission on the State aid evaluation report of PARP under the POIR – Final Report Assessment Fiche).

This methodological challenge will also be accompanied by the evaluation of PARP's State aid under the FENG. In view of the above, the Agency plans to follow a similar approach (assessment of short-term, current effects) as part of the planned counterfactual analyses. It will respond to the typical limitations in evaluation studies, linked to the time taken to measure the final effects of support too early. When analysing the enterprise's myco-economic indicators throughout the investment process, we will seek to observe, at a relatively early stage in the implementation of the programme, whether it influences the behaviour of entrepreneurs by producing the desired incentive effect. At the same time, such research assumptions will not make it necessary to reduce the analysed supported population to those who have ceased to participate in the programme – as a general rule, all participants in a specific support instrument may be included in the study of the short-term effects of the programme (e.g. if account is taken of the time that has elapsed since the entry into the programme by the individual units).

However, bearing in mind the Commission's expectations that some limitations of the PARP approach (*limitations*, thus leaving room for additional improvements) will also be met-cf. Final Reprot Asessment Fiche), on the relevant sub-population of beneficiaries, the micro-economic situation of the supported entities will also be analysed in relation to the twin entities (matched in terms of similarity index – PSM or equivalent) of the non-supported entities. This test approach will take into account the classical IDR-PO

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¹¹ Cit. Daniele Vidoni, DG COMP Unit A3 – State aid case support and policy, The adulthood of evaluation: recent developments of the evaluation requirement (cf. presentation by *DG COMP's approach, evaluation is an administrative proportionate effort and targeted. Avoid the overkill... and reduce the admin burden'*), SAM Workshop on State aid Transparency and Evaluation, Brussels, December 2022.

comparative model (e.g. analysis of the so-called double difference in effect/DiD indicators, referring to micro-data from the period preceding and following the end of the project for a specific sub-population of beneficiaries).

3. It should also be noted that two observations emerge from the Commission's opinion on the above-mentioned report(*final Reprot Asessment Fiche*) and which should also be taken into account in the planned evaluation of the PARP aid scheme in the FENG. First, in the context of planned counterfactual analyses, the matching models should take into account the value of the support intensity as a continuous variable (e.g. when analysing relative effects, between different types of modular projects of SMEs implemented under Priority I. FENG). Secondly, in the context of the potential multiplicity of sources of information used in the planned evaluation, it is necessary to clearly document where knowledge from research on effective and inefficient applicants or other research techniques and sources of knowledge has been used. Those issues raised doubts on the part of the Commission in its assessment of that report.

(e) Summary of studies and evaluations carried out in the past on previous aid schemes or similar schemes

In view of the fact that the above-mentioned report on the evaluation of PARP's State aid in the OP Smart Growth used applications and source data from a number of studies carried out in Poland (between 2016 and 2020) in this area (the most important of them being the series of evaluations of the OP Smart Growth project selection system, the Innovation¹²Barometer – evaluations of on-going support for enterprises under the OP Smart Growth¹³, analysis of the effects of the OP Smart Growth at sectoral and macroeconomic level)¹⁴, it seems inappropriate to list all existing 'studies and evaluations carried out in the past on previous aid schemes or similar schemes'. We consider that this report on the evaluation of PARP's State aid under the OP Smart Growth condensates the conclusions of existing studies in the area in question and provides original counterfactual studies and analyses in line with the objectives and Community methods of State aid assessment.

A summary of the results of this evaluation is available on the first pages of the report. The document (in Polish and English) is available at: www.parp.gov.pl/publications/publication/ewaluacja-pomocy-publicznej-parp-w-ramach-programu-operacyjnego-inteligentny-rozwoj-2014-2020). Among the annexes published are: Table of recommendations and Detailed description of the evaluation methodology (including the counterfactual analyses used).

II. Impact assessments for the aid scheme:

Impact assessment and justification for the legal basis of the PARP aid scheme in the FENG: Regulation of the Minister for Funds and Regional Policy of 7 November 2022 on the granting of financial assistance by the Polish Agency for Enterprise Development under the European Funds for the Modern Economy programme 2021-2027:

<u>legislacja.rcl.gov.pl/docs//571/12359902/12880826/dokument574753.doc</u> legislacja.rcl.gov.pl/docs//571/12359902/12880826/dokument574756.docx

¹² Studies carried out between 2015 and 2017 by a consortium of entities: Idea Development Foundation, IMAPP sp. z o.o.; Policy & Action Group Uniconsult Sp. z o.o. and Jagiellonian University, commissioned by the Ministry of Infrastructure and Development

¹³ Studies carried out in 2018-2021 by a consortium of entities: MCM Institute Poland Sp. z o.o., Foundation IDEA Development, IDEA InInstitutt Sp. z o. o., Exacto Sp. z o.o., ReWY Sp. z o.o. on behalf of PARP.

¹⁴ Macroeconomic modelling carried out in 2019-2022 by a consortium of entities: WiseEuropa – Foundation of Warsaw University of Economic and European Studies and Ecorys Polska Sp. z o.o. on behalf of PARP.

The documents relate to the draft aid scheme. They have been prepared for the legislative process and are available on the website of the Government Legislation Centre: legislacja.rcl.gov.pl/projekt/12359902/katalog/12880826#12880826

They essentially concern the regulatory context of the aid scheme – they discuss the provisions introduced, their logical and substantive order and the context external to national and EU law (including the PARP Act, the State aid rules).

Furthermore, the IA document mentions that the aid scheme:

- —affects PARP ('enables the provision of support')
- —affects aid beneficiaries ('enabled to receive aid')

it applies to entities throughout the country (other than the sectors excluded by the Regulation),

— it will have a positive impact on the competitiveness of the economy and entrepreneurship, including the functioning of enterprises (in particular, "has non-monetary effects" on micro, small and medium-sized enterprises).

it will have a positive impact on the labour market due to the possibility of financing entrepreneurs' projects and thus their competitiveness.

No additional regulatory burden (including disclosure obligations)

According to the IA, 'the direct effect of implementing the proposed action is to enable support under the FENG programme to be provided'.

III. Ex ante evaluations of the aid scheme:

Not applicable. The PARP aid scheme and the Operational Programme European Funds for the Modern Economy 2021-2027 in respect of the activities entrusted to PARP were not subject to an ex ante evaluation (evaluation).

2. Objectives of the aid scheme to be evaluated15

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.

a) Description of the aid scheme in the context of the requirements for the evaluation plan

The Regulation of the Minister for Funds and Regional Policy of 7 November 2022 on the granting of financial assistance by PARP under the European Funds for the Modern Economy programme 2021-2027 (hereinafter referred to as 'the aid programme' or the PARP Regulation) is part of the system for implementing the operational programme under the above-mentioned name (FENG) within the framework of the cohesion policy of the European Union in Poland. The regulatory scope of the PARP Regulation covers selected support instruments (measures) planned in the FENG in Priority 1. ("Support for entrepreneurs") and Priority 2. ("Innovation-friendly environment"), entrusted to the PARP by the relevant agreement between the Minister

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.

of Funds and Regional Policy (FENG Managing Authority) and the PARP (FENG Intermediate Body)¹⁶.

At the same time¹⁷, the Regulation constitutes an aid scheme which lays down the specific purpose, conditions and procedure for granting:

- 1) 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 (OJ Office EU L 187, 26.6.2014, p. 1, as amended, hereinafter referred to as "State aid" or "GBER aid",
- 2) 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 (OJ Office EU L 352, 24.12.2013, p. 1, as amended, hereinafter referred to as "de minimis aid", and,
- 3) financial assistance not constituting State aid within the meaning of Article 107(1). 1 of the Treaty on the Functioning of the European Union.

Therefore, the aid granted on the basis of the PARP Regulation is compatible with EU law (in particular the internal market and state aid law). However, in accordance with Article 1(1) 2 (a) GBER, an aid scheme with an average annual budget exceeding EUR 150 million is exempted from notification to the European Commission for 6 months from the date of its entry into force. On the other hand, the Commission may decide that an aid scheme may continue to be implemented for a longer period after the assessment of the relevant evaluation plan. Such a plan should be sent to the Commission within 20 working days of the entry into force of the programme concerned. This provision concerns in particular the block exemption aid scheme (cf. GBER aid referred to in point 1 above) and the cumulative amount of the aid planned in the scheme.

The budget for the PARP aid scheme in the FENG amounts to EUR¹⁸2825458921, with the GBER categories being the predominant categories.¹⁹ The aid will run for 5 years (2023-2027), which means that the average annual budget of the scheme will exceed the above-mentioned amount of EUR 150 million and is subject to the GBER's requirement to submit this evaluation plan to the Commission.

b) Needs and problems to be addressed by the programme

The PARP aid programme addresses 3 of the 4 strategic development challenges (understood as needs and problems at national and European Union level) identified in the FENG

¹⁶ Agreement of 7 November 2022 between the Minister of Funds and Regional Policy and PARP on the entrustment of tasks related to the implementation of the European Funds for the Modern Economy Programme 2021-2027, for Priorities: 1. Support for entrepreneurs and 2. An innovation-friendly environment.

¹⁷ Pursuant to the State Aid Proceedings Act of 30 April 2004, Of Laws 2021, item 743 as amended, the PARP Regulation is a block exemption aid scheme and a de minimis aid scheme.

¹⁸ Action under 2 is not included in thebudget. The FENG priority 'Financing of projects implemented by Polish partners in national smart specialisation areas', which was entrusted to the PARP under the Agreement with the Minister of Funds and Regional Policy (on the entrustment of tasks related to the implementation of the European Funds for the Modern Economy Programme 2021-2027, for the Priorities: 1. Support for entrepreneurs and 2. An innovation-friendly environment). Implementation of this action (as at 31/12/2022) is suspended. This action, like the other in 2. FENG Priority – (a) will not have a significant share of the total budget of the PARP aid scheme in the FENG, (b) may not involve financial aid linked to GBER categories at all, (c) is not considered in this evaluation plan as a 'relevant intervention' of the PARP.

¹⁹ In the entire aid scheme of the PARP under the FENG, the share of *de minimis* aid and financial aid not constituting State aid will represent a large minority of planned expenditure.

programming document²⁰ (under the chapter "Programme strategy: main challenges and related policy responses"). The members are:

- 1) Challenges related to economic development, innovation and R & D
- 2) Challenges related to the implementation of the European Green Deal in Poland (green transition)
- 3) The challenges of the 4.0 economy (digital transition).

The various challenges are discussed below and how the PARP aid scheme in the FENG will respond to them by offering a specific direction of support. The support which will be most relevant throughout the PARP aid scheme, given the cumulative value of the GBER aid allocated, i.e. the support planned under Priority 1, for SMEs projects and their consortia (FENG.01.01 SSMART), is indicated **in bold**. This key area of support for the FENG will focus on the planned evaluation of PARP's state aid.

Ad. 1) In the 2021 European Innovation Scoreboard Poland is referred to as a emerging Innovator (65.9 % of the EU average). The analysis of individual areas shows a low level of business innovation compared to the EU average in areas such as: business expenditure on R & D, investment in innovation per employee, product innovation or innovative SMEs cooperating with others. Important challenges are increasing:

Business innovation, in particular improving the commercialisation of research results;

Expenditure on business R & D activities;

The share of innovatively active enterprises that will generate revenues from the sale of advanced products and services;

Effective cooperation between companies and scientific bodies;

Level of competence, in particular as regards identified competency deficits (...)

Feng - in the part covered by financial assistance of the PARP programme – in the area of challenges related to the development of innovation and R & D activities,

it will support:

Increasing the productivity of the economy, by creating a strong incentive for companies to engage in R & D activities, in particular under 1. Priority;

Increasing the number of innovative companies; (...)

Developing entrepreneurs' competences in the areas of smart specialisation, innovative business models, technology transfer and innovation management, strengthening the capacity of clusters, research organisations and innovation hubs; (...)

The potential of the Polish start-up market (...);

Increasing the level of business cooperation by exploiting synergies between European and national support;

Developing the potential of the science sector, in particular in terms of cooperation with businesses and technology transfer.

Ad. 2) The European Green Deal points to the need to mobilise *action to enable a more efficient* use of resources through the transition to a clean and circular economy (GOZ), halting climate change, tackling biodiversity loss and reducing pollution.

²⁰ The fourth challenge, referred to in the FENG, related to technology transfer (including, in particular, the development of the potential for commercialisation of research results from the scientific sector, is mainly the subject of a separate support programme of the National Centre for Research and Development under the FENG.

The analyses show a low awareness of Polish society, including companies, of the need to contribute to climate neutrality or the benefits for their activities of the green transition. (...) the most important barriers to the development and implementation of GOZ solutions are:

Low awareness among market participants (both consumers and producers),

Lack of sufficient knowledge (competence gaps),

Insufficient resources (including financial).

Feng - <u>in the part covered by financial assistance of the PARP programme</u> – in the area related to the implementation of the European Green Deal in Poland (green transition), will support:

Creation and dissemination of new business models and business frameworks;

Introducing eco-innovation and eco-design, improving resource efficiency in the economy;

Raising businesses' awareness of the environmental and economic benefits of implementing eco-innovation and increasing the use of RES;

Advisory services for the environmental assessment of products and identification of areas of economic activity with a view to their change to the GOZ model, awareness-raising activities for GOZ; (...)

Investments related to the energy efficiency transformation of enterprises (...)

Ad. 3) The main barrier to the digital transformation of the Polish business sector is the lack of knowledge of global technological trends and, consequently, a feeling of apparent security in the course of business. (...). The main challenges addressed by the FENG are:

Raising awareness among businesses about the practical application of digital solutions;

Set up an advisory system where suitably qualified professionals can demonstrate to the company the tangible benefits of joining the digital transition and the risks of ignoring global change;

Finance investments in the area of digitalisation of businesses. (...)

Feng - in the part of the PARP financial assistance programme – in the area related to economy 4.0 (digital transition),

it will support:

The creation, uptake and optimal use of advanced digital solutions;

Investments related to the use of digital solutions in companies: production, processes, products, services and business model, as well as increasing the level of cybersecurity;

Technological, business advisory services and access to demonstration infrastructure, supporting companies in their digital transformation; (...)

c) envisaged categories of beneficiaries of the aid scheme (e.g. size, sectors, location, indicative number

Enterprises – SMEs:

In accordance with the PARP Regulation, financial assistance under the FENG may be granted to the entities referred to in Article 6b(b). 1 of the Law of 9 November 2000 establishing the

PARP, that is to say, a relatively wide range of ten categories of natural and legal persons²¹. However, in practice, the range of envisaged categories of beneficiaries of the aid scheme is narrower and results from the types of beneficiaries for each support instrument as defined in the FENG (in the document entitled 'Detailed description of the FENG Priority Axes'). Detailed indications as to the categories of beneficiaries targeted by the PARP aid scheme in the FENG and the expected (indicative) number of beneficiaries are set out in Table 1 below.

It should be stressed that the main recipient of FENG support – in part of the PARP aid scheme – is entrepreneurs (entities carrying out an economic activity, offering goods or services on the market for payment, regardless of their legal form)²², in particular from the SME sector (micro, small or medium-sized enterprise, fulfilling the conditions laid down in Annex I to Commission Regulation No 651/2014). These entities (SMEs and their consortia) are identified as beneficiaries of the key instrument of the PARP aid programme, implemented under Priority I. "Support for enterprises" (Por. Action FENG.01.01 SSMART Path, in the part of the PARP aid scheme – 'Support for SMEs and their consortia'), on which the attention of the planned evaluation is concentrated.

Nationwide location:

The scheme will be implemented throughout Poland and therefore eligible for support will be enterprises whose headquarters will be located in any region of the country (voivodships). It should also be mentioned that, in the case of regional investment aid, the aid intensity preferences (incentives) will apply, in accordance with the regional aid map 2022-2027²³ (see https://www.parp.gov.pl/mapa-pomocy-regionalnej-dla-polski). The highest 50 % intensities will apply to regional investment aid granted to entrepreneurs from the macro-region of Eastern Poland (warmińsko-Mazurskie, Podlaskie, Lubelskie, Podkarpackie and Świętokrzyskie provinces) and six eastern districts of Mazowieckie Voivodeship (garwoliński, łosicki, Sokołowski, węgrowski, siedleckie and Siedlee). In other locations (excluding the City of Warsaw and selected neighbouring municipalities not eligible for regional investment aid), the intensity is between 15 % and 40 %. In addition, the FENG assumes that specific preferences for so-called competitions may be used in selected competitions. Strategic intervention areas, including for medium-sized cities losing socio-economic functions and areas at risk of permanent marginalisation (including instruments to reduce the innovation gap between Polish regions, and measures for rural development or agri-food sector).

Diversified sectors:

In principle, the PARP scheme does not restrict financial assistance to certain sectors of economic activity (all sectors eligible for aid). However, there is a group of sectors that have limited or no access to the aid as a result of EU and national legislation (e.g. fisheries and aquaculture activities, primary production of agricultural products and agricultural processing; activities related to tobacco products, alcohol, pornography, weapons, gambling and drugs or related; entities subject to an obligation to repay the aid, entrepreneurs in difficulty, sanctioned entities in connection with Russia's armed aggression against Ukraine, including those active in the industrial sectors targeted by these sanctions).

²¹ Cf. PARP Act, Article 6b. 1. In carrying out its tasks, the Agency may grant financial assistance to: (1) entrepreneurs and employees of entrepreneurs; (2) economic development actors; (3) entities working for employment, human capital development or the adaptive capacity of entrepreneurs; (4) local authorities and their associations; (5) innovation actors; The social and economic partners within the meaning of the Act of 6 December 2006 on the principles of development policy; 7) employers' organisations and trade union organisations, representative within the meaning of the Act of 24 July 2015 on the Social Dialogue Council and other social dialogue institutions, 5); (8) to the entities referred to in Article 7. 1 points 1, 2 and 4-8 of the Higher Education and Science Act of 20 July 2018 (including entities of the higher education and science system, in particular universities and various types of scientific and research institutes and their federations); (9) associations with the participation of local authorities; (10) natural persons, including those wishing to establish themselves.

²² Cf. an enterprise within the meaning of the FENG (FENG, Main Assumptions of the Scheme, p. 15) and within the meaning of Article 1 of Annex I to Commission Regulation No 651/2014.

²³ Regional aid map, established on the basis of Article 10 2 of the State Aid Proceedings Act of 30 April 2004.

It should also be emphasised that, in particular, the 'Enterprise support' provided under Priority 1. In principle, Feng will be limited to business projects that comply with the so-called. National Smart Specialisations. However, these assumptions should not be equated with preferences for the eligibility of beneficiaries from certain sectors of economic activity.

2.2. 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.

(a) Objectives of the Programme - Subject of Common Interest

The objective of the aid scheme (PARP Regulation) stricto sensu is to provide a legal basis²⁴ for the granting of financial aid by PARP under the FENG in order to stimulate the **innovativeness of the Polish economy.** As indicated above, the aid scheme defines the specific purpose, conditions and procedure for granting the aid and is a tool in the wider implementation system of the above-mentioned operational programme FENG, within the framework of the European Union's cohesion policy in Poland. The objectives and intervention logic of the PARP's aid programme are determined by the objectives and logic of the FENG and its actions, under which the PARP (under the Agreement with the Managing Authority) will provide assistance. Therefore, the PARP aid scheme does not constitute an autonomous socio-economic development programme, but is a legal instrument which forms the basis for the granting of State aid under selected measures of the socio-economic development programme, namely the FENG. At the same time, the objectives and the logic of the FENG action respond to the specific socio-economic needs and problems (challenges) identified in paragraph. 2.1(b) the evaluation plan. Given the crucial importance of one FENG measure, the PARP aid programme, given its budget and its potential impact on the market and competition, then focuses on the characteristics of the objectives and the intervention logic of only one of them.

In accordance with the Regulation, PARP will provide aid under the FENG in order to stimulate the innovativeness of the Polish economy. This objective should be considered as a general objective for this aid scheme and the support instruments it consists of.

At the same time, the FENG operational programme itself forms part of the objectives of the higher level of cohesion policy implemented in Poland for the period 2021-2027, and sets out its own specific objectives to which it subordinates certain programme priorities and, finally, FENG measures (support instruments). However, in a broad sense, those objectives coincide with the above-mentioned general objective, which is the financial assistance of the FENG, including through the PARP aid programme. The FENG hierarchy of objectives is summarised below, highlighting in bold those relating to the areas of support from the PARP aid programme and, in addition, those relating to the key PARP aid instrument referred to above (Priority 1. "Support for entrepreneurs", Action FENG.01.01 SMART Path – "Support for SMEs and their consortia")

These higher-ranking objectives are:

 $POLICY\ OBJECTIVE\ 1\ (CP1): \ \textbf{A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity}$

Specific objective FENG 1.1: **Developing and enhancing research and innovation capacities** and the uptake of advanced technologies

Priority 1. "Support for entrepreneurs"

Here, the FENG supports – the R & D work of companies and their consortia, including research organisations. This is complemented by support for research infrastructures, innovation deployment, greening, digitalisation, competences and internationalisation.

²⁴ The PARP Regulation addresses the problem of "providing a legal basis for the provision of financial assistance to entities under the 2021-2027 FENG programme" – cf. IA to the PARP Regulation.

in particular, through the PARP aid scheme:

• FENG 01.01. Smart Pathway, "Support for SMEs and their consortia"

Priority 2. "An innovation-friendly environment"

Here, the FENG supports - the innovation environment, including science-business cooperation projects for the commercialisation of research results; it focuses on capacity building for public administrations, regions, clusters and innovation hubs in the areas of NIS, digital and low-carbon transformation of industry and entrepreneurship, innovative business models, technology transfer and innovation management, to provide services to entrepreneurs.

in particular through the measures implemented in the PARP aid programme:

- FENG.02.12 Grants to Eurogrants
- **FENG.02.17 Development of cluster offers for firms** (Enterprise development through cluster support)
- **FENG.02.18 Development of OI offers to firms** (Enterprise development through support to innovation hubs)

Specific objective FENG 1.2: Reaping the benefits of digitisation for citizens, companies, research organisations and public authorities

Priority 1. Not applicable.

Priority 2. "An innovation-friendly environment"

Here, FENG supports the digital transformation of businesses – the main support is targeted at SMEs, large companies, **European Digital Innovation Hubs** (**EIHs**) and Artificial Intelligence Testing and Experimentation Facilities Artificial Intelligence (TEF AI) to provide high-quality services to businesses.

in particular through the measures implemented in the PARP aid programme:

• **FENG.02.22 Co-financing of EDIH actions** (Co-financing of actions carried out by the European Digital Innovation Hubs. European Digital Innovation Hubs)

Specific objective FENG 1.3: Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments

Priority 2. "An innovation-friendly environment"

Feng supports the development of innovative enterprises through dedicated programmes tailored to the development phase of innovative SMEs (including start-ups), enabling accelerated growth and expansion abroad, as well as addressing the challenges of the digital and green transitions; increase in the internationalisation of enterprises (...)

- in particular through the measures implemented in the PARP aid programme:
 - **FENG.02.25 Promotion of innovative SME brands** (Support for promotion and internationalisation of innovative SMEs)
 - **FENG.02.27 Innovator Laboratory** (Support for individual innovators)
 - FENG.02.28 Startup Booster Poland
 - **FENG.02.29 Startups are us** (PARP non-competitive project, with grant projects for accelerators and start-up services)

POLICY OBJECTIVE 2 (CP2). A greener, low-carbon transitioning towards a net zero carbon economy and resilient Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility

Specific objective FENG 2.1: Promoting energy efficiency and reducing greenhouse gas emissions

Specific objective FENG 2.3. Developing smart energy systems, grids and storage outside the Trans-European Energy Network (TEN-E)²⁵

(b) Expected impact at programme level (with regard to objective of common interest) – macroeconomic level

In the operational programme FENG, under the chapter "Programme strategy: key challenges and policy responses' identified a number of indicators that represent the expected impact of the programme at macroeconomic level. These indicators have been formulated in relation to the challenges (needs and problems) related to the implementation of the programme. As indicated above, three of the four challenges are in the area of intervention of the PARP assistance programme and therefore the expected macro-impact indicators of the PARP programme have been derived for these areas. It should be borne in mind that PARP's actions form part of a wider range of aid measures planned in the programme (including those forming part of the NCBiR and BGK aid programme), and therefore, when presenting the list of expected effects at programme level (in the form of indicators), the list of expected effects at programme level (in the form of indicators) is limited to those which are in the area of impact of the planned assistance measures of the PARP – one relating to a given socio-economic challenge.

It should also be stressed that the FENG is not the only factor determining the achievement of the above indicators within the expected time frame. The scale and extent of the FENG's impact on their achievement or the potential contribution of the FENG to the targets will be verified in the planned evaluation, based on macro-economic modelling or other studies.

1) Expected impacts in the area of economic development, innovation and R & D:

The impact of PARP's financial assistance in the FENG is expected on the following (selected) macroeconomic indicators²⁶:

Investment by the corporate sector in R & D in relation to GDP

The value for 2020 indicated in the SOR -0.8 %; Value achieved, according to CSO and Eurostat data -0.88 %. Value for 2030-1.3 %.

Share of innovative enterprises in the total number of industrial enterprises

Value achieved in 2020 according to CSO data – 31.4 %; Value for 2030 – 35 %.

2 Expected impacts in the area of implementation of ERW in Poland (green transition):

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²⁵ In the area referred to above. The policy objective and specific objectives of the FENG did not include any of the support instruments for the PARP (FENG activities) and therefore their broader characteristics were abandoned.

²⁶ This information is taken from the descriptive part of the FENG programming document, where objectives and target indicators are expressed. The existing documents or working arrangements (as at 31.12.2022) do not define which part of the macro-indicators identified for the achievement of the objectives of the FENG should be attributed to the PARP aid scheme competitions. It should be assumed that the achievement of the macro-level targets will remain at the overall level (as the expected direction of socio-economic change), which will be a positive indirect impact of the entire FENG (including PARP interventions). Only selected objective indicators have been cited above, which can, without doubt, be indirectly linked to the effect of the intervention of the PARP aid scheme in the FENG. Other FENG target indicators, to a larger extent, remain linked to the interventions of other actors of the FENG delivery system (e.g.: National Centre for Research and Development, Bank Gospodarstwa Krajowego, Ministry of Funds and Regional Policy). A similar – selective – approach was applied to indicators at beneficiary level by presenting the most important ones in the evaluation plan (cf. Table 1, column 'Key indicators at the level of beneficiaries') – i.e. those indicators which do not relate to the company level in the *strict sense* (they are more 'nuance'), and/or operationally (slightly modified) have been reduced in order to achieve consistency with indicators of official statistics (e.g. revenue indicators).

Increasing environmental awareness/competence in the number of enterprises supported

Value for 2020 – 0 (indicator not monitored). Value for 2030 – 8000 enterprises.

2 Expected impacts in the area of economy 4.0 (digital transition):

The following indicators are expected to be affected:

Increasing digital awareness/competence in the number of enterprises supported

Value for 2020 - 0 (indicator not monitored). Value for 2030 - 8000 enterprises.

(C) Objectives of the actions and expected impacts at the level of the envisaged beneficiaries – microeconomic level

The measures of the PARP aid scheme under the FENG are listed below, indicating their objectives, the types of beneficiaries and the indicators planned (in particular the impact at the level of beneficiaries, including their indicative number and target values).

Table 1. Objectives, beneficiaries, indicators at the activity level of the PARP aid scheme in the FENG.

No.	Name	Objectives	Type of beneficiary	Key indicators at beneficiary level
FENG.01.01	SMART (Support for SMEs and their consortia)	Developing and strengthening the research and innovation capacities of enterprises, through R & D, implementation of innovation, in connection with the adaptation of business activities to the challenges identified in the European Green Deal and related to digitalisation, the development of research infrastructure, the internationalisation of activities and the increase of human skills. The action shall provide comprehensive support to projects covering the following modules: R & D, innovation deployment, R & D infrastructure, digitalisation, greening of businesses, internationalisation, competences. An SME project must include at least one of the following modules: R & D or innovation deployment.	SMES (concerning the PARP aid scheme)	Enterprises (SMEs) receiving total support – 1658 (including digital/sustainability transition/internationalisation of activities/R & D implementation/implementation of R & D outputs/investment in skills for smart specialisation, industrial transformation and entrepreneurship). ²⁷ Total/product/process innovation enterprises (SMEs) ²⁸ Private investment complementing total/enterprise public support (SMEs) Revenues of enterprises from sales of new or improved products in total/outside the territory of the Republic of Poland (PNT GUS) ²⁹ Business income from sales of products/services in total/outside the territory of the Republic of Poland (GUS SP) ³⁰
		(hard, investment or service-investment support to business)		
FENG.02.12	Grants for Eurogrants	Increase the innovation and internationalisation of SMEs and research organisations by increasing their participation in EU programmes managed centrally, i.e. by the European Commission. Activities to find partners for joint research projects and to support their preparation are supported.	SMEs (Indirect – Research Organisations)	Enterprises supported – 385 Research organisations participating in joint research projects – 140

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²⁷ According to the objectives of the instrument, entrepreneurs have a high degree of freedom to apply for support. The project may even consist of several modules and is to be adapted to the current situation and needs of the applicant. Each project must include one of the mandatory modules, i.e.: 'R & D work' or 'Innovation deployment'. In view of the above, it is not possible to indicate (on the basis of the available documents or to estimate) targets for the implementation of the individual substantive modules of the intervention. Furthermore, in Measure FENG.01.01 SMART Path – which includes the part of the PARP 'Support for SMEs and their consortia' (the intervention in question) and the part implemented by the National Centre for Research and Development (addressed to large enterprises and consortia of enterprises and research organisations or NGOs) – there is no strict allocation between PARP and NCBR. According to the methodology, it is estimated that 67.71 % of the supported enterprises will come from competitions under the PARP aid scheme and the remaining percentage from calls published by NCBR. This reservation applies only to the main indicator FENG.01.01 'Number of enterprises receiving support'.

²⁸ If no target values are provided for the indicators, they have not been set at 31.12.2022. It should be assumed that the level of implementation of such indicators at the level of the PARP aid programme in the FENG will be derived from the cumulative value of these indicators, as presented in the beneficiaries' declaration in the grant applications (project outputs).

²⁹ Index modified, for consistency with official statistics (GUS)

³⁰ I.e.

FENG.02.17	Development of cluster offer for firms (business development through cluster support)	Strengthen the professionalisation of cluster coordinators to develop the innovative service offer of the R & D & I business cluster (including inter alia in the areas of digital and green transition) and support internationalisation at industry events. (soft, service support for coordinators of innovation clusters and business)	Innovation clusters (indirect – companies)	Supported clusters – 36 Supported enterprises – 756 Enterprises involved in supported clusters – 1920
FENG.02.18	Development of OI offers for firms (Enterprise growth through support to innovation hubs)	Developing the potential of innovation hubs with specific thematic specialisations (including Digital Innovation Hubs (DIHs) and Green Innovation Hubs (GIH)) to expand their offer to and provision of pro-innovative business services, in particular for the digital and green transitions. (soft, service support for business)	Business support institutions – Innovation centres and their consortia (entities accredited by the minister responsible for the economy) (indirectly – enterprises)	Enterprises receiving support in total -450 , including in digital technologies -300 /concerning the transition towards sustainability -40
FENG.02.22	Co-financing of EDIH actions (Co-financing of actions carried out by the European Digital Innovation Hubs. European Digital Innovation Hubs)	Enhancing the competitiveness of SMEs in the digital transition. The European Digital Innovation Hubs will operate in a one-stop-shop model. In particular, the services offered by EDIHy are intended to enable the company to set up a digital transformation plan, to provide access to up-to-date expertise and to provide the conditions for testing solutions or experimenting with state-of-the-art technologies potentially critical for its products, services, processes or business models. (soft, service support for business)	Business support institutions — European Digital Europe Programme Hubs (indirectly- companies)	Enterprises supported in digital technologies – 4900 Enterprises (SMEs) introducing total/product/process innovation – 980
FENG.02.25	Promotion of the brand of innovative SMEs (Support for the promotion and internationalisation of innovative SMEs)	(1) Promote Polish product brands on foreign markets using the Polish Economy Mark by supporting the participation of SMEs in foreign trade fair and conference events (identified by the Minister for Labour and Technology Development as key to the development of selected economic sectors) and, as a result, internationalisation of companies' activities. (2) Renaissance of Poland's image as a modern country with a rich, diversified and competitive offer to foreign consumers. (soft, service, logistics, technical support for business, e.g. for the construction of a stand at fairs)	SMES	Enterprises (SMEs) supported to internationalise activities – 655 Total private investment complementary to public support – PLN 164 600 000,00 /per enterprise (SME) Business income from sales of products/services in total/outside the territory of the Republic of Poland (GUS SP) ³¹
FENG.02.27	Innovator laboratory (Support for individual innovators)	Stimulating the innovation potential of Polish society through educational and relationship initiatives (Startup After Hours,	Business environment institutions	25 supported start-ups

³¹ Modified indicator FENG.02.25 – "Revenue from sales outside the territory of the Republic of Poland of products covered by the company's project from sales of products/services in total/outside the territory of the Republic of Poland – PLN 2 352 977 700,00"

		Tech-Talents) and/or start-up grants for start-ups (in particular technological start-ups set up by engineers, scientists) (soft, servicesupport for business start-ups, relational; optional start-up grants)	(target – natural persons not operating gosp.)	Enterprises (MSP) that innovate in total – 13 /including product/process 13 new firms remaining on the market
FENG.02.28	Startup Booster Poland (development programmes for innovative companies, accelerator and post-acceleration)	Accelerating innovative early-stage enterprises (startup) carried out by specialised entities. (soft, service support for business start-ups, and gosp. start-up grants)	Business support institutions – Business incubators (target start-ups)	Total new enterprises supported – 620 /including transition towards sustainability – 169 Enterprises (SMEs) innovating a total of 330 /including product/process New companies remaining on the market – 310
FENG.02.29	Startups are us	Integration of the start-up ecosystem, intensification and developing start-ups' scaling-up activities (also globally) by, inter alia, supporting the professionalisation of start-up service providers (accelerators) and promoting innovative solutions and business models. (soft, service support for business start-ups)	Government administration (non-competitive project) Accelerators (grant projects) (target start-ups)	Supported enterprises (SMEs) – 356

2.3. Please indicate the possible negative effects on the beneficiaries of the aid or on the wider economy which may be directly or indirectly linked to the aid scheme32.

Given the service-related nature of the support under Priority 2, the expected impact on the market and competition will be neutral, i.e. it will not lead to negative effects (distortions) at the level of the wider economy. The direct and indirect effects of service support, taking into account their expected scale and time, should be considered limited and short-term (negligible, negligible). At the same time, the lines of intervention under Priority 2 will make it possible to sustainably strengthen the National Innovation System and modernise the offer of business³³environment service providers, adapting it to the challenges (needs and problems) of the economy and businesses in Poland.

On the other hand, the support planned under Priority 1, which will be comprehensive (modular projects), investment or service-investment may be relevant in terms of impact on the beneficiaries of the aid. Mandatory, in an SME project supported by Priority 1. (FENG.01.01) will be either the 'R & D work' module or the module 'implementation of the results of R & D work'. However, at this stage it is difficult to predict which of them will be chosen more frequently by economic operators. Indeed, the popularity of implementation investments may be limited by the planned design of programme support, in which the so-called conditional grant was applied. At the same time, this solution protects against the potential negative effects of the aid granted to individual SMEs. According to the FENG document, the scheme uses the forms of support provided for in General Regulation 2021/1060, including conditional grants (partly **repayable**). "The type of funding is adapted to the specificities of the WI projects. As a priority, all support modules, with the exception of the module on the implementation of R & D results, are financed in the form of grants. (...) R & D work and R & D infrastructure projects are the most risky for entrepreneurs in the innovation cycle (...) financing part of the costs of projects involving R & D works and the development of R & D infrastructure in the form of grants reduces the level of risk and increases the propensity of entrepreneurs to implement projects in this area, which is necessary in view of the objectives of the FENG. Complementary modules to be funded in the form of grants are linked to mandatory modules. Their implementation is expected to increase the long-term impact of R & D work.

For the implementation of R & D results, the level of risk is lower than for the implementation of R & D work. The technological risks are already being reduced, but market risks and uncertainties in commercialisation effects remain. A repayable grant is used to finance implementations, combining a non-repayable grant and a grant which will be partially repayable once the conditions related to the effects of implementation, e.g. revenues generated from investments, are met."

Taking into account the above safeguards against potential negative effects of the aid in the intervention logic of Priority 1. (contingent grant mechanism for investments for the implementation of R & D results) as well as risks (grants in other project modules, including R & D investments), in the planned evaluation of support for Priority 1. Feng will examine the possible scale of the lack of incentive effect of theaid (circumvention/crowding out of private investment) and the possible existence of sectoral bias (in particular its concentration in the sector concerned and the potential to distort the market and competition). This is because we consider the most important risks of negative effects on the economy which may be directly or indirectly linked to the aid scheme, in particular in Priority 1. FENG.

At the same time, we do not identify potential negative effects of the aid scheme that could affect individual beneficiaries. In this case, only the scale of the reduction of expected positive

³² Examples of negative effects are regional and sectorial biases or crowding out of private investments induced by the aid scheme.

³³ In accordance with the recommendation to evaluate PARP's State aid in the OP Smart Growth, in part of sub-measure 2.3.1 – cf. the evaluation plan point 1.(4)1.c)

effects at SME level (e.g. due to the administrative burden on project implementation conditions) can be mentioned. This phenomenon (administrative burden on the part of the beneficiary and assessment of the effective value of the support – cf. the study using the *conjoint* method described below) will also be of interest for the planned evaluation of the PARP aid schemes in the FENG.

However, we recognise that the more important – potentially strong negative impact on the aid beneficiaries – may be linked to factors external to the aid scheme (market collapse/economic crisis, increased operating costs, geopolitical instability, etc.), which will be the subject of, inter alia, the economic analyses planned during the programme period (cf. analyses using the macroeconomic model).

2.4. Please indicate (a) the amount of the planned annual budget under the scheme, (b) the planned duration of the scheme34, (c) the aid instrument or instruments and (d) the eligible costs.

The budget is presented below (Tables 2 and 3) broken down into the different support instruments for the PARP aid scheme (Activities – FENG.01.01, FENG.02.12, FENG.02.17, FENG.02.18, FENG.02.22, FENG.02.25, FENG.02.27, FENG.02.28, FENG.02.29) and their planned categories of aid – indicating in which instruments a predominant share (max. up to 100 % of the budget) of public aid is expected (by section and article of the GBER) or where public aid will be a minority (max. up to 50 % of the instrument budget). In addition, the percentage distribution of the PARP budget, broken down by total support instrument, and taking into account only the expected commitment of public aid (maximum) is indicated.

Taking into account that the total budget of the PARP aid scheme (EU allocation in EUR) is planned to be 2825458921 (including the maximum expected amount of public aid GBER = EUR 2 562 129 461), and the fact that the financial implementation of the aid scheme is planned for 2023-2027 (5 years of cultivation), the planned average annual budget will be around. EUR 565 091 784,20 (of which no more than EUR 512 425 892,20 per year for GBER State aid – cf. Table 2, RAZEM position, at the bottom of the allocation value column).

As regards the eligibility of costs, this will always coincide with the permissible catalogue of costs linked to the specific purpose of the aid under the GBER, as long as the specific purpose of the aid is planned for the measure in question.

The following tables point to the desirability of concentrating the planned evaluation on Priority 1. ('Support for undertakings'), Measure FENG.01.01 SSMART, in the part included in the PARP aid scheme, i.e.: "Support for SMEs and their consortia", as part of modular projects.

The assistance planned under Priority 2. as a general rule, business services and a small financial contribution to the entire PARP aid programme (approx. 14 % in the overall aid portfolio and only around. 6 % in the part of the portfolio that provides for GBER-compliant public aid – to be considered as non-critical (de minimis aid, non-invasive) in the potential impact on the market and competition, and not to be targeted by rigorous evaluation studies in line with the *Common evaluation for State-aid evaluation* guidelines.

It should be stressed that evaluations of PARP support instruments, as planned under Priority 2, will be covered by evaluation studies carried out under the FENG Evaluation Plan, in accordance with the requirements for the evaluation of operational programmes implemented under EU cohesion policy as set out in the General Regulation. The PARP evaluation unit is part of this national evaluation system for cohesion policy, which concerns all operational programmes implemented in Poland under the Partnership Agreement 2021-2027, including the FENG programme. The system for evaluating operational programmes is regulated on the basis of the national 'Guidelines for the evaluation of cohesion policy in Poland for 2021-2027' issued

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³⁴Aid schemes as defined in Article 1 (1) 2 (a) of Regulation (EU) No 651/2014 are excluded from the scope of the Regulation six months after their 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.

by the Minister responsible for regional development. Therefore, this evaluation plan, later on the assessment approach, including its methodology, will concern only the action FENG.01.01 implemented by PARP in favour of SMEs. Intensification of funding for evaluation activities in part of the programme (Priority 2. Feng, which includes small business service instruments, would not be a rational action (*smart*).

Table 2. Structure of the financial assistance in the PARP assistance programme in FENG 2021-2027

PARP action in FENG	Purpose of the aid according to GBER	Form of support ³⁵	Predominan t GBER aid (Y/N)	EU allocation (EUR)	% Share of total	GBER aid max allocation (EUR)	% Share of GBER aid
FENG.01.01 SMART Path (Support for SMEs and their consortia)	regional investment aid (Section 1, Article 14 GBER) investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards (Section 7, Article 36 GBER), investment aid for early adaptation to future Union standards (Section 7, Article 37 GBER), investment aid for energy efficiency measures (Section 7, Article 38 GBER) investment aid for high-efficiency cogeneration (Section 7, Article 40 GBER), investment aid for the promotion of energy from renewable sources (Section 7, Article 41 GBER), investment aid for energy efficient district heating and cooling (Section 7, Article 46 GBER), investment aid for the recycling and re-use of waste (Section 7, Article 47), aid for advisory services in favour of SMEs (Section 2, Article 18 GBER), aid for SME participation in fairs (Section 2, Article 19 GBER), aid for research and development projects (Section 4, Article 25 GBER), innovation aid to SMEs (Section 4, Article 28 GBER), training aid (Section 5, Article 31 GBER), de minimis aid	Grant (up to 80 % of KK or more in case of de minimis aid) //Conditional grant *A detailed breakdown of the form of aid for the different project modules supported in FENG.01.01 is provided in a separate table.	YES	2 396 900 000	84.83%	2 396 900 000	93,55%
FENG.02.12 Grants to Eurogrants	de minimis aid de minimis aid financial aid not constituting state aid (research organisations)	Grant (up to 100 % KK) De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)	NOT	30 000 000	1,06%	0	0.00 %

³⁵ It should be noted that these forms of aid, in particular their intensities by reference to the rules and knowledge available on 31 December 2022. Detailed decisions in this regard will be set out in the so-called. Manual on the eligibility of expenditure on which work is ongoing.

FENG.02.17 Development of cluster offers for firms (Enterprise development through cluster support)	aid for innovation clusters (Section 4, Article 27 GBER), aid for SME participation in fairs (Section 2, Article 19 GBER), de minimis aid	State aid: 1. Commission Regulation (EU) No 651/2014: (a) Article 27 Assistance to cluster coordinators – 50 % In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola may increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2 of the Regional Aid Map Regulation) – the intensity may be increased by 15 percentage points. (b) Article 19 Aid to SMEs for participation in fairs – 50 %, 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)	NOT	66 477 310	2,35%	33 238 655	1.30 %
FENG.02.18 Development of OI offers to firms (Enterprise development through support to innovation hubs)	aid for innovation clusters (Section 4, Article 27 GBER) or aid for advisory services in favour of SMEs (Section 2, Article 18 GBER) andinnovation aid for SMEs (Section 4, Article 28 GBER) de minimis aid or financial aid not constituting state aid	Public aid 1. For IOs applying individually: (a) State aid under Commission Regulation (EU) No 651/2014, Article 27 Aid to cluster coordinators – 50 % In addition, enterprises implementing the project in the regions: Dolnośląskie and Wielkopolskie and in the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola may increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2 Regional Aid Map Regulation) may be increased by 15 percentage points. 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period) For IOs applying in a consortium: No State aid at 100 % intensity (mechanism for the transfer of aid to final recipients – undertakings in the form of de minimis aid).	NOT	81 781 611	2,89%	40 890 806	1,60%

FENG.02.22 Co- financing of EDIH actions (Co- financing of actions carried out by the European Digital Innovation Hubs) European Digital Innovation Hubs)	absence of aid or financial assistance not constituting state aid or de minimis aid aid for SME participation in fairs (Section 2, Article 19	Grant (up to 100 % KK) No public aid (mechanism for the transfer of aid to final recipients) Grant (up to 50 % KK)	NOT	55 100 000	1,95% 3,54%	50 000 000	1,95%
Promotion of innovative SME brands (Support for promotion and internationalisatio n of innovative SMEs) FENG.02.27	GBER), de minimis aid No aid (natural persons not carrying out an economic	Public aid 1.Commission Regulation (EU) No 651/2014 (a) Article 19 Aid to SMEs for participation in fairs – 50 % 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period) Grant (up to 100 % KK)	NOT	5 000 000	0.18 %	0	0.00 %
Innovator Laboratory (Support for individual innovators)	activity) or financial assistance not constituting state aid or de minimis aid	1. No public aid 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)	NOT	3 000 000	0.18 %	U	0.00 %
FENG.02.28 Startup Booster Poland	aid for start-ups (Section 3, Article 22 GBER) de minimis aid	Grant (up to 100 % KK) State aid: 1. Commission Regulation (EU) No 651/2014: (a) Article 22 Aid to start-ups 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)	NOT	82 200 000	2,91%	41 100 000	1,60%
FENG.02.29 Startups are us	absence of aid or financial assistance not constituting state aid de minimis aid	Grant (up to 100 % KK) 1. No public aid 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)	NOT	8 000 000	0.28 %	0	0.00 %
			TOGETHER.	2 825 458 921	100.00 %	2 562 129 461	100.00 %

Source: Compiled on the basis of data from the FENG MA (MFiPR) and the SZOOP FENG project

Table 3. Structure of financial assistance in PARP's key action – FENG.01.01 Smart Path – "Support for SMEs and their consortia"

Priority 1. Support for entrepreneurs,

FENG.01.01 SMART (Support for SMEs and their consortia – PARP)

Allocation EUR 2396900000

Mandatory modules for SMEs:

- R & D work

OI

- Implementation of R & D results

Optional modules:

- R & D infrastructure
- Digital transition
- Greening businesses
- Internationalisation
- Powers

Type of	Form of	Intensity/rules of support
project	support	
R & D work	grant	State aid: 1. Commission Regulation (EU) No 651/2014 a) Article 25 Aid for research and development projects In the field of R & D, the intensity of support may be maximum for: - industrial research: SMES 80 %; large 65 %, - experimental development: SMES 55 %; high 40 %. 2. The research organisation is not a beneficiary of public aid and may receive up to 100 % of the funding if the project is carried out as part of its non-economic activities.
Implementatio	conditional	State aid:
n of R & D results	grant (Article 57 CPR)	 Commission Regulation (EU) No 651/2014: Article 14 Regional investment aid for SMEs 35-70 %; large: 15-50 % The aid intensity for infrastructure projects is defined by Mapa on regional aid for 2022-2027. In addition, large enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorów, Kaluszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola can only receive aid for initial investment infavour of new economic activity (in the case of SMEs, aid may be granted for any form of initial investment irrespective of the region of Poland); Additional limitation for large enterprises: costs of intangible assets shall be eligible only up to 50 % of the total eligible investment costs. (b) Article 18 Aid for advisory services in favour of SMEs – 50 % Article 28 Innovation aid for SMEs – inter alia: 50 % De minimis aid (according to the maximum permissible limit per undertaking over a three-year period) Conditional grant: Co-financing divided into a reimbursable part and a non-repayable part (share of the reimbursable and non-repayable part in the amount of co-financing, as well as the rules for calculating the amount to be reimbursed, depending on the financial performance of the project carried out and the size of the company).
R & D infrastructure	grant	State aid: 1) Commission Regulation (EU) No 651/2014: a) Article 14 Regional investment aid – SMEs 35-70; large: 15-50 The aid intensity for infrastructure projects is defined by Mapa on regional aid for 2022-2027. In addition, large enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck,

	Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola can only receive aid for initial investment infavour of new economic activity (in the case of SMEs, aid may be granted for any form of initial investment irrespective of the region of Poland); Additional limitation for large enterprises: costs of intangible assets shall be eligible only up to 50 % of the total eligible investment costs.
Digital grant transition grant	State aid: 1. Commission Regulation (EU) No 651/2014: a) Article 14 Regional investment aid – SMEs 35-70 % large: 15-50 % The aid intensity for infrastructure projects is defined by Mapa on regional aid for 2022-2027. In addition, large enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola can only receive aid for initial investment infavour of new economic activity (in the case of SMEs, aid may be granted for any form of initial investment irrespective of the region of Poland); Additional limitation for large enterprises: costs of intangible assets shall be eligible only up to 50 % of the total eligible investment costs. b) Article 18 Aid for advisory services in favour of SMEs – 50 % C) De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)
Greening businesses grant	Public and 1. Commission Regulation (EU) 651/2014 a) Article 14 Regional investment aid – SMES 35-70 % large: 15-50 % The aid intensity for infrastructure projects is defined by Mapa on regional aid for 2022-2027. In addition, large enterprises implementing the project in the regions: Doinoslyskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Blonie, Daphowka, Dobre, Góra Kalwaria, Grodzisk Macrowiecki, Jody, Joktrorbw, Kalussyn, Kampinos, Kobiel, Latowicz, Leono, Incessor, Maray, Nasieks, Oseek, Pratmow, Serock, Siennica, Sobienie-Jeziory, Strachówka, Torczyn, Tuszcz, Zokroczym and Zabia Wola can andry receive aid for initial investment inforware cereives in favour of SMES, aid may be granted for any form of initial investment irrespective of the region of Poland), Additional limitation for large enterprises: costs of intangible assets shall be eligible only up to 50 % of the total eligible investment costs. Article 18 Aid for advisory services in favour of SMES – 50 % Article 28 Innovation aid to SMES – 50 % Article 28 Innovation aid to SMES – 50 % Article 28 Innovation aid to SMES – 50 % Article 28 Innovation aid to SMES – 50 % In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Blonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk Mazowiecki, Jady, Jaktorikow, Kaluszyn, Kampinos, Kolbiel, Latowicz, Leonoin, Leszno, Mrazy, Nasieks, Osieck, Pratmów, Serock, Siennica, Sobienie-Jeziony, Strachówka, Taczyn, Tuszcz, Zokroczym and Zabia Wollo may increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in \$3(3)). 2 Regional Aid Map Regulation) may be increased by 15 percentage points. In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of th

		-
		increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2
		Regional Aid Map Regulation) may be increased by 15 percentage points.
		h) Article 41 Investment aid for the promotion of energy from renewable sources
		— investments for which the eligible costs have been calculated in accordance with the criteria set out in Article 41. 6(a) (A) or (b) GBER — - SMEs up to 65 %; large 45 %;
		— investments for which the eligible costs have been calculated in accordance with the criteria set out in Article 41. 6(c) SMEs up to 50 %, large 30 %;
		In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk
		Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola may
		increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2
		Regional Aid Map Regulation) may be increased by 15 percentage points.
		i) Article 46 investment aid for energy efficient district heating and cooling – SMEs up to 65 %, large 45 %
		In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk
		Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola may
		increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2
		Regional Aid Map Regulation) may be increased by 15 percentage points.
		j) Article 47 Investment aid for recycling and re-use of waste – SMEs up to 55 %: large 35 %
		In addition, enterprises implementing the project in the regions: Dolnośląskie, Wielkopolskie and the following municipalities of the Warsaw Capital Region: Barans, Błonie, Dąbrówka, Dobre, Góra Kalwaria, Grodzisk
		Mazowiecki, Jady, Jaktorów, Kałuszyn, Kampinos, Kołbiel, Latowicz, Leoncin, Leszno, Mrozy, Nasielsk, Osieck, Prażmów, Serock, Siennica, Sobienie-Jeziory, Strachówka, Tarczyn, Tłuszcz, Zakroczym and Żabia Wola may
		increase the above intensities by 5 percentage points and in other regions of Poland (with the exception of municipalities in the Warsaw Capital Region other than those indicated above, i.e. those listed in §3(3)). 2
		Regional Aid Map Regulation) may be increased by 15 percentage points.
		2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period) – 50 %
		State aid:
Internationalis		1. Commission Regulation (EU): No 651/2014:
ation	grant	a) Article 18 Aid for advisory services in favour of SMEs – 50 %,
		b) Article 19 Aid to SMEs for participation in fairs – 50 %,
		c) Article 28 Innovation aid for SMEs – inter alia: 50 %. 2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)
		State aid: State aid:
Powers	grant	1. Commission Regulation (EU) 651/2014: b) Article 31 training aid – SMEs up to 70 %; large entrepreneur 50 %
		c) Article 28 innovation aid for SMEs – 50 %
		2. De minimis aid (according to the maximum permissible limit per undertaking over a three-year period)

Source: Compiled on the basis of data from the FENG MA (MFiPR)

2.5. 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 to select 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) the scoring rules when applying the scoring to the scheme, (e) the aid intensities, (f) the criteria that the granting authority will take into account when assessing applications.

The rules for the selection of beneficiaries of assistance will be in line with the provisions of Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy and Regulation (Ue) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and the Cohesion Fund. At national level, the rules for project selection and evaluation are laid down in the Act of 28 April 2022 on the rules for the implementation of tasks financed from European funds in the 2021-2027 financial perspective (Implementing Act). In addition, guidelines from the Minister for Regional Development were issued on the basis of the Act:

- Guidelines for the selection of projects for 2021-2027
- Guidelines for the use of experts in the 2021-2027 programmes
- Guidance on eligibility 2021-2027
- Guidelines on equality principles in EU funds for 2021-2027

These documents set out the framework within which the PARP will select projects.

At the level of an individual operation, it will be assessed on the basis of the project selection criteria that will apply to the call. The criteria will be approved by the FENG Monthing Committee (the first KM FENG meeting is scheduled for January 2023). It is envisaged that under the PARP aid scheme, projects will be selected on a competitive basis (the intervention in question) and non-competitive within the meaning of the Implementing Act. The criteria themselves will be tailored to the objectives of each action and programme in order to ensure that the most relevant operations are selected. It provides for criteria that are "yes or no" as well as scoring criteria where, depending on the degree of fulfilment of the criterion, a certain number of points will be awarded. External experts may be involved in the evaluation process, who, in accordance with the Implementing Act, can assist the institutions in carrying out their tasks during the project selection phase.

The budgets of the individual actions are in line with the information indicated in the previous points of the evaluation plan. During the implementation of the FENG, the use of individual allocations will be monitored. Possible transfers of appropriations will be agreed by the Managing Authority.

As regards the intensities of the aid thresholds, the provisions of the GBER and the de miminis Regulation and the notified aid scheme prepared on that basis will apply. At the same time, both the cost catalogue and the above intensity are described in detail in the Guide for the eligibility of expenditure, which will be annexed to the Competition Rules.

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.

We recognise that the most important constraints or risks – potentially strong negative effects on the aid beneficiaries as well as on the achievement of the objectives of the scheme – may be

linked to factors external to the aid scheme (market failure/economic crisis, increase in costs of gosp., geopolitical instability, etc.).

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.

As a preliminary point, it should be noted that the findings set out below relate to the subject matter of the evaluation, which, on the basis of the programme theory described above, was limited to PARP's assistance under Priority 1. (Action FENG.01.01, SMART Path, "Support for SMEs and their consortia"). It is the central, investment and over-priority (financial and potential impact on market and competition) part of the aid scheme. For the sake of simplicity, the plan describes it as 'the intervention in question' (intervention/subject-matter of the evaluation, or using the FENG taxonomy).

The purpose and evaluation criteria to which specific questions for this evaluation have been linked (e.g. referring to quantitative evidence of the impact of PARP interventions under the FENG) are set out below:

The aim of the evaluation is to assess the positive and negative, direct and indirect effects of interventions, within the framework of evaluation criteria and thematic areas (including evaluation questions and indicators), including:

- 1) the direct impact of the aid on the beneficiaries;
- 2) indirect effects of programme implementation (positive and negative);
- 3) proportionality (including incentive effect) and appropriateness of the aid.

The evaluation of the intervention is to assess the main achievements of the implementation of the PARP aid scheme in the FENG (at least until 2026 inclusive) and their socio-economic impact, taking into account considerations relating to the appropriateness and proportionality of the aid and its effectiveness. Therefore, the following evaluation criteria will be taken into account in the study:

- **effectiveness** the extent to which financial assistance contributes to the objectives (impact/effects) of the intervention theory;
- **relevance** matching the identified needs and problems (FENG challenges) to which it is addressed (including adequacy of choice of aid destination, beneficiaries, project implementation logic modular, grants/conditional grants, etc.)
- **proportionality** the efficiency (including the effectiveness of the incentive) of financial assistance in achieving the objectives resulting from the intervention theory, i.e. the extent to which it is impossible to achieve the same impact/effect with a lower involvement of the aid, or another form of assistance.

The relevant evaluation questions and result indicators (described in the following chapter) will answer to each of these thematic areas covered by the study.

a) evaluation questions on the direct impact of the aid on beneficiaries

(1) Has the aid granted had a significant impact on the scope of the activities undertaken by the aid beneficiaries (incentive effect)?

- 2) Does the aid affect the situation of the beneficiaries (has their competitive position changed)?
- *3) To what extent have the expected results of the assistance been achieved?*
- 4) How varied the effects of the aid (e.g. depending on the size of the undertaking, location or sector of activity)?
- 5) Has the aid increased the number and types of innovations introduced (e.g. product innovations, including eco-innovations; process innovation, including digital innovation) by beneficiaries?

b) questions on indirect effects – positive

- 1) Has the intervention resulted in a spillover effect on the activities of other companies (sectors) or geographical regions?
- 2) Has the intervention contributed to achieving the objectives of <u>regional policy and cohesion</u> in promoting innovation and competitiveness in Poland?

c) questions on indirect effects – negative

In the implementation of the aid scheme, can there be negative developments in the selection of beneficiaries affecting competition, i.e. sectoral bias (the predominant aid was granted to a single sector in a multi-sectoral scheme) and bias towards incumbents (relationship between old and new companies)?

d) questions on the appropriateness of the aid

1) Has the most effective form of intervention been chosen?

Would other forms of aid be more appropriate to achieve the objectives of the intervention (effects/impacts) or the objectives of the category of destination of the aid?

e) questions on the proportionality of the aid

1) Is the aid proportionate to the problem or need (challenges) addressed?

Would it be possible to achieve the same effects with less public aid or other aid (e.g. projects with relatively higher vs. projects with relatively lower aid intensities; R & D investment projects/R & D infrastructure (grants) vs. investment projects "implementation of R & D results" (conditional grants), projects with one type of aid vs. projects with different aid structures)?

The link between the above evaluation questions and the objectives of the programme concerns areas (a) and (b).

In the first case, the expected effect/impact of the intervention on the attitude and situation of the beneficiaries (microeconomic perspective) and in the second case the expected effect/impact of the intervention at economic level (macro-economic).

The relevant objectives of the programme in this regard shall relate to:

a) 'Development and strengthening of research and innovation capacities' of SMEs (through the implementation of modular projects FENG.01.01 – primarily modules for R & D and innovation implementation) – which will translate into the ability of SMEs to carry out R & D & I projects (including private investment in addition to public aid) and ultimately their competitiveness (in particular their ability to compete with innovation, including in foreign markets); the above effect/impact of the programme will be reflected in the observed increase in the scale of SME activity, including its internationalisation (increase in revenue from sales of products in general/outside Poland), in particular innovative activities (increase in revenue from sales of product innovations in general/outside Poland). Furthermore, the effect/impact of the programme will be to focus the above-mentioned innovation activities on eco-innovation and digital innovation.

b) "Boosting the innovativeness of the Polish economy" and the expected effects/impacts of the programme, in particular "in the area of economic development, innovation and R & D" (the intervention is primarily intended to lead to an increase in private R & D investment and the number of innovative enterprises in Poland). In addition, at macro level, the intervention is also intended to strengthen the green and digital transformation of the national economy.

In the case of questions relating to the area of adequacy and proportionality, they are not directly linked to the objectives of the programme, referring to the appropriateness of the financial assistance itself in this area of intervention and its use in the programme, and are therefore linked primarily to the State aid rules (incentive efficiency, cost-effectiveness). As regards the questions on indirect negative effects of the programme, similarly, they are not linked to the objectives of the programme (the programme does not assume negative effects/impacts – cf. Chapter 2.3 of the plan). However, the acquisition of knowledge in the evaluation of the PARP aid scheme in the FENG in this respect will make it possible to verify the possible impact of the financial aid on the distortion of the market and competition.

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.):

Table 4. Result indicators and related

Evaluation question	Index	Source	Frequency	Level	Population
(a) Direct impact o	n aid beneficiaries			ı	ı
(1) Has the aid granted had a significant impact on the scope of the activities undertaken by the aid beneficiaries (incentive effect)? 2) Does the aid affect the situation of the beneficiaries (has their competitive position changed)? 3) To what extent have the expected results of the assistance been achieved? 4) How varied the effects of the aid (e.g. depending on the size of the undertaking, location or sector of activity)? 5) Has the aid increased the number and types of innovations undertaken by the beneficiaries (e.g.	In the context of the direct impact evaluation, we will focus on the growth parameters of the selected indicators (e.g. if it is present, its size, etc.). The evaluation of the intervention will include the following indicators (direct impacts): Expenditure (e.g. total, own resources, loans, fixed assets, including machinery and technical equipment), 2) Operating costs (e.g. total, wages, foreign services, use of materials and energy) 3) Innovation (e.g. number of firms investing in R & D internal, external; value of completed development) Revenue from sales of products (e.g. total/export; total/export product innovation; share of export sales revenue in total revenue) For the purpose of measuring the above-mentioned result indicators (direct impacts) for the undertakings subject to intervention (beneficiaries), a control sample will be created from among the companies: (a) ineffective applicants (e.g. companies that have formally submitted compliant applications but with insufficient merit) or (b) not participating in the programme (only if option a above is not feasible/statistically unjustified).	We plan to estimate the direct impact (direct impact indicators) of the intervention on the basis of comparisons of the values of the impact indicators between the beneficiaries and the appropriately selected control group (PSM + DID). The PARP plans to obtain results indicators from the Central Statistical Office in Warsaw (e.g. estimated values for central trend parameters for, inter alia, direct impact indicators for the experimental sample vs. values for the control group) and/or from alternative sources (a narrower range of indicative data, taken from annual company accounts to the National Court Register). The selection of the sample (PSM) will take into account the characteristics of the companies, relevant to the selection and outcome of the projects, available in the administrative databases (e.g. grant applications, business plans for projects). Where possible, implementation (i.e. the possibility of building appropriate analytical models), the effects of the aid (DID) will be examined in terms of differentiation, e.g. the size, location or sector of activity of the beneficiary firms. The source of data for measuring complementary result indicators will be data from the FENG-CST/LSI monitoring system (point 1) and the on-	Measurement frequency (source data collection interval) Direct impact indicators: The data feeding the indicators are collected by the Central Statistical Office (or alternative sources – KRS) on an annual basis on the basis of the so-called. An annual survey of GUS- SP companies (or, in the case of the NCJ, on the basis of the companies' annual accounts). Complementary indicators: Data from the FENG – CST/LSI monitoring	The estimation of the direct impact/effect of the programme relates to the level of the unit (microeconomic outlook). The analyses will be carried out on beneficiary companies and in beneficiary pairs and appropriately selected control cases (in a tailored model — PSM or equivalent). Effects/impacts will be presented as DID	1. Enterprises – beneficiaries (impacted group – expected size N=1658); Data of the above entities available in the CST/LSI resources, in the official statistics resources of the SP GUS, at the National Court Register, in the 'Innovation Barometer' survey. 2. Enterprises – non-beneficiaries (a sufficiently selected group of ineffective

product innovations, including ecoinnovations; process innovation, including digital innovation)? In addition, the evaluation will also be able to cover the following complementary indicators:

- 1) Number of beneficiary companies introducing total/type-specific innovations (e.g. eco-innovation/digital innovation; product/process innovation)
- 2) Share of enterprises that would not have carried out the project at all (total incentive effect)
- 2) Share of companies that have carried out a project to a lesser extent (partial incentive effects) if they did not benefit from the support of the scheme
- 4) Share of enterprises which, if not supported by the scheme, would have carried out the project at a later date (partial incentive effects)

As part of the analysis of the above-mentioned complementary indicators, the beneficiaries' data from the FENG implementation monitoring system (CST/LSI) and the data from the ongoing survey of beneficiaries – where appropriate sample sizes are available – may be compared (in the designs of the tailored PSM) of the sub-groups of the beneficiaries of the intervention (including sub-groups identified on the basis of the structure of support according to the state aid module/category; optionally, also by size class, location, sector of activity of the undertaking, etc.) identifying differences in the effectiveness of the achievement of the indicators by a certain group of beneficiaries or the support model (cf. a similar approach in the following section of the table, with regard to the area of proportionality of the aid).

going survey of a representative sample or population of beneficiaries (Innovation Barometer project implemented by PARP since 2011) (points. 2-4). On the basis of the beneficiaries' questionnaire surveys, relevant data will also be collected allowing, inter alia, an analysis of the incentive effect and the impact of the support on the competitiveness of enterprises (including, where possible, comparative analyses in schemes tailored to the PSM – between subgroups of beneficiaries, e.g. different calls for proposals, size classes, sectors of activity, intensity and structure of support by category of aid, etc. – when checking similarity due to factors related to selection and impact of projects).

system are collected on a continuous basis.

Data from beneficiary surveys ('Innovation Barometer') are collected periodically (semi-annual or annual rounds of surveys) and provide cumulative data on the situation of a representative sample of beneficiaries of intervention, at a standardised point on the time axis (e.g. mid-term) of project implementation.

Frequency of analyses (use of data in evaluation)

For the purpose of evaluating the aid scheme, the estimation of direct impact indicators will cover a maximum of 3 yearly phases of analysis. (e.g. 2023-2024-2025) the above-mentioned source data, which will be summarised by the evaluator in the final report. In turn, the analysis of complementary indicators on CST/LSI data and the survey of beneficiaries will be carried out by the evaluator once, on the population of beneficiaries (CST/LSI) and on the cumulative

(Difference in differences between the control group and the group of beneficiaries/im pact of the programme) applicants or nonparticipating entities).

The data of the above entities available in the CST/LSI resources (only unsuccessful applicants) and in the SP GUS official statistics resources and company reports to the NCJ.

*In the case of CSO, the SP resource will not cover entities other than those employing 10 or more persons; in the case of the NCJ, the resource will not include entities other than companies; moreover, both of these sources may not provide 100 % coverage for other entities (beneficiaries. unsuccessful applicants).

In the analysis of complementary indicators, data will be used for the entire

			sample of beneficiaries surveyed (Innovation Barometer).		population of beneficiaries (CST/LSI) and a representative sample of beneficiaries ('Innovation Barometer').
(b) Positive indired	ct impact				
1) Has the intervention resulted in a spillover effect on the activities of other companies (sectors) or geographical regions? 2) Has the intervention contributed to achieving the objectives of regional policy and cohesion in promoting innovation and competitiveness in Poland?	In the context of the evaluation of the positive indirect impact, for indicators we will focus on growth parameters (e.g. growth, size, dynamics, subgroup structure). The evaluation will cover the following indicators (positive indirect impacts): 1) (optional) Number of indirect beneficiaries (e.g. number of foreign, national, regional providers/subcontractors from different sectors, etc. — benefiting from an economic advantage as a result of the investment carried out by the beneficiaries 2) Expenditure on R & D/innovation activities of beneficiaries in relation to total R & D expenditure of enterprises (e.g. in the country, at regional level) 3) Private R & D expenditure in Poland (for baseline without intervention) (4) Other indicators for the so-called "Macroeconomic gains" in the parameters of Poland's economic development (for the baseline without intervention) (5) (optional) Macro-environmental indicators/'Macro-environmental profits', including on emissions and energy intensity (for baseline without intervention)	The data source for measuring positive indirect impact indicators will be: (a) data on material and financial progress of programme implementation from CST/LSI systems (data on financial transfers from the programme to individual beneficiary enterprises, with specific microeconomic characteristics) (b) (optional) data on value flows between beneficiaries and providers of solutions, for purchases in projects (data on transfers between the beneficiary and individual supplier enterprises, with specific microeconomic characteristics), from the CST/LSI system (ID of the issuer of the accounting document/invoices, date and value of purchases, etc.) and the REGON national business register (region of establishment of the supplier, supplier sector, etc. microeconomic characteristics) (C) macroeconomic data for Poland, in long time series 2023-2033 (in regional and sectoral disaggregation). A combination of at least these data sources and economic knowledge will make it possible to estimate the effects (including spillovers)/impacts of the programme at macroeconomic level (see points 2 to 5), using the DSGE (or CGE) model, i.e. a large-scale macro-economic model calibrated appropriately for the Polish economy. In addition (optional – point 1) microeconomic analyses (bigData type) will be carried out at the level of the suppliers concerned (invoice issuers), identifying the economic benefits (modal, inter-	Measurement frequency (source data interval) Data from the CST/LSI and the REGON register are collected on a continuous basis. Macroeconomic data for Poland, as a general rule, are collected (published) in monthly, quarterly or annual cycles (the last one, the lowest annual interval, includes all the macro indicators necessary for the evaluation). Frequency of analyses (use of data in evaluation) For the purpose of evaluating the aid scheme, the estimation of positive indirect impact indicators will cover up to three annual phases of macroeconomic analyses (e.g. 2024-2025-2026), which will be summarised by the evaluator in the final report. On the other hand, the analysis of	The estimation of positive indirect impacts of the programme relates to the aggregate level (macroeconomic outlook), except for indicator no. 1. The analysis will be carried out on source data, providing results at national, sectoral and/or regional level (with/without intervention, i.e. indicating the effect/impact of the programme at the level of macroeconomic indicators, i.e. the so-called macroeconomic profit).	1. Enterprises – Beneficiaries (number of units) and Enterprises – Providers of goods/services in beneficiary projects (multiple number of beneficiaries) Data of the above- mentioned entities available in CST/LSI resources. 2. Enterprises of the economy as a whole, included in aggregate macro data for the country's economy, sector performance and/or regional economic performance.

		regional) of the investments carried out by the beneficiaries. In addition, in order to better identify and interpret the mechanisms of the impact of the aid on the beneficiaries' environment (other companies/market participants, cooperating companies/competition, value flow, trade, etc.), complementary qualitative surveys (case studies, including those active in the field of impact of the beneficiaries) and expert studies (industry, business) will be carried out.	supplementary indicator No 1) (optional) could possibly be carried out once on the population of beneficiaries and their suppliers in the PARP aid programme projects in the FENG.		These data come from public statistics (GUS, Eurostat), publications fron the National Ban of Poland, the OECD and other public sources of such macro statistics.
In the implementation of the aid scheme, can there be negative developments in the selection of the selection, i.e. sectoral the predominant aid was granted to a single sector in a multi-sectoral scheme) and bias towards incumbents (relationship)	The evaluation will cover the following indicators of negative indirect impacts: (1) In a multi-sectoral scheme, the predominant aid was granted to one sector (e.g. shares of individual sectors in the total amount of aid granted) Ratio of old enterprises to new enterprises (e.g. shares of individual groups of enterprises differentiated on the basis of the length of activity in general of the companies benefiting from the aid)	The data sources for analysing the negative indirect effects will be data from the CST/LSI allowing the preparation of appropriate statistical distributions for the general population (population) of beneficiaries and the examination of concentration due to the relevant characteristics referred to in the indicators. In addition, it will be possible to compare (without/without a counterfactual pattern) data on the distribution of beneficiaries, according to a combination of characteristics such as the size class	The indicators will be analysed once by the evaluator.	1. Beneficiary enterprise level (unit data) 2. Beneficiary enterprises in relation to all non-financial enterprises in Poland (comparison of	1. Enterprises – beneficiaries of support (number of units) 2. Total non-financial corporations in Poland
netween old and new ompanies)?		of the enterprise, the region of residence, the period of activity, the sector of activity (in this case an analysis at the lowest possible level of the PCA classification – at least the division level) with the corresponding data for the enterprise population in Poland (based on data from official statistics). A comparison of the distributions of the group of beneficiaries and of the business population in Poland will be used to seek concentration/reciprocality (including quantitative evidence of no negative indirect impact). The feasibility of the above (detailed) will be determined by the level of disaggregation of the data provided by the official		aggregates)	
(D) Adequacy of th	o aid	(detailed) will be determined by the level of			

1) Has the most effective form of intervention been chosen? Would other forms of aid be more appropriate to achieve the objectives of the intervention (effects, impacts) or objectives of the category of destination of the aid?	Not applicable Qualitative expert analysis and assessment of the relevance of the programme and its objectives (theory-based evaluation)	The evaluation of the adequacy of the aid will be carried out mainly on the basis of the expert analysis of the evaluation team, based on available quantitative and qualitative data on the implementation processes, the market mechanisms in the context of the intervention (including the results of other evaluations of the FENG, and the data analysed in the process of this evaluation). In addition, complementary qualitative studies (case studies, involving beneficiaries) will be carried out to assess the relevance of the programme theory.	The appropriateness analysis will be carried out by the evaluator once.	Level of intervention of the programme and its specific assumptions (theory)	Not applicable
(e) Proportionality	of the aid				
I) Is the aid proportionate of the problem or need (challenges) addressed? Would it be possible to achieve the same effects with less public aid or other aid (e.g. projects with relatively higher vs. projects with relatively higher vs. projects with relatively ower aid intensities; R & D infrastructure (grants) vs. investment projects "implementation of R & D results" (conditional grants), projects with one type of aid vs. projects with lifferent aid structures)?	Difference between DIDs on direct impact indicators (and/or other indicators of change in undertakings, e.g. behavioural additionality change), treated as a 'causal relative effect', i.e. the predominance of a form of aid over another. The difference in the effect indicator would be estimated between the twin cases of the beneficiaries of the support (PSM matching) within the identified comparator groups, one of which (the so-called focal group/focal group) would be one aid option and the other (the so-called reference group) the second option. Aid options may include, inter alia, the following comparison systems: uniform aid at the beneficiary (e.g. predominance of regional investment aid) vs. differentiated aid (without any predominance of any of the categories of destination of the aid) in the statistical twin of another beneficiary aid of high intensity at the beneficiary (e.g. resulting from a regional aid map) vs. low intensity aid in a static twin of another beneficiary R & D aid/R & D infrastructure at the beneficiary vs. R & D aid/R & D infrastructure accompanied by other modules (e.g. implementation of innovation, internationalisation, etc.) at the statistical twin of another beneficiary investment aid for R & D/R & D infrastructure in the form of a grant at the beneficiary vs. investment aid for the implementation of innovation in the form of a conditional grant from a statistical twin of another	The proportionality evaluation will be carried out mainly on the basis of the expert analysis of the evaluation team, based on available quantitative and qualitative data on the implementation processes, the market mechanisms in the context of the intervention (including the results of other evaluations of the FENG, and the data analysed in the process of this evaluation). In addition, taking into account the financial and substantive (modular) structure of the projects and the available selection and outcome characteristics of the companies, an attempt will be made to provide quantitative evidence of the proportionality of the programme using a counterfactual approach. It will address the proportionality of the aid in terms of the relative causation indicator (differences between the subgroups of beneficiaries of the intervention) and provide evidence-based answers to evaluation question 2. The data sources for this analysis will be: 1) CST/LSI monitoring systems (identification of beneficiaries and their characteristics, including the financial assistance received)	Refers to different options for the indicator 'relative cause effect': Measurement frequency (source data interval) i.e. (concerning: CST/LSI, GUS SP, KRS, beneficiary survey of the "Innovation Barometer") Frequency of analyses (use of data in evaluation) The analysis of the 'reasonable effect' indicators, with regard to the proportionality of the aid, will be carried out by the evaluator once.	Level of intervention concerned (expert assessment) Company level – beneficiary	Enterprises – beneficiaries of support (numbe of units) Quantitative analyses, depending on the size of the beneficiaries of the intervention will include deliberately constructed comparator groups (cf. aid options, in the column on indicators)

2) results of GUS SP reports (annual enterprise survey) and/or company accounts to the NCJ (provide information on changes in the economic situation of

beneficiaries over time – cf. direct impact indicators)

The normative interpretation of the above indicator amounts to an answer to the evaluation question. In a very simple way, for example:

beneficiary.

	 (a) When controlling in the statistical matching model (PSM) the characteristics of similarity between the beneficiaries that are relevant for the effects and selection to the programme, the cheaper support option leads to the same or higher (e.g. revenue) effects, the proportionality of the aid must be called into question. (b) if – by controlling the similarity of the ion. the aid option limited to the 'R & D' module leads to the same or higher effects (e.g. revenues from sales of product innovations outside the Polish borders) than the multi-module option, including the R & D module and the 'Internationalisation' module, the proportionality of the aid must be questioned. 	(3) results of the enterprise survey – PARP's 'Innovation Barometer' (provide information on changes in the company's attitude over time). *Carrying out the above-mentioned counterfactual analyses on "reasonable relative effects" will be possible if the size of the beneficiaries of this intervention allows, i.e. it will be possible to design different options for comparator groups verifying the proportionality of the financial assistance.			
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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 most important indicators – presented in Table 4 (above) – are those relating to areas of direct impact on beneficiaries (microeconomic outlook) and positive indirect (macro-economic) impacts, given their direct link with the objectives of the PARP aid scheme in question in the FENG (see point 2.3 of the evaluation plan – 'the link between the evaluation questions and the objectives of the scheme relates to areas a and b). Obtaining data on the above indicators will make it possible to assess the effectiveness of the intervention, i.e. the rate in which financial assistance contributes to the objectives (effects/impacts) of the intervention theory.

The indicators proposed for the 'proportionality of aid' area are experimental. They relate to 'reasonable effects', the estimation of which is not as well established in the practice of evaluation studies and there is not as clear a normative interpretation as an estimate of absolute (net) effects related to the zero scenario (no intervention). They therefore need to be developed (operationalisation) and tested, but can provide reliable quantitative evidence of the degree of effectiveness of financial assistance in achieving the objectives of the intervention theory (including the effectiveness of the incentive). It should be stressed that PARP made two effective attempts to apply this approach to evaluation studies between 2014 and 2015. These concerned a counterfactual analysis of two options for support in the field of training of business personnel (postgraduate training courses co-financed by the ESF/POWER 2007-2013) and three options for R & D & I support for enterprises (implementation of R & D/4.1 OPIG vs. R & R/4.2 infrastructure R & R/4.2 OPIG vs. investment in innovation/4.4 of the IEOP)³⁶. This approach seems to be particularly relevant for the evaluation of the PARP aid scheme intervention in the FENG, given the modular nature of the support (different intervention options/targets, within the substantive modules chosen by the beneficiary) and the relevance of assessing the effectiveness of certain modular project options/module selection combinations.

The other indicators for the area of "negative indirect impact" are indeed in line with the evaluation of State aid granted under the GBER (cf. *Common Methodology for State-Aid Evaluation*). They provide quantitative evidence of the impact/no effect of the intervention in question on the distortion of competition and the market.

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 choosing those methods and for rejecting other methods (for example, reasons related to the design of the scheme).37

(a) methods for assessing the causal impact on beneficiaries

A set of methods, the so-called counterfactual impact assessment, will be used to determine the causal impact of the aid on beneficiaries (SMEs) – a microeconomic perspective. The specification of such methods is perfectly illustrated by the *Common Methodology for State-Aid Evaluation*, so we do not consider it appropriate to give a detailed description and justification of why these methods are relevant in estimating the causal effects (net) of this type of intervention and providing

³⁶ Cf. 'Analysis of the net effects of selected actions of the Operational Programme Innovative Economy 2007-2013, using the counterfactual impact evaluation approach as part of the PARP evaluation project 'INNOWACYJNOŚCIAL Barrierometer', Final Report, Jagiellonian University and EGO – Evaluation for Government Organisations s.c commissioned by PARP, Kraków 2014, pp. 3-13 https://www.parp.gov.pl/images/sites/documents/Raport Barometr netto POIG.pdf 37Please make reference to SWD(2014)179 final of 28.5.2014.

quantitative evidence "what works". These methods were perfectly successful in the implementation of the previous PARP evaluation plan in the 2014-2020 OP Smart Growth.³⁸

For this PARP intervention, we plan to use quasi-experimental schemes in the assessment of the direct effects/impact of the aid on the beneficiaries, including the beneficiary companies and a properly selected control group among those not participating in the scheme (first to test the possibility to use the control group – a pool of so-called ineffective applicants, i.e. entities that planned similar investments to beneficiaries at the same time/are similar to beneficiaries in terms of self-selection to the scheme). The selection of the control sample will use the *Propensity Score* Matching technique to match the control units in terms of probability (PS) of participation in the programme (similarities to beneficiaries) based on a broad set of characteristics available in CST/LSI (characteristics of applicants, application documents, not correlated with the effect of the intervention) and/or GUS/KRS (metric data/socio-economic characteristics, independent variables). We allow testing different options for the matching method (e.g. accurate matching on selected similarity indicators and taking into account the distance of the PS probability index value on other indicators - Coarsened Exact Matching³⁹ + Propensity Score Matching; consider continuous variable matching models, e.g. funding intensity, when comparing different aid options and causal relative effects – Stratified-PSM/fuzza hierarchical clustering⁴⁰, etc.). As regards the approach to estimating the effects, we will use the analysis of the difference in differences (differences in the value of the analysed effect indicator between the groups compared in the period before/pre-vs. post-, the so-called 'double difference', DiD/Difference in differences). We allow testing different options for determining the period before/after – both in terms of calendar years in which the source data of GUS/KRS will be available (e.g. pre=2022, then years between and post=2025/2026) and in relative terms for individual cases (e.g. pre=R-1, i.e. the year preceding the implementation of the project, then the start year of project R and subsequent years and post = R+2/R+3). It should be stressed that the estimation of causal effects in both i.e. approaches. (calendar arrangement vs relative layout) have an interpretative value and limitations. In both cases, beneficiaries who have not completed projects will not be excluded. The studies will cover the entire pool of "active projects" (completed and implemented). This is the optimal approach, given the deadline by which the final report of this evaluation should be provided (06.2027) and where most projects will still be implemented/cleared (by 2030). Limiting the analysis to a small number of beneficiaries who have completed their projects could lead to ineligible/non-representative assessments of the direct impact of the aid. Where possible (test, optional), a sample of analysis within such subgroup of completed projects (separate counterfactual model) will be undertaken. but the results will be more complementary than leading in the overall evaluation of the direct effects/impact of the aid on the beneficiaries.

As a general rule, we plan to map the methodological approach used in the evaluation plan for the PARP aid programme in the 2014-2020 OP Smart Growth⁴¹, focusing on estimating the short-term/'current effects of the intervention' –⁴² only taking into account some

³⁸ Cf. https://www.parp.gov.pl/storage/publications/pdf/Aneks_3_Metodologia_Dostepny.pdf (methodological report) and https://www.parp.gov.pl/component/publications/publication/ewaluacja-pomocy-publicznej-parp-w-ramach-programu-operacyjnego-inteligentny-rozwoj-2014-2020 (ast of outputs from the evaluation process of the PARP aid programme in OP Smart Growth 2014-2020)

³⁹ Cf. Trzciński R. et al. "Establishing the values of selected economic indicators for beneficiaries of the Human Capital Operational Programme and for selected control groups. Final Report on the Study, Central Statistical Office, Warsaw 2017, p. 33. (https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultstronaopisowa/6156/1/1/raport_koncowy_efs.pdf)

⁴⁰ Cf. Widła-Domaradzki Ł., Wojtowicz D., "Stratified Propensity Score Matching – quasi-experimental research design for theory-based impact evaluation with lacking dependent variable, in: Theory-based evaluation in complex environments, PARP, Warsaw 2017 (https://www.parp.gov.pl/storage/publications/pdf/20017_theory-based-evaluation.pdf)

⁴¹ Cf. https://www.parp.gov.pl/storage/publications/pdf/Aneks_3_Metodologia_Dostepny.pdf (methodological report)

⁴² This approach is discussed in detail in the methodological report: "Research: Establishing the value of selected economic indicators for recipients of aid granted through the PARP under the OP Smart Growth Programme and the POPW, and for the control groups selected – stage 1. Feasibility study, CSO, Jachranka 2018, p. 26 ('Methodology for measuring the current impact of interventions')

additions/methodological improvements (including the use of the above-mentioned continuous variable expected by the Commission – cf. Chapter 4. Section. I, point (d)3) and by adapting the methodology accordingly to the new specificities of interventions in FENG projects.

One of the methodological approaches that respond to the new intervention specificity of FENG projects (i.e. the modular design of projects and consequently the complex structure of the financial assistance included therein and the potentially multi-directional impact – e.g. innovation and internationalisation) will be to use the concept of "reasonable effects"/relative causal *effects* (describing the situation we would have had if the company had benefited from alternative support, e.g. another combination of substantive modules or a composition of aid allocation categories)⁴³. The use of comparative analyses (in counterfactual schemes – generally applying a PSM matching of the groups compared and an analysis of differences in DiD differences) will allow, on the one hand, to provide quantitative evidence on the degree of effectiveness of the different model models (one aid option versus the other) and, on the other hand, to verify the proportionality of the aid (incentive effectiveness). More broadly, the above-mentioned approach is described in Table 4, under the heading 'proportionality of the aid'.

(b) methods for assessing the (positive) impact of indirect aid

For the study of positive indirect effects – a macroeconomic outlook – the main approach will be a set of methods using macro-econometric modelling. In addition (optional) it is planned to carry out analyses (type Big data analysis, network analyses) on the flow of aid value/financial transfers to suppliers (analysis on the data of issuers of accounting documents/invoices for purchases in beneficiaries' projects). On the one hand, macro econometric analyses will provide data on the socalled The 'macroeconomic gains' induced by the intervention (distortion of the underlying trend of a given macro-indicator as a result of the shock of the cumulative value of the aid to the market) and spillover effects (positive externalities/spreading), from the second analysis of interregional/modal flows of financial assistance to suppliers, will provide quantitative evidence of the magnitude of the impact of the aid on the indirect beneficiaries (e.g. number of foreign, national, regional providers of solutions/subcontractors from different sectors, etc. which receive an economic advantage as a result of the investment being carried out by the beneficiaries). The second approach will make it possible to try to estimate positive indirect effects also using micro-data. This is in line with the expectations of the Common Methodology for State-Aid Evaluaton - "Indirect impact assessment of a State aid scheme usually requires a different type of evidence than that used to assess the direct impact on recipients and the interpretation is usually based on economic theory and modelling. It is more difficult to prepare precise guidelines for this type of assessment, as they need to be adapted to the possible and expected impacts of the policy, both positive and negative. Therefore, the evaluation should be carried out after a careful and detailed analysis of the most credible possible indirect impacts of the policy. On the basis of this analysis, evaluators may design measures based on micro-data from non-assisted beneficiaries, in particular from the same region, cluster or industry, as well as from neighbouring regions. They should form the basis for the assessment of the indirect effects of the State aid scheme. They may be complemented, where appropriate, by macroeconomic data and, in particular, by carefully selected case studies.'

We consider that the approach proposed by PARP is fully consistent with the above-mentioned Commission recommendations. In particular, as indicated in Table 4, for the part on positive indirect effects, "for the purpose of better identifying and interpreting the mechanisms of impact of the aid on the beneficiary's environment (other undertakings/market participants, cooperating companies/competition, value flow, trade, etc.), complementary qualitative research (case studies, including those active in the field of impact of the beneficiaries) and expert studies (industry, business) will be carried out."

⁴³ Cf. 'Analysis of the net effects of selected actions of the Operational Programme Innovative Economy 2007-2013, using the counterfactual impact evaluation approach as part of the PARP evaluation project 'INNOWACYJNOŚCIAL Barrierometer', Final Report, Jagiellonian University and EGO – Evaluation for Government Organisations s.c commissioned by PARP, Kraków 2014, pp. 3-13 https://www.parp.gov.pl/images/sites/documents/Raport Barometr netto POIG.pdf

As regards the choice of macro-econometric model, we would like to see it as a DSGE model (dynamic, stochastic general equilibrium model) prepared for the Polish economy. PARP (in cooperation with external experts) carried out analyses with this tool in 2017 and 2019-2022 as part of the evaluations of the IEOP⁴⁴ and OPIR/POPW, and proved useful in providing valuable analyses on the effects/impact of a macro-innovation programme, such as the intervention in question⁴⁵. In addition, when indicating the choice of model class, we take into account the following: "From the point of view of usefulness in modelling concrete effects (...), the CGE and SCGE models are better when we are interested in the long-term impact of the intervention. In turn, it is convenient for the short-term analysis to use DSGE class models that work well on data with a higher frequency than annual."

The detailed agreement on the methodology for assessing the positive indirect effects of the aid is also contained in Table 4.

(C) a holistic methodological concept

The overall methodological concept of this evaluation takes into account the **combination of the micro- and macro-economic (economic)** approaches when assessing the effectiveness of the scheme (partly also when assessing the proportionality of the aid), thus reconstructing the full picture of the impact of interventions from micro and macro perspectives⁴⁷. Counterfactual studies (in a micro-based approach to the counterfactual situation of the beneficiary – without financial assistance/with another aid option; in a macro-economic approach – excluding transfers from the aid scheme/baseline scenario – they are at the heart of this evaluation plan. The other planned methods (enterprise survey/'Innovation Barometer', qualitative research – interviews/case studies/expert workshops, analysis of documents and legacy data) have a complementary and explanative function (including explaining "why the programme works/does not work") in the context of programme theory. According to the 'Common methodology...', 'State aid assessment may be supplemented by information from surveys of aid beneficiaries or interviews with programme managers. Such qualitative information shall be subjective (...) However, if handled with sufficient caution, information from qualitative surveys, such as interviews and case studies, may be a useful additional source and may help to interpret the results of the evaluation.

At the same time, this is a well-established approach in the literature which **combines the concept** of counterfactual impact evaluation with the concept of evaluation based on programme theory – *Theory-based counterfactual impact evaluation*.

While planning the methodology of this evaluation, efforts have been made to anticipate the scope, approaches and methods that may/will be covered by research activities for the evaluation of EU cohesion policy in Poland (as part of the overall FENG evaluation plan) – avoiding duplication, foreseeing complementarity/synergy between the two processes.

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.

⁴⁵ Cf. Bukowski M., Pokorski J., 'Innovation and competitiveness policy in the light of the Vespa 3 model' in: 'Using econometric modelling in the evaluation of the impact of public policies and programmes', PARP, Warsaw 2019, pp. 127-159. https://www.parp.gov.pl/storage/publications/pdf/Wykorzystanie-modelowania-ekonometrycznego 200117.pdf (EN: https://www.parp.gov.pl/storage/publications/pdf/14---The-Use-of-Econometric-Modelling-Internet 191206.pdf)

⁴⁴ Cf. https://www.parp.gov.pl/component/publications/publication/analiza-wybranych-dzialan-po-ig-na-poziomie-sektorowym-i-makroekonomicznym-za-pomoca-modelu-przeplywow-miedzygaleziowych (Final report on macro modelling of the effects of the OPIE, 2017)

⁴⁶ Cf. Kossowski T., 'Application of macro-economic modelling in the evaluation of innovation policy in: Ibid., pp. 107-227 and Piech K., 'Evaluation of the impact of EU funds – macroeconomic modelling theory and practice', in: K. Olejniczak, M. Kozak, B. Ledzion (eds.), Theory and practice of evaluating public interventions. Academic Handbook, Academic and Professional Editions, Leona Koźmiński Academy, Warsaw 2008, pp. 179-211.

⁴⁷ Cf. Pokorski J. "Evaluation of support for competences of people on the labour market and for promotion employment. The full picture of effects from the micro and macro perspective', in: Evaluation in Educational Practice, FRSE, Warsaw 2020.

The identification strategy for the causal impact assessment included in this evaluation involves taking into account the causal link between the impact of the intervention on changes in the situation of beneficiaries of public support. "Determining the occurrence and strength of causal relationships is crucial for monitoring and improving public action (...). Modern methods for estimating the impact of interventions are centred around the concept of causality, defined using the so- called counterfactual state concept. The effects of the schemes under assessment are estimated by comparing the situation of the aid beneficiaries with the hypothetical situation if they had not benefited from the support. This situation is not actually observed, but can be estimated by using a variety of statistical methods and techniques and by using entities which have not received State aid under the measures under examination (...) (control group). In general, at the level of the survey methodology, counterfactual approaches are tantamount to comparing the situation of the beneficiaries of the support in question with an appropriate control group. '48 A similar strategic approach, based on the concept of counterfactual states, concerns planned causal studies at a macroeconomic level, where estimates of the impact of the programme at macro level are related to the situation of the economy in the so-called baseline/counterfactual scenario (without financial transfers from the aid scheme). In this case, however, the counterfactual is not expressed by a wellselected control group, but by a set of specific economic assumptions (theoretical, empirical) included in the model, which disregard programme inputs and their actual impact on markets, households, etc.

As a control group in causal studies at the micro-economic level (the situation of the beneficiary), in principle the so-called data will be used. 'ineffective applicants', i.e. entities that submitted grant applications (formally in line with the programme theory) but ultimately did not receive funding. Used as a control pool of 'ineffective applicants', these cases can be brought closer to beneficiaries in terms of similarities in terms of readiness to invest in projects with a similar purpose and benefit from assistance and the ability to prepare an application (alignment in terms of self-selection to the programme). This is one of the main advantages of the control group, which is cited in the literature (also in the "Common methodology..." guidelines – "The use of rejected applicants in the assessment is particularly useful in order to avoid the systematic error that occurs when trying to compare applicants with non-applicants. This group of companies passed the first quality test, meaning that they submitted a credible investment project. In this respect, they share the ambition of the aid beneficiaries to invest in credible projects⁴⁹."

Only if the use as a control group of "ineffective applicants" is statistically unauthorised, the possibility of using non-applying entities as a control pool will be tested.

In the case of the above-described additional concept of studying the so-called causal relative effects, there will be beneficiaries of another aid option under this intervention as a control/reference group.

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?

(a) sectoral bias

The methodological approach to be applied in the study in the area of 'negative indirect aid effects', including negative effects on competition and trade, resulting in sectoral bias, is described in Table 4.

In particular, it will be examined in this respect whether the predominant aid was granted to one of the sectors in question. This will be done on the basis of a comparison of the PKD distributions of

impact and cost effectiveness of investment subsidies in Italy (2012)

 ⁴⁸ Cf. PARP, Field of research work of the Central Statistical Office concerning 'Establishing the value of selected economic indicators for recipients of aid granted through the Polish Agency for Enterprise Development (PARP) under the Operational Programmes 2014-2020: Smart Development (POIR) and Eastern Poland (POPW) – and for selected control groups", 2018.
 ⁴⁹ Cf. *Common methodology...*, p. 35/A. Martini and D. Bondonio: "Counterfactual impact evaluation of cohesion policy:

beneficiaries (PCA 2007 Polish classification of activities according to NACE Rev.2 in the EU) in relation to the size of firms in the different PKD divisions in the national economy (according to the Central Statistical Office). In addition, an attempt will be made to analyse the **level of so-called sectoral concentration** within the various PCA divisions within the dominant PCA section beneficiaries (this will most likely be the section on manufacturing). The level of sectoral concentration will be expressed by an indicator of the concentration of marketed production, measured by the value of two factors, Herfindahl-Hirschman and Lorenzo respectively. Similar analyses were carried out as part of the previous PARP State aid evaluation plan under the 2014-2020 OP Smart Growth⁵⁰.

(b) materiality of observed differences

Case-by-case data will be **used in analysing the causal effects at microeconomic level (the impact of the programme on beneficiary enterprises)**. Or access to these data will be possible either directly (this working model is foreseen, in accordance with PARP's experience, when using data from company reports to the National Court Register)⁵¹ or indirectly ("after omack") – by means of queries/descriptions submitted to a set of data with specific specifications (this working model provides, if data are used, protected by statistical secrecy from company reports to the Central Statistical Office – "Annual Company Survey – SP")⁵².

Therefore, due to the non-aggregated nature of the data, it will be possible to determine the statistical significance of the observed differences (DiD) between the experimental/focal group and the control/reference group, which will allow to quantify with what certainty the observed differences in results at the final beneficiaries are due to the aid. The following is an example of how results of DiDs can be reported, with an indication of the materiality of differences.

Table 5. Indication of statistical significance in the counterfactual analysis on CSO data (impact of aid in subsequent years – changes in total expenditure, inter alia: (ID)

Index	Year	В	K	Difference year (B-K)	B.S.	Amendment from 2015 (B)	Amendment from 2015 (K)	Difference (DID)	B.S.	P>payz\
	(I)	(II)	(III)	(IV)	(v)	(VI)	(VII)	(VIII)	(IX)	(X)
Total outlays	2015	4 971	3 795	1 177	1 725	_	_	_	_	_
(thousands of	2016	5 519	5 651	—132	1 720	548	1 856	—1 308	2 069	0,53
PLN)	2017	9 919	4 535	5 384	1 816	4 948	740	4 208	2 087	0,04
	2018	11 223	6 370	4 853	2 029	6 251	2 575	3 676	2 433	0,13

Legend: (i) the reporting period (ii) the value of the indicator for beneficiaries (N=84) in the indicated period (iii) the indicator value for non-supported entities (N=84) in the indicated period (iv) the difference between the beneficiaries and the control group in the specified period (v) standard error (v) the change in the value of the indicator in the group of beneficiaries in the specified period from the base year, 2015 (v) the change in the value of the indicator in the control group in the specified period from the base year, 2015 (v) the estimated effect of the double difference in time between the beneficiaries group and the control group compared to the base year (v) the statistically of the difference (v) the difference (v) the difference (v) the statistically significant when the so-called (v) value is less than (v) the indicator for beneficiaries (v) the indicator in the value of the indicator in the same (v) the change in the value of the indicator in the group of the indicator in the same (v) the change in the value of the indicator in the group of the indicator in the same (v) the change in the value of the indicator in the group of the indicator in the same (v) the change in the value of the indicator in the group of the

Cf. PARP State Aid Evaluation Report in POIR p. 114 https://www.parp.gov.pl/storage/publications/pdf/RK PP PARP Final-PL 2020 06 25 Dostepny.pdf

⁵¹ Cf. Jadrzejowski A., Pokorski J. "Use of company accounts in the evaluation of the impact of economic development programmes, in: 'Public Intelligence. Use of administrative data for monitoring and evaluation of public policies", PARP, Warsaw 2022, pp. 206-244, https://www.parp.gov.pl/storage/publications/pdf/Public-Intelligence PL.pdf

⁵² The model used in the Report on the evaluation of PARP State aid in the 2014-2020 OP Smart Growth – cf. Ibid.

⁵³ Source: Evaluation of PARP's State aid in the 2014-2020 OP Smart Growth. Final report, IDEA Institute, IDEA Development, Jagielloński University commissioned by PARP, Warsaw 2020, based on the results of the study 'Determining the value of selected economic indicators for recipients of aid – granted through PARP under the Operational Programmes 2014-2020: Smart Development (OP IR) and Eastern Poland (POPW) – and for selected control groups (Stage 2) GUS 2019.

Table 6 Determinations of statistical significance in the counterfactual analysis on NCJ data (impact of aid in the third year following the submission of the grant application – changes in assets held, DiD)

Index	Measure X	Action Y	Action Z
(thousands of PLN)			
Fixed assets	2369	8920 ***	6025 ***
Working assets	3947	4696 *	3622
Stocks	1195	2302 ***	1725 ***
Equity capital	2104	5364	4827 *
Total balance sheet	6437	13618 ***	9556 ***

^{***} statistical significance of 0,01; ** at 0.05; * at 0.1⁵⁴

Moreover, by assuming, in good faith, theoretical assumptions (e.g. conditional independence)⁵⁵ and ensuring that the basic standards for the use of these counterfactual analysis techniques, in particular PSM, are met in the process of this evaluation, we rely in a certain sense on the well-established science, for this research approach and its credibility⁵⁶.

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.

Complex programme and methods used.

For this intervention. the challenge will in the evaluation process be: (a) a complex set of substantive modules (compulsory for: 'R & D work' or 'implementation of R & D results', and the optional modules 'R & D infrastructure', 'Digitalisation', 'Greening of 'Internationalisation', enterprises', 'Competences',

(b) **dependencies related to the use of the grant and the conditional grant** (the latter appears only in the module "Implementation of R & D results – if the beneficiary implements this module),

and – linked to the above —

(C) a complex combination of the GBER aid category <u>at the level of the individual beneficiary-SME</u> and its co-financed project.

It should also be noted that the order in which the above modules are carried out by the company in the project is not specified (may be any) nor does it necessarily concern a single multi-stage business project (e.g. the subject of the module 'R & D work' does not need to be linked to the subject matter of the 'implementation of R & D results').

Moreover, the level of financial aid intensity in each project will depend on the conditions of the regional aid map (e.g. in the case of regional investment aid, depending on the regional location of the beneficiary and the size of the company according to micro, small and medium classes) on the other hand, and on the other hand, the specific conditions in terms of intensity resulting from the category of purpose of the aid in the project (cf. However, the table on the categories of aid under Measure FENG.01.01.) the resulting aid intensities at project level can be determined (previously referred to as "continuous variable") by reference to the total value of eligible costs in the SME project to the cumulative value of the financial aid granted (from different purposes, with different intensities).

⁵⁴ Source: Counterfactual analysis of the effects of the 2014-2020 POPW, Final Report, IDEA Institute, IDEA Development on behalf of PARP, Warsaw 2021, on the basis of PARP data and data from the ekrs system.

⁵⁵ We assume that if we control the observed differences between the beneficiaries and the control group, the effect would have been the same for both groups without support. We therefore assume that variables that we do not control do not affect the results achieved (cf. Trzciński R., Use of propensity score matching in evaluation studies, PARP, Warsaw 2009. https://www.parp.gov.pl/storage/publications/pdf/6873.pdf)

⁵⁶ The 'revolution of credibility' in economics as the basis for judgment 'what works'/what works – cf. King Swedish Academy of Sciences. (2021). Economic Science Award 2021 www.nobelprize.org/prizes/economic-sciences/2021/press-release/ <u>-</u> Josh Angrist, Guido Imbens "for their methodological contributions to the analysis of causal relationships".

All these dependencies will be taken into account in the comparator models being prepared (matching beneficiaries and "ineffective applicants" on the basis of the PSM or equivalent). These conditions will create further control variables (Korriants) selected as a matching criterion/constituent index for the similarity of FVCs, and/or call for the need to build further comparator models with relatively homogeneous characteristics in terms of the above-mentioned conditions.

It is difficult to decide at this stage of evaluation planning how the distributions of the types of projects involved in the intervention will evolve. It cannot be excluded that the intervention ultimately dominates one set of modules that will co-exist most frequently (e.g. small module "R & D work" as mandatory + large "Infrastructure R & D" module + small module "internationalisation", including all RPIs as the predominant category of aid of average intensity; No conditional grant). In that case, it will not be appropriate to multiply the different options for comparison models and to test many hypotheses.

It should be stressed that the above-mentioned problem of "consistency" of intervention at the level of individual beneficiaries-SMEs will be addressed by the preparation of comparator models within the group of beneficiaries (for the purpose of estimating the causal relative effects – cf. the previous sub-chapter) and complementary qualitative studies using the 'case studies' method.

6. Data collection

6.1. Please provide information on the mechanisms and sources used to collect and process data on the aid beneficiaries and the envisaged counterfactual scenario57. 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.

In line with the recommendations of the *Common methodology for State aid evaluation*, access to the relevant microeconomic data for impact assessment is crucial. Data collection and aggregation will start with the launch of the first calls for intervention.

Data on participants in the PARP aid scheme in the FENG will be collected in the Central IT System (CST – client application, administered by the Office of the Minister of Funds and Regional Policy; PARP is one of the customers with authorised access to the application) and in the Local Information System (LSI – App, administered by PARP).

In principle:

- (a) The LSI supports the application and project selection processes and collects a set of data from this process (data from grant application forms, appendices to applications e.g. business plans, results/scoring from the application evaluation phase, status e.g.: 'formally correct without co-financing' vs. 'granted'). Therefore, the LSI provides homogeneous data on both beneficiaries and "ineffective applicants" collected during the selection/recruitment phase of the programme.
- (b) the CST records the processes for granting aid (starting from the conclusion of support agreements), implementing projects (including amendments to support contracts) and settlements (including successively approved so-called payment claims, in which the beneficiary demonstrates material and financial implementation of the project, including indicators, structure of the aid received, intensity, etc.). Thus, the CST provides detailed

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.

data only on beneficiaries (individual) and cumulative information on material and financial implementation of the programme.

The planned matching models (PSMs or equivalent) for analysing the direct impact/effects of the aid on the beneficiaries will primarily use data from the LSI (identification of beneficiaries and "ineffective applicants" and a strong pledge of the characteristics of the two groups of entities).

In the planned matching models (included) for the analysis of the so-called "reasonable effects", data from both CST and LSI (beneficiaries and their characteristics from the project implementation phase as well as from the application phase) will be used.

If it is not possible to match the control group from the so-called 'ineffective applicants', another source with a consistent system of data will be used in its entirety to match the match. These will then be the metric data and socio-economic characteristics of enterprises contained in the resources of the Central Statistical Office SP "Annual Business Survey"). In this collection, beneficiaries' identifiers from the CST – NIP/REGON – will make it possible to separate the group of beneficiaries, while the remaining cases will constitute a broad control pool to select appropriate control cases. The audit pool will consist of several hundred thousand entities, which will give relatively great scope for compiling it so that the entities meet the restrictive criteria of similarity due to the likelihood of participation in the programme (index *propensity score*). At that time, it will not be possible to ensure similarities in terms of unobserved self-selection criteria, which is ensured by 'ineffective applicants'. The use of data from Central Statistical Office SP, as a data source for matching models – whether the control group will come from 'ineffective applicants' or from entities not applying to the programme at all – is of added value, with data available on both similarity indicators and intervention impact indicators (e.g. 2023, 2024, 2025) in the same dataset (with a homogenous taxonomy).

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?

The answer to this question is set out in Table 4. see column 'Frequency', 'Level', 'Population'.

As a general rule, data planned to be used for analyses at micro-economic level (direct impact/effects of the aid on beneficiaries; positive indirect effects of the aid on suppliers of goods/services in the beneficiaries' projects) will be disaggregated (individual data).

On the other hand, the data planned to be used in the analysis at macroeconomic level (positive indirect effects of the aid – "macroeconomic gains") will be aggregated (the lowest level of aggregation will concern the region and sector, the highest – the country). This kind of data is suitable for carrying out the counterfactual analyses planned in this evaluation in micro- and macro-econometric models respectively.

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.

(a) Statistical secrecy

In the case of data from the Central Statistical Office, it is not possible to carry out the above-mentioned analyses on individual data outside the Office, in connection with the provisions of the Public Statistics Act of 29 June 1995. In the light of the above, as in the case of the evaluation of PARP's State aid under the 2014-2020 OPIR (also in the case of other State aid evaluations in Poland, e.g. the regional investment aid scheme in Special Economic Zones/58 SEZ Scheme), we plan that counterfactual analyses will be carried out in the context of trilateral cooperation

⁵⁸ Cf. <u>https://www.gov.pl/web/rozwoj-technologia/BDG-V.2610.36.2019.MB</u>

between the PARP, the evaluator and the Central Statistical Office, using the 'after omack' method – i.e. using multi-aterative queries (scripts) for the collection of GUS SP and obtaining results (*outputs*), which will lead to adequate preparation and processing of the dataset, matching (including matching quality assessment) and preparation of estimates of effects (including an assessment of the statistical significance of differences, sensitivity of models, etc.). If, on the basis of the relevant agreement/contract, such cooperation is initiated between the PARP and the Central Statistical Office (model for previous years), the task is feasible.

Statistical secrecy will also apply to data from beneficiary surveys ('Innovation Barometer'), whose responses will be treated as confidential/anonymous, in accordance with ESOMAR standards. If complementary analyses are needed on this dataset (e.g.: the 'reasonable relative effects' of the different aid options in which the correspondent beneficiaries participated), the relevant characteristics of the financial assistance they have benefited from (e.g. aid intensity) will be included in the frame before the survey and, after the relevant statistical analyses have been carried out by the contractor 'Innovation Barometer' (or evaluator), removed.

(b) Access to public registers

In accordance with the Act of 28 April 2022 on the rules for the implementation of tasks financed from European funds in the 2021-2027 financial perspective (the 'Implementation Act' – Article 92.1), for the purposes of, inter alia, the evaluation process of programmes implemented under EU cohesion policy in Poland (including the FENG and the evaluation of the PARP intervention in question), the FENG Managing Authority and the Intermediate Body FENG – PARP have access to 13 public registers ⁵⁹. This is a new solution that does not have a precedent in the past evaluation history of cohesion policy and theoretically provides new analytical opportunities for planned evaluations. However, the availability of the above-mentioned data requires the conclusion of appropriate agreements with data gestors and the establishment of appropriate procedures and/or the introduction of implementing acts for the above-mentioned provisions of the Act. In particular, the most valuable data (resourced in economic and financial information at the level of individual companies) is provided by the National Court Register and collected in the register of company reports. Until such time as the above-mentioned issue of PARP's processing of registration data is regulated, we consider the above as an alternative source of data.

Companies' financial statements are theoretically publicly available, but their structure and purpose are far from acceptable for analytical purposes. However, it should be stressed that obtaining this data and using it to estimate the direct impact of the aid – as an alternative source to GUS SP – is possible, with the involvement of webscraping techniques and complex analytical and substantive activities to prepare the dataset for analysis ⁶⁰. This data was effectively used by PARP in 2021 for counterfactual analysis (PSM+DiD) in the evaluation of the 2014-2020 POPW.

(C) personal data

The rules on the protection of personal data do not restrict the analytical and research activities planned in this evaluation. In the case of surveys and qualitative research, best practices (as regards entrustment of processing of personal data from CST/LSI) will be applied in PARP's contracts with the study contractors/evaluator, which will ensure confidentiality and protection

⁵⁹ The list includes – (1) the National Court Register; (2) Central Register and Information on Business Activities; (3) National Debt Register; (4) Central Register of Real Beneficiaries; 5) a central register of tax data; 6) Register of entities excluded from receiving funding for programmes funded with European funding; 7) a system for making data on state aid available; 8) a system for the scheduling, registration and monitoring of public aid; 9) Public Procurement Bulletin; (10) a central register of insured persons; (11) a central register of contributors; (12) the national official register of the territorial division of the country; 13) the information system of the Public Prosecutor's Office.

⁶⁰ Cf. Jadrzejowski A., Pokorski J. "Use of company accounts in the evaluation of the impact of economic development programmes, in: 'Public Intelligence. Use of administrative data for monitoring and evaluation of public policies", PARP, Warsaw 2022, pp. 206-244, https://www.parp.gov.pl/storage/publications/pdf/Public-Intelligence PL.pdf

of data subjects. Where external data are used by the Central Statistical Office and the NCJ, respectively, statistical confidentiality/no view of individual data (GUS), the availability of data for companies only (KRS) eliminates the GDPR from this evaluation area.

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.

As indicated in Table 4 and Chapter 5, the PARP intends to use data from the beneficiary survey and other programme stakeholders in the planned evaluation.

(a) Research involving beneficiaries will cover:

the ongoing CAWI/CATI survey (as part of the PARP 'Innovation Barometer' evaluation project) focusing⁶¹ on project implementation (beneficiary opinion survey) and changes in beneficiaries' attitudes influenced by the intervention (identification of *behavioural additionality, evaluation* of the usefulness of support for beneficiaries), in the context of the planned programme theory.

The survey will also serve to collect declaratory data from beneficiaries on:

- a) **incentive effect of the aid** /total &partial incentive efects (share of companies that would not have carried out the project at all/would have implemented the project to a lesser extent/would implement the project later on
- b) **valuation of the 'actual value of support'** (this information can also be used to assess the proportionality of the aid and to identify the scale of administrative/transaction costs related to SME participation in the scheme).

For valuation, so-called the "real value of support" will be used in a *conjoint* methodology. It is used to determine the respondent's preferences on the basis of the different attributes of the product and the benefits obtained by the buyer depending on the value of the different characteristics of the product. By translating these assumptions into intervention, the method aims to obtain an answer as to whether beneficiaries would still choose to benefit from public support, knowing both the benefits and the constraints associated with it (e.g. administrative burden). The audited beneficiaries select from among the scenarios in which they are successively offered an appropriate sum of money without commitment to use it (20.40.60.80 % of the grant received) instead of participating in the programme with full, known funding and conditioning on how these funds are spent. The conjoint experiment ended when the respondent, instead of participating in the whole project at the next auction level, chose a certain percentage of his or her grant, or when the auction reached 80 % and the respondent did not want to change what he obtained⁶².

(b) Other qualitative surveys

⁶¹ Cf. description of the "Innovation Barometer" project implemented in 2018-2022 under the prorgams of the OPIR and OPW 2014-2020; Cf. Final report (2015) from the "Innovation Barometer" of OPIG 2007- 2013 https://www.parp.gov.pl/storage/publications/pdf/20190208111352m1eyd.pdf and the final report (2022) of the Innovation Barometer of OPIR 2014-2020: https://www.parp.gov.pl/component/publications/publication/barometr-innowacyjnosci-program-operacyjny-innowacyjny-rozwoj

⁶² For example, as part of the evaluation of the 2007-2013 OP Smart Growth, less than half of the beneficiaries surveyed (43 %) selected a share of the programme as a whole. On the basis of these replies, the average result (weighted average of responses) of the valuation of the value of the support was calculated, which was 70 %. The evaluation pointed to the advantage of the support received over costs understood as inconvenience linked to the process of applying and operating the project during its implementation. According to the beneficiaries, almost 3/4 of the funds received were added value, meaning that without the co-financing the projects would not have been carried out on a similar scale or time. These applications corresponded to other – non-experimental – measurements of additionality/incetive effects where PARP's customers declared what would have happened if they had received support (the applicants who did not actually receive the aid were asked)/or had not received them (the beneficiaries were asked about this). Cf. Final report (2015) of the "Innovation Barometer" of OPIG 2007-2013 https://www.parp.gov.pl/storage/publications/pdf/20190208111352mleyd.pdf p. 57.

—Case studies for selected projects (differentiated selection in terms of e.g. composition of content modules used and aid categories); in any case, e.g. analysis of documentation/financial reports, study visits to the beneficiary company, face-to-face interviews with the company's management, telephone interviews with the business environment),

Qualitative research in the form of IDI interviews with programme stakeholders and experts, including representatives of the administration and management structures of the programme, representatives of science and industry institutions, and experts assessing grant applications,

Expert workshops (optional) with programme managers at operational level (managers of the intervention in question and/or individual technical modules in PARP) and strategic (FENG Managing Authority).

In-depth analysis of established data/desk research (including, inter alia, the available evaluation reports of the FENG on horizontal issues of the programme, e.g. the efficiency of the project selection system, including criteria).

The choice of methods outlined above (complementing the *counterfactual impact evalation method further described in the*plan) will provide information to identify and interpret the mechanisms of the impact of the aid (explain "why the scheme works/does not work", how the theoretical assumptions that condition the occurrence/no effect, etc.) are implemented. Their application is carried out by *theory-based evaluation*, as mentioned above, the second important component of this evaluation.

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.

Considering that the following circumstances -i.e.:

- (a) the financial assistance of the PARP programme in the FENG is part of the 2021-2027 EU cohesion policy implemented in Poland (under the Partnership Agreement concluded between the Commission and the PL authorities for the period 2021-2027),
- (b) expected to be the predominant category of destination of the aid that will be present in the scheme in question (in particular under the intervention covered by the evaluation plan i.e. the PARP measure under Priority 1). Feng SMART, "Support for SMEs and their consortia") will be regional investment aid (Section 1, Article 14 GBER)
- The time horizon of this evaluation plan has been adapted to the period during which (a) the operational programmes under EU cohesion policy in Poland (including FENG 2021-2027) will be implemented and (b) the period of validity in Poland of the regional aid map, which concerns the abovementioned categories of financial aid in the PARP⁶³scheme, i.e. until 31 December 2027.

In view of the above, the indicative timetable for the evaluation is as follows:

I. January 2023 – submission of the EC evaluation plan by the Polish authorities

Intermediate step 1. — opinions/amendments/possible working arrangements on an evaluation plan between the Parties

II. January – June 2023 – EC evaluation (approval) of the evaluation plan

III. July 2023 – December 2026 – Operationalisation of the substance and methodology of studies and data collection for the evaluation of interventions (preparatory phase)

⁶³ Cf. Table 2 of the evaluation plan.

Milestone 2. collection of data in the programme implementation system (including the Central ICT System for the 2021-2027 programmes and the PARP Local IT System) from calls for proposals and support agreements concluded, and on the progress of project implementation (including individual intervention modules) and material and financial settlements.

Milestone 3. prepare a worksheet for research and cooperate with the Warsaw Central Statistical Office; operationalise the programme's effect/impact indicators and link them to data from official statistics for enterprises; verify the coverage of data in the resources of official statistics for beneficiaries and different control group options (methodological phase); then carrying out counterfactual analyses and estimating the effects/impacts of the programme at microeconomic level on the data of the Central Statistical Office (empirical phase – up to 3 annual phases of microeconomic analyses).

Milestone 4. preparation of the scope of the contract and cooperation with the macro-economic analysis centre (think-tank); operationalise the programme's macroeconomic effect/impact indicators and calibrate (or quantify) the assumptions of the DSGE (or CGE) model accordingly, taking into account the data on the programme's financial transfers to the economy and the characteristics of the aid recipients (methodological stage); then carry out counterfactual analyses and estimate the effects/impacts of the programme at macro-economic level (empirical phase – up to 3 annual macro-economic analysis phases).

Milestone 5. systematic design and implementation of on-going evaluations included in the FENG overall evaluation plan (including PARP interventions), inter alia on the quality of the project selection system (including criteria), barriers to project implementation (including administrative burdens), as well as on-going surveys involving beneficiaries on the usefulness of support for individual modules, the impact of support on beneficiaries' behavioural additions, the declared level of incentive and the evaluation of the 'real value of support' /conjoint, etc.

Phases 2-5 will mostly be carried out in parallel.

III. June 2026 – May 2027 – Evaluation of the PARP aid scheme in FENG (relevant phase)

Milestone 6. prepare the scope of the procurement and cooperate with the evaluator responsible for the evaluation covered by this plan; meta-analysis of data obtained in previous stages (on progress of the programme and beneficiaries, results of micro- and macro-economic analyses), preparation of counterfactual microeconomic analyses on alternative sources (optional) and other studies of a qualitative nature (methodological phase), carrying out studies, analyses and evaluations on all the collected material, drafting of a **draft evaluation report** (draft), together with a table of recommendations for consultation with stakeholders/addressees.

Milestone 7. consultation of the draft evaluation report (draft) with programme stakeholders and the addressees of the recommendations, including the evaluator's assistant.

IV. June 2027 (half year before the end of the financial implementation of the scheme) - submission of the final report on the evaluation of the PARP aid scheme under the FENG by the Polish authorities to the Commission

V. July 2027 - December 2030 - Post-evaluation phase of the PARP aid scheme in the FENG

Milestone 9. opinions/amendments/possible working arrangements for the report and the implementation of the evaluation plan between the Parties, including the evaluator's assistant (optional)

Intermediate step 10. publicationof the final report (final), approval of the evaluation recommendations by the MA/FENG Monitoring Committee, implementation of the recommendations and use of evaluation results by the Polish authorities for programming a new generation of programme with a converging objective/allocation of aid.

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

As indicated in the timetable presented in the previous point of the evaluation plan, the **Polish** authorities will submit the final evaluation report to the Commission no later than 30 June 2027, i.e. six months before the end of the financial implementation of the aid scheme in question.

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

Apart from the factors that are 'force majeure', we consider the timetable for implementation of the evaluation plan to be feasible. The findings are well thought-out and are based on the PARP Evaluation Body's nearly 20 years' experience in conducting evaluation studies, in particular such comprehensive SME support schemes, using rigorous evaluation methods (e.g. *counterfactual impact evaluation*, macroeconomic modelling), and in cooperation with policy partners and programme stakeholders. It should be stressed that the most important experience in this area derives primarily from the implementation of the evaluation plan for the PARP aid programme in the 2014-2020 OP Smart Growth.

The other factors are treated in terms of risks that will be taken into account in the processes to manage the implementation of the evaluation plan. These risks concern three areas:

(a) ensure (maintain) adequate resources to implement the evaluation plan (PARP project team with adequate competences; budget for the financing of project work and external services in the abovementioned intermediate phases);

Provision of appropriate FENG technical assistance to PARP in order to finance the costs of staff and external services serving, inter alia, the purpose of evaluating the programme, it will reduce the aforementioned risk (a).

(b) cooperation with external service providers (acquisition/maintenance of contractors providing high-quality services, including an evaluator based on a competitive procedure/Public Procurement Law; tripartite model of cooperation between CSO-Evaluator-Assessment Unit PARP).

The development of PARP's best practices in contracting innovative services (research and development, evaluation, expert) for the public sector (e.g. minimum price share in the tender selection criteria/comparative evaluation of offers, drawing on the most innovative and merit-based proposal from available, etc.) and mapping the proven model of cooperation with the Central Statistical Office in the evaluation of the previous PARP aid programme (POIR, 2014-2020) will help reduce the aforementioned risk (b).

(C) a significant change in programme theory/intervention logic during the implementation process, due to market factors (e.g. lack of demand), administrative burden (e.g. barriers to the implementation of modular projects, conditional grants, etc.), changes in intervention priorities (e.g. programme structure/allocation of aid, etc.).

Aligning the evaluation assumptions with the actual programme theory and documenting significant changes – both in the programme and in the research approach used – in the final evaluation report (dedicated chapter drawn up by the evaluator) 64 will reduce the aforementioned risk (c).

In the event of major changes to the programme that call into question the validity of this evaluation plan (e.g. reducing the average annual expenditure of the programme below EUR 150 million), we take into account the need for an agreement between the Polish authorities and the Commission on the procedure to be followed.

⁶⁴ Cf. Evaluation of PARP's state aid under the 2014-2020 OP Smart Growth. Final report, PARP Warsaw 2021, pp. 41-45 (Chapter 5. "Major changes to the PARP aid scheme and their impact on the scope of the evaluation"), www.parp.gov.pl/storage/publications/pdf/RK_PP_PARP_Final-PL_2020_06_25_Dostepny.pdf

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 aid scheme will be coordinated by PARP. An independent unit located in the Department of Analysis and Strategy (DAS) is responsible for the implementation of the evaluation processes in the PARP. The above-mentioned unit (the DAS Monitoring and Evaluation Unit) focuses its attention on the programmes, activities and projects implemented by PARP, and its tasks include in particular:

- drawing up an evaluation study plan,
- development, procurement and implementation of evaluations,

preparing assumptions, procedures and standards for internal evaluations,

to contribute to the development of proposals for instruments to support the development of entrepreneurship, innovation and human resources in Poland,

cooperation with managing authorities, intermediate bodies and other organisations designing and evaluating EU-funded programmes, including participation in evaluation working and steering groups,

construction of PARP's facilities for the evaluation of programmes of a socio-economic nature (training, studies, publications, conferences, seminars, interinstitutional cooperation) and

substantive support to other PARP organisational units in the preparation and implementation of research projects⁶⁵.

PARP Evaluation Unit

Until the contractor(s) for the evaluation/evaluator are selected, and during the period between individual contracts for tasks (intermediate stages) related to the evaluation of the aid scheme, the role of the "body carrying out the evaluation" of the aid scheme – within the meaning of the *Common methodology for State aid evaluation* – will be performed by the PARP (Assessment Unit of the Intermediate Body FENG – PARP). It has played a leading role in the preparation of this evaluation plan (as requested by the European Commission)⁶⁶ and will ensure the independence of the evaluation process of the aid scheme.

External contractors/Evaluator

The selection of the evaluator of the PARP aid scheme in the FENG (and of the other service providers, at the intermediate stages of the process) will be made in the competitive procedure (in accordance with the applicable Public Procurement Law) and will be based on criteria and conditions confirming the relevant expertise and experience in the provision of such services. This approach is well established in more than 20 years of PARP's practice in ordering and carrying out evaluation studies (this is the most experienced evaluation unit in Poland) – cf. point. 8.3 of the plan). Particular emphasis will be placed on providing relevant experts (e.g. related to the research

 $^{^{65}}$ Cf. Order No 10/2019 of the President of the Polish Agency for Enterprise Development of 31 January 2019 introducing the internal organisational structure of the Analysis and Strategy Department

^{66 &}quot;The early involvement of the evaluation body (e.g. in the design phase of the programme) is important for the effective conduct of the evaluation. Such early involvement ensures that the State aid scheme can be assessed in the proposed way and ensures that the necessary data is collected. On the with this (...) the evaluation plan should be drawn up by a designated assessor.' (Cf. Common methodology for State aid evaluation, p. 13). During this period, the PARP evaluation unit will be responsible, inter alia, for the detailed preparation of the scope of the contract for evaluation (e) (the terms of reference), taking into account, inter alia, the composition of the population of applicants (beneficiaries and unsuccessful applicants), the availability of data at a given stage of the implementation of the aid scheme and, consequently, the details of the methodology to be applied by the contractor.

centre) among the members of the executive team who demonstrate relevant knowledge and experience in the application of counterfactual methods in both micro- and macro-econometric approaches (comparison to the counterfactual/baseline scenario) in the evaluation process of economic development programmes.

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.

In accordance with the requirements of the evaluation of the aid scheme and the national 'Guidelines for the evaluation of cohesion policy 2021-2027' of 24 August 2022 (as amended), issued by the Minister of Funds and Regional Policy, in order to ensure the independence of the body carrying out the evaluation and the functional independence of the evaluation process, the PARP ensures that the evaluation process is carried out 'in an objective manner and independently of the organisational units responsible for programming and implementing interventions in the institution concerned. The condition of functional independence shall be fulfilled by (...)

- (a) entrust the implementation of the evaluation to experts or bodies external to the institutions responsible for programming and implementing the interventions, (...)
- (b) the implementation of the evaluation by the body operating within the body responsible for programming and implementing the programme or part of it, while clearly delimiting and describing the responsibilities of the staff carrying out the evaluation.'67

The evaluation process of the aid scheme (including the collection of relevant data) will be carried out both on the basis of: (a) external resources (external evaluations) as well as (b) internal (in this respect detailed design of the evaluation methodology, extraction of data from selected sources for the evaluation process, procurement of external research and evaluation work, supervision of the conduct of the evaluation process, reception and dissemination of results). However, independent evaluators (external contractors) will be entrusted with the formulation of assessments and relevant conclusions and recommendations from the evaluation, thus ensuring the independence and objectivity of the evaluation results.

It should be stressed that the PARP in no way interferes with the evaluations, conclusions and recommendations drawn up by independent contractors and experts. The evaluation process in Poland is independent and transparent. The evaluation process is initiated by the work of the Evaluation Steering Groups [e.g.: FENG]. In the first phase, the Group's work results in a comprehensive multi-annual evaluation plan for the FENG (evaluation studies planned for the PARP aid scheme under the FENG are part of the overall FENG evaluation plan). The FENG evaluation plan is approved by the FENG Monitoring Committee, in which, in addition to the administration, representatives of socio-economic partners are involved, inter alia ensuring social (citizen) control of the evaluation process. 'The role of the Monitoring Committee in evaluation derives directly from the provisions of the General Regulation and consists, in particular, in: (a) considering and approving the evaluation plan for the relevant programme and its amendments, (b) monitoring the evaluation process of the programme, (c) recommending areas and topics to be evaluated, (d) familiarising with the evaluation results and monitoring their use.'68 The representatives of the PARP Evaluation Body, who cooperate with the evaluator, are primarily concerned with the methodological correctness of the studies carried out (basis for the correctness of the findings made by the valuer), compliance with the plan (timeliness, scope of evaluation, etc.) and procedures (e.g. guidelines, procedures for implementing the FENG).

After completion of the study, in relation to the report submitted (in particular tables of conclusions and recommendations, specifying, inter alia, the method of implementation, the deadline and the addressees of the evaluation recommendations), the PARP and the authorities supervising the implementation of the programme (e.g.: The Managing Authority of the Operational Programme) may formulate its own positions (separate from that of the evaluator). The process of agreeing on

⁶⁷ Guidelines for the Evaluation of Cohesion Policy 2021-2027, pp. 11-12.

⁶⁸ Ibid., p. 17.

evaluation recommendations is separated from the evaluation process itself and is carried out as part of the so-called. The Recommendation Implementation System. The process documents the original (independent) evaluation results and the position of individual stakeholders on them (including a justification for why the recommendation was possibly rejected). Once the agreement has been completed, the implementation process of the agreed recommendations starts.

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.

PARP is the most experienced institution in conducting evaluation studies in Poland. The Agency has been carrying out continuous evaluations of the activities implemented since 2000. The Agency, together with the National Evaluation Unit, has been developing a system for evaluating European funds in Poland. In the last 22 years, the PARP has carried out evaluations of national and European development programmes, in particular the programmes to support the competitiveness and innovation of the economy, the upskilling of private sector personnel and the development of socio-economic infrastructure (including the PHARE and pre-accession Phare SSG 2000-2003, SOP-ICE and SOP RZL 2004-2006, OP IG, HC OP, OP RPW 2007-2013, OP Smart Growth, OPOPW, OPWER 2014-2020). After 2022, the PARP will carry out evaluations under the FENG, the FEPW, the FERS 2021-2027 and the Entrepreneurship and Innovation Programme under the Norwegian EEA Financial Mechanism 2014-2021.

PARP staff are high-level research and evaluation specialists and form an interdisciplinary team. They design and implement complex and ambitious (innovative) research and evaluation projects, continuously develop their workshop and share experiences with other evaluation units of the implementation system of EU funds. They work with the best universities and research teams at home and abroad.

Reference should also be made to the systematic development of the evaluation methodology carried out by PARP (2006 and 2007) in Poland's first counterfactual impact evaluations, using primary data, in quasi-experimental schemes and using the *Propensity Score Matching* technique, further studies of this type also using data from official statistics and registers of GUS, UOKIK) and the use of non-standard methodologies in evaluation projects (e.g. *mystery shopping*, projection techniques, semiotic audit, tracking and business panel surveys, *conjoint*, SNA and others).

Since 2005, PARP has been a co-organiser of the International Evaluation Conference in Poland (https://www.ewaluacja.gov.pl/strony/archiwalne-strony-konferencji-ewaluacyjnej/) and regularly publishes, inter alia, on evaluation methodology and results (https://www.parp.gov.pl/publikacje/?query=&type=1&series=13&publisher=&year=&language=&sort=year-desc&topic=&page=1). The latest publication of the PARP in 2022 is: 'Public Intelligence. Use of administrative data for monitoring and evaluation of public policies (https://www.parp.gov.pl/publikacje/publication/public-intelligence)

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

The members are:

- 1) Internal management control tools and procedures used in PARP (inter alia the Agency's annual action plans and quarterly reports on the performance of planned tasks; quarterly objectives of the Analysis and Strategy Department and quarterly monitoring of their implementation),
- (2) External audit of the Intermediate Body FENG PARP as part of the FENG implementation system procedures/instructions of the PARP in the FENG and external audits, the FENG evaluation plan and the monitoring of the progress of PARP's implementation of the plan.
- 3) Contracts with test contractors/evaluators, including procedures for supervising the execution of contracts according to their scope and schedule, and providing tools for sanctions in case of deviations/irregularities.

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:

Given that carrying out this evaluation will be a cumulative process, requiring a number of preparatory/methodological work (e.g. in cooperation with CSO) and systematic collection, analysis and reporting of data, the cumulative cost of evaluation may be significant. However, it will certainly not exceed 0.1 % of the value of the PARP aid scheme in the FENG⁶⁹.

Appropriations for PARP activities related to the evaluation of the assistance programme will be provided under FENG technical assistance, 2021-2027.

Given the expected time commitment to prepare and carry out this evaluation process, a minimum of 2 posts (3 persons/experts) will have to be secured on the PARP's side for carrying out the task on average in 2023-2027. This does not take into account the personnel costs for the testing contractors/evaluator/GUS involved.

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 preserve the transparency of the evaluation study, both this evaluation plan as well as the final evaluation report on the PARP aid scheme under the FENG will be published online (no later than 4 months after their acceptance), thus ensuring public access to information. In particular, both documents will be made available on the PARP website: www.parp.gov.pl and the Minister of Funds and Regional Policy: www.ewaluacja.gov.pl / www.funduszeeuropejskie.gov.pl or equivalent.

As this evaluation of the PARP aid scheme will also be included in the overall FENG evaluation plan (as one of the evaluation plans for operational programmes implemented in Poland under EU cohesion policy 2021-2027), it will be subject to the national 'Guidelines for the evaluation of cohesion policy 2021-2027' of 24 August 20222 (as amended), issued by the Minister for Funds and Regional Policy. One of the chapters of the Guidelines (Section 3.3.2. Publication of the results of the study) regulates in⁷⁰ detail how the results of the evaluation of the Programme (including the FENG) are made public, which will be fully respected by PARP as well as by the FENG Managing Authority (MFiPR) in relation to the final report of this evaluation.

It is not excluded that the evaluation (in particular its substantive and methodological approach) will also be disseminated through presentations/discussions/preferences at the International Evaluation Conference, organised cyclically in Poland by the Office of the Minister together with PARP or other evaluation conferences and seminars at regional and international level.

⁶⁹ Daniele Vidoni, DG COMP Unit A3 – State aid case support and policy, The adulthood of evaluation: recent developments of the evaluation requirement (see presentation by *DG COMP's approach, evaluation is an administrative proportionate effort (often less than 0.1 % of the total budget of the aid scheme and targeted)*, SAM Workshop on State aid Transparency and Evaluation, Brussels, December 2022.

⁷⁰ Cf. Guidelines for the Evaluation of Cohesion Policy 2021-2027, Section 3.3.2. Publication of the results of the study: 'Every evaluation study received shall be made public in electronic form. The Managing Authority of the [FENG] shall transmit the relevant results of the evaluation studies of the programme to the [FENG] Monitoring Committee [to a colleague composed, inter alia, of socio-economic partners, exercising social oversight over the implementation and evaluation processes of the FENG] (...). The Managing Authority of the [FENG] shall send the National Evaluation Unit, which [within 30 days of receipt] shall place it on its website [www.ewaluacja.gov.pl, in the so-called. The Evaluation Research Base] the following products [within 90 days from the date of their formal receipt]: (a) final reports, (b) other selected evaluation products, including at least a detailed description of the task used to carry out it [e.g. a plan for the evaluation of the PARP aid scheme in the FENG and/or a detailed description of the task of the evaluator] (...) The Evaluation Body [PARP] may also make the results of the studies public in a different form [e.g. baseline for further research and analysis – cf. paragraph. 9.5 evaluation plan], e.g. on the websites of their institutions [www.parp.gov.pl], in the form of paper or electronic publications and presentations at conferences and seminars.

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 a general rule, evaluation is a social, development, partnership and democratic (participatory) process, and not a purely legal-administrative process, whether or not it is based on legislation (e.g.: GBER) or bottom-up/internal information needs of the programme implementation system or its stakeholders. This is also the case for this evaluation of PARP's State aid in the FENG. Although it focuses to a large extent on answering questions about the quantitative evidence of the programme's impact (whether/to what extent it has worked) – which we believe to be in line with the Commission's assessments and meeting the requirements of the GBER – it does not limit itself to 'dry data' and expert judgements of the programme's value. The planned evaluation, at different stages of the research process, will also involve key stakeholders in the interpretation of the acquis of this programme (why did/do not work) in confrontation with the established theory. Hence, during the data collection phase, in order to properly reconstruct the theory of change and the logic of implementation and empirical verification, qualitative studies (in-depth interviews, creative/consultative workshops) will also involve PARP intervention managers, representatives of the FENG Managing Authority and stakeholders from the socio-economic environment. They will therefore be relevant actors who understand and influence implementation and those indirectly representing target groups (entrepreneurs and business environment organisations), interested in the planned change in the target area resulting from the programme's theory. This will be the "socialisation" of the evaluation process during the implementation phase.

As regards the involvement of stakeholders after the evaluation, a public consultation of the report, including in particular the conclusions and recommendations, is planned with the addressees (persons "who have the best knowledge of the solutions proposed and (...) are directly responsible for the possible implementation of the recommendations"). The PAER Evaluation Unit and the Evaluator will be involved in this process, respectively, coordinating the process and ensuring a fair interpretation of the results provided, and ensuring independence from the perspective of persons within the programme implementation system and interest representatives. The consultation will be carried out in accordance with the standards set out in the national guidelines for the evaluation of cohesion policy 2021-2027' (Section 3.4.3. Adoption and implementation of recommendations). The overall logic of the consultation process will be as follows:

- The PARP will initiate a consultation process on the report and recommendations with stakeholders/addressees⁷¹.
- Consultations will accordingly take place before the report is finally received from the evaluator (the subject of the consultation will be the preliminary report/draft) and before a decision is taken, in particular by the [FENG] Monitoring Committee, on the implementation/partial implementation/rejection of the recommendation (table of conclusions and recommendations).
- The consultation process will include at least one meeting with programme stakeholders/recommendation addresses (the main results of the so-called preliminary report and stakeholders will be able to be presented at the meeting). By way of exception, consultations may take place in a different form (e.g. electronic circuit mode). In particular, the consultation will make it possible to verify the relevance of the proposed recommendations and how they have been implemented.
- On the basis of the consultation of the report and the agreement on the table of conclusions and recommendations, the Evaluator will prepare the final report/final report, as appropriate, and the PARP will adapt the method of implementation, the deadlines, the addressees (if appropriate). However, the amendment will not cover the original content of the study

⁷¹ Separate processes concern broader recommendations going beyond the programme, i.e. horizontal recommendations, non-symmetrical recommendations or addressing issues other than the subject of the evaluation. In that case, such consultation processes shall be conducted by the FENG MA or the National Evaluation Unit, respectively.

conclusions and the content of the recommendations proposed by the evaluator (independence of the process).

- Once the consultation process has been completed, the report will be published and the recommendations submitted to the FENG MA for approval, followed by a process of implementation and monitoring (cf. SWR, Chapter 9.3 of the Plan).

PARP does not foresee dedicated/additional evaluation events, subject to the initiatives referred to in the previous point of the plan (evaluation conferences) where the results or the methodology used for the evaluation of State aid may be disseminated.

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:

By analogy with the use of the results of the evaluation of the PARP aid programme in the 2014-2020 OP Smart Growth (cf. the examples cited in Chapter 1, point (4) of the plan), when planning this evaluation, the PARP and the Managing Authority of the FENG assume that its results will be used to the fullest extent possible – inter alia in the process of shaping strategic orientations and operational solutions for a new programme with a convergent objective of stimulating the innovativeness of the Polish economy (e.g. the successor of the operational programme FENG, 2028-34). This is a rational approach and embedded in a well-established culture of using evaluations in the PARP organisation (starting from the start of its operation in 2000) as well as in the whole system of implementation of EU cohesion policy in Poland.

In accordance with the national *Guidelines for the Evaluation of Cohesion Policy 2021-2027*, the process of coordinating the use of evaluation results is being carried out in Poland within the so-called. The Recommendation Implementation System (SWR)⁷². The system is supervised by the National Evaluation Unit, located in the Strategy Department of the Ministry of Funds and Regional Policy, i.e. at a high/strategic administrative level, which is responsible for the overall management of the implementation of the Partnership Agreement and all the 2021-2027 operational programmes covered by it in Poland (including the FENG). The SWR organises the principles to be followed when adopting, implementing and monitoring the implementation of recommendations from evaluation studies. As part of the institutional organisation of the SWR, the SWR operates, among other things. National Evaluation Unit, Monitoring Committee [FENG], Managing Authority [FENG], evaluation units at lower levels of implementation [e.g.: J PARP), Research Contractor [Evaluator], Addressees of the recommendation. The guidelines set out in detail the functions of the various entities involved in the SWR and the procedures for the system for implementing recommendations.

We would like to reiterate that this evaluation of the PARP aid programme under the FENG is considered as a complementary process (study) for evaluation activities supervised by the Minister of Funds and Regional Policy (FENG MA), as part of the overall FENG evaluation plan, prepared in accordance with the provisions of the General Regulation. This evaluation will be included in the overall evaluation plan of the FENG and will therefore be subject to the same procedures as for the evaluation of operational programmes implemented in Poland under EU cohesion policy 2021-2027 (inter alia the above-mentioned Minister's Guidelines, as well as the target provisions set out in the FENG overall evaluation plan, in the agreement/contracts between the FENG MA and PARP for the implementation of evaluation tasks, implementing instructions/evaluation procedures for

⁷² The guidelines in sub-chapter 3.4 indicate 'the methods for using the results of evaluation studies', define the 'Recommendation Implementation System' (the SWR organises the principles to be followed when adopting, implementing and monitoring recommendations from evaluation studies (...) are described by the procedures, the functions of its entities, the way in which recommendations are formulated and their classification. The functioning of the system is supported by an IT database administered by the National Evaluation Unit. It contains recommendations from studies carried out within the framework of the system for evaluating cohesion policy in Poland." – cf. Guidelines, Section 3.4.2. The Recommendation Implementation System), lays down rules for the 'adoption and implementation of recommendations' and for monitoring the status of their implementation.

PARP as an entity in the FENG delivery system), including in particular as regards the use of evaluation results.

It is certain that carrying out this evaluation will also bring added value to the existing methodological results of evaluation studies or, more broadly, to good practice in developing *public intelligence* ⁷³capacities and implementing evidence-based policy in Poland and the EU. We also consider this area of use to be relevant.

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:

The data collected during the evaluation process (results bases, factsheets and/or possible encrypted qualitative interview transcripts and source documents) will be made publicly available (e.g. for further analysis or research).

This approach will coincide with the Government's 'Data Opening Programme 2021-2027' adopted by Resolution No 28 of the Council of Ministers of 18 February 2021 (https://www.gov.pl/web/cyfryzacja/otwarte-dane-publiczne). This will be possible, inter alia, under the following conditions:

- 1) guaranteeing the anonymity of individual data (respondents, companies, etc.),
- 2) ensure the protection of the contractor's secrecy (e.g. if the system that will share the data or provides pre-defined analysis schemes is covered by a licence or other form of legal protection),
- 3) the cost of preparing (formatted) and making the source data public in a comprehensible form (with an appropriate guide) will be efficient (input-value effects),
- 4) the data will indeed be useful (e.g. for research and research on the analysis of public policies and the design of new pro-innovation programmes after 2027, the development of evaluation methodologies, etc.).
- **9.5.** Please indicate whether the evaluation plan contains confidential information that should not be disclosed by the Commission:

Not applicable.

This evaluation plan is a non-confidential document, does not contain confidential information it may be made public in its entirety.

10. Other information

- 10.1. Please indicate here any other information you consider relevant for the assessment of the evaluation plan:
 - (a) When assessing this evaluation plan, we kindly ask the European Commission to take into account the following:
 - 1) the financial assistance of the PARP programme in the FENG is part of the 2021-2027 EU cohesion policy implemented in Poland (under the Partnership Agreement concluded between the Commission and the PL authorities for the period 2021-2027).
 - 2) expected as the predominant category of destination of the aid that will be present in the scheme in question (in particular under the intervention covered by the evaluation plan -i.e. the PARP measure under Priority 1). Feng SMART, "Support for SMEs and their consortia") will be regional investment aid (Section 1, Article 14 GBER).

⁷³ Cf. CHŁOŃ-Domińczak A., Pokorski J. *et al.* (EDS.). (2022). Public Intelligence. The Use of Administrative Data for Monitoring and Evaluation of Public Policies. Warsaw: Polish Agency for Enterprise Development (PARP) https://www.parp.gov.pl/component/publications/publication/public-intelligence-eng

In view of the above, the time horizon of this evaluation plan has been aligned with the period during which the operational programmes under EU cohesion policy in Poland (including FENG 2021-2027) will be implemented and the period of validity of the regional aid map in Poland, which concerns the above-mentioned categories of financial aid in the PARP programme. The Polish authorities assume (in good faith) that, ultimately, regional aid granted under the PARP aid scheme in question, by way of derogation under Article 1 (1). Point 2(a) of the GBER will be extended by the Commission until the end of the validity period of the relevant regional aid maps, i.e. until 31 December 2027⁷⁴.

(b) In order for PARP's financial assistance under the FENG, on the basis of the GBER, to be granted smoothly – in particular to small and medium-sized enterprises – this evaluation plan should receive an assessment (approval) of the European Commission no later than 6 June 2023. Therefore, in case of any questions, doubts or objections to this proposal for an evaluation plan, the Polish authorities would like to ask the Commission services to forward them to the Commission without delay. in order to respond to them and/or to correct the plan, and to submit a revised version of the plan for reassessment by the Commission (before the end of the sixmonth period after which the GBER could cease to apply to the PARP aid scheme in question in the FENG and the financial assistance could not be granted).

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

Not applicable.

⁷⁴ Article 1 2 a GBER – "The Regulation shall not apply to schemes (...) if the average annual State aid budget per Member State exceeds EUR 150 million, six months after the date of entry into force of such schemes. (...) The Commission may decide to continue to apply this Regulation for a longer period of time to (...) aid schemes following an assessment of the relevant evaluation plan notified by the Member State to the Commission within 20 working days of the entry into force of the scheme concerned. (...). However, regional aid granted under this Regulation may, by way of derogation [i.e. taking into account the end of the current period of application of the GBER, i.e. until 30 June 2024 – cf. https://www.parp.gov.pl/component/content/article/62731:pomoc-publiczna-komisja-europejska-przedluza-dotychczasowe-zasady], be extended until the end of the period of validity of the relevant regional aid maps' [i.e. until 31 December 2027 – cf. https://www.parp.gov.pl/mapa-pomocy-regionalnej-dla-polski]