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

Member States must use this sheet for the notification of an evaluation plan pursuant to Article 1(2)(a) of Regulation (EU) No $651/2014^{1}$ and in the case of a notified aid scheme subject to an evaluation as provided in the relevant Commission guidelines.

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

1. Identification of the aid scheme to be evaluated

(1)	Title of the aid scheme:					
	Federal-Länder joint task "Improvement of the regional economic structure" (GRW) — business economy					
(2)	What the evaluation plan concerns:					
	(a) a scheme subject to evaluation pursuant to Article 1(2)(a) of Regulation (EU) No 651/2014?					
	(b) X a scheme notified to the Commission pursuant to Article 108(3) TFEU?					
(3)	Reference of the scheme (to be completed by the Commission):					

(4) Please list any existing *ex-ante* evaluations or impact assessments for the aid scheme and ex-post evaluations or studies conducted in the past on predecessors of the aid scheme or on similar schemes. For each of those studies, please provide the following information: (a) a brief description of the study's objectives, methodologies used, results and conclusions, and (b) specific challenges that the evaluations and studies may have faced from a methodological point of view, for example data availability that are relevant for the assessment of the current evaluation plan. IF appropriate, please identify relevant areas or issues not covered by previous evaluation plans that should be the 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:

Empirical work on the impact of GRW investment support in the field of business economy has a long tradition: A number of studies have been published since the late 1970s, including Bölting (1976), Recker (1977), Erfeld (1980), Asmacher et al. (1987), Asmacher (1989), Franz/Schalk (1989), Schalk (1992a/1992b), Deitmer (1993), Schalk/Untiedt (1995), Blien et al. (2003), Stierwald/Wiemers (2003), Council of Economic Experts (2004), Eckey/Kosfeld (2005), Ragnitz/Lehmann (2005), Bade/Alm (2010), Alecke et al. (2013), Alm (2013), Brachert et al. (2018, 2019, 2020) and Siegloch et al. (2021). For an overview see Alm/Titze (2017) and Brachert et al. (2017). The vast majority of the analyses clearly show that the overall targets 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 (OJ L 187, 26.6.2014, p. 1).

² SWD(2014)179 final of 28.5.2014.

regional economic policy (in particular employment and income, see 2.2.) are positively influenced by the GRW.

The most recent evaluation study (Brachert et al. (2020), available at: https://www.bmwi.de/Redaktion/DE/Artikel/Wirtschaft/gemeinschaftsaufgabe-evaluierung.htmlusingmodern economist-statistical methods (in particular a combination of the difference-difference estimate and various matching methods) compares GRW-supported holdings in terms of their development with a control group of very similar holdings not benefiting from the support. Up to five years after the end of the support, employment growth in farms supported by GRW is almost 12 percentage points higher than in non-assisted farms. The main objective of the GRW to create sustainable jobs in structurally weak regions is thus achieved. In addition to the job effects, there is a markedly positive effect of the GRWvintage on the growth of the turnover of the supported enterprises. In addition, the experts have shown positive effects on regional income and productivity growth.

2. Objectives of the aid scheme to be evaluated 3

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:

Regional economic policy in the Federal Republic of Germany is an important building block of general economic policy. Its starting point is a targeted and moderate influence on the spatial distribution of economic activities in the Federal Republic of Germany.

Public intervention in the field of regional economic policy is generally justified by allocative and distributive arguments in the economic literature. While allocative theoretical justification focuses on market failures, and in particular on adaptation and flexibility deficiencies, the distribution policy justification is essentially based on the fact that purely market-based governance mechanisms have not produced satisfactory results with regard to socially relevant targets (see, in particular, Neumark and Simpson (2015), Section 18.2).

The GRW is the central instrument of regional economic policy in Germany. Since 1969, the Federal Government has been co-responsible under the GRW for balanced regional development in Germany. Cooperation between the Federal Government and the Länder in the GRW is governed by Article 91a of the Basic Law and specified in the GRW Act.

The intervention logic and the starting point of the GRW are to compensate for local handicaps in structurally weak regions and to help reduce regional disparities in development. The achievement of this objective is of great importance to society as a whole and is guaranteed by the constitutional requirement of establishing equivalent

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.

living conditions (Article 72(2)(2) of the Basic Law and Article 106(3)(2) of the Basic Law). The GRW is a classic example of 'multiactor support', the structure of which is the consequence of the federal system in Germany. The basic division of labour between the Federal Government and the Länder applies in so far as the Federal Government has the central coordinating role of the GRW and the Länder alone are responsible for the implementation of the funding, i.e. for the prioritisation and selection of projects.

On the role of the Federal Government:

The role of the federal government in regional policy stems directly from the Basic Law: 'The Federal Government shall participate in the performance of tasks of the Länder in the following areas if these tasks are of importance to the Community and the involvement of the Federal Government is necessary to improve living conditions' (Article 91a(1) of the Basic Law). This mandate gives rise to the GRW. Apart from the half-financing share, the Federal Government assumes the role of strategy and coordination within the framework of the GRW. The co-ordination framework established jointly with the Länder defines the assisted areas, objectives, principles, priorities and conditions. These apply throughout Germany and ensure, firstly, that the State aid framework conditions are implemented in a binding manner for all Länder and, secondly, that competition on location is subject to clear rules regarding support. This rule-based support ensures high transparency and binding force. The coordination role of the Federal Government also includes the monitoring and evaluation of GRW support measures.

On the role of the countries:

In the spirit of subsidiarity, the actual implementation of the funding is the sole responsibility of the Länder. In accordance with the requirements of State aid law and the coordination framework agreed between the Federal Government and the Länder, they set certain (objective) funding priorities. This is generally based on the Länder's own funding guidelines, which can depart from the coordination framework only to the extent that they can be more restrictive. These guidelines serve as a benchmark for funding for the Länder and are regularly adapted to changing framework conditions. The Federal Government has no influence over these guidelines as long as they do not exceed the scope of the coordination framework. Some countries do not have their own guidelines and promote them on the basis of the coordination framework alone.

Against this background, only the coordination framework with its binding and generally applicable rules for all structurally weak regions in Germany is suitable as the basis for the evaluation. This applies in particular to the question of the selection criteria of the specific projects. Where the Länder carry out their own performance checks, their results will be taken into account as far as possible in the context of the evaluation.

The beneficiaries are primarily small and medium-sized enterprises (SMEs), microenterprises and, in some cases, large enterprises from the following sectors:

- C MANUFACTURING
- F BUSINESS/BAU (parts)
- G TRADE; MAINTENANCE AND REPAIR OF MOTOR VEHICLES
- H TRANSPORTING AND STORAGE

- I ACCOMMODATION AND FOOD SERVICE ACTIVITIES
- J INFORMATION AND COMMUNICATION
- E.38 Collection, treatment and disposal of waste; Recovery

Due to the multi-annual study period of the evaluation, the number of beneficiaries is expected to be in the 4-digit range and will include beneficiaries from the following regions (NUTS level 2): Bavaria, Berlin, Brandenburg, Bremen, Hessen, Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, Saxony, Saxony-Anhalt, Schleswig-Holstein, Thuringia, Mecklenburg-Western Pomerania.

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:

The overall objective of the GRW is to compensate for local handicaps in structurally weak regions and to help reduce regional disparities in development. Building on the development opportunities available in the region, the aim is to create additional employment and income within the assisted areas by strengthening (business) investment, thus significantly increasing the overall regional income in the long term. Structural change will be facilitated, regional labour markets stabilised and macroeconomic growth strengthened.

The GRW is designed in the medium to long term. The wide range of funding opportunities is based on the supply side of the economy. The economic structure and development of the less-favoured regions thus remains the result of the decision of a large number of undertakings which have to compete.

2.3. Please indicate possible negative effects, on the aid beneficiaries or on the wider economy, that may be directly or indirectly associated with the aid scheme⁴:

The potential negative effects of the GRW support and the corresponding theoretical combinations of effects are discussed in the relevant literature. However, empirical evidence of these effects was only possible for very specific aspects and in a few cases. In principle, the vast majority of analyses find clear evidence of positive income and employment effects of GRW support (see Section 1). In addition, a positive incentive effect has been demonstrated: A pilot study for Saxony-Anhalt (Brachert et al. (2018)) shows that the holdings supported by GRW (during the project phase) invested significantly more than the holdings in the control group. This demonstrates the high effectiveness of the measure focused on operational investment.

Eckey/Kosfeld (2005) analyse, using a spatial model, the direct and indirect effects of GRW investment cost subsidies on gross value added per inhabitant. They show that the direct positive effect of operating subsidies on gross value added per inhabitant in the assisted regions is accompanied by a shift of investment from non-assisted areas. However, both the direct and indirect influence of funding is immaterial in their estimation approach. In addition, the analysis is limited to data for 2001 and East German regions. Alecke et al. In 2011, there are significant positive productivity effects for the period 1994-2006. If spatial effects are explicitly taken into account in

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

the estimation approach, there are negative spill-over effects, which the authors explain by means of shifts of investment from non-assisted areas. These spatial spillovers may lead to a slower pace of convergence, but are in line with the basic intervention logic and do not alter the overall positive effect of GRW support. Alecke et al. (2013) shows positive spatial spillovers, depending on regional income levels.

For other potentially negative effects (e.g. Deadweight or possible disincentives) so far there is no (broad) empirical evidence in the literature.

In a recent study, Siegloch et al. (2021) through Event Study Approaches, the causal link between GRW support and local employment for the period 1996-2016. In addition to significant positive employment effects, the authors find clear evidence of sectoral spillovers. This shows that employment effects can also be observed in the trade and construction sectors excluded from GRW support. For example, every job loss (as a result of a lack of GRW support) in the directly affected economic sectors is accompanied by an average of 0.64 further job losses in construction and trade. On the other hand, the authors do not find evidence of job shifts. The final analysis of the efficiency of the GRW support on the basis of a measure that sets the impact of the support in relation to the costs (marginal value of public funds) shows that the GRW support is as efficient as certain social benefits, unless the aforementioned spillover effects are taken into account. If these are included in the assessment, GRW support is more efficient. It is also superior to social benefits in reducing regional inequality.

- **2.4.** Please indicate (a) the annual budget planned under the scheme, (b) the intended duration of the scheme⁵, (c) the aid instrument or instruments and (d) the eligible costs:
 - (a) EUR 1.33 billion (2022 approach)
 - (b) 01.01.2022 to 31.12.2027
 - (C) GRW
 - (D) Depending on the specific investment project
- **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 for selecting beneficiaries (e.g. such as scoring), (b) the indicative budget available for each group of beneficiaries, (c) the likelihood of the budget being exhausted for certain groups of beneficiaries, (d) the scoring rules, if they are used in the scheme, (e) the aid intensity thresholds and (f) the criteria the authority granting the aid will take into account when assessing applications:

GRW support will also be provided in the period from 1 January 2022 to 31. December 2027 only in structurally weak regions. The regional aid area was defined on the basis of objective, comprehensible and transparent criteria, in accordance with the provisions of the EU-wide Regional Aid Guidelines (2021/C 153/01). As in previous periods, the methodological basis for the new delimitation was a multi-stage regional indicator model in which the extent of regional structural weakness is adequately reflected. As a result, in addition to large parts of the eastern German Länder, the assisted area includes some western German regions, particularly low-development rural regions, old industrial regions undergoing structural change and

Aid schemes defined in Article 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.

the eastern Bavarian border regions under pressure from adaptation to the Czech Republic.

The focus of the GRW is on revitalising investment in these structurally weak regions. To this end, GRW provides direct grants or interest subsidies to cover the investment costs of private companies. Support for the commercial economy, together with the investment grants for municipal business-oriented infrastructure, is a complementary offer of support for structurally weak regions.

The specific eligibility criteria are specified in the GRW coordination framework, including on job effects and the level of investment in relation to depreciation. As described in detail under 2.1, funding is the sole responsibility of the Länder. In particular, the Länder also decide whether they set their own funding priorities in their own funding guidelines or whether they support them solely on the basis of the coordination framework. In the latter case, only the eligibility criteria of the coordination framework are relevant.

If, on the other hand, the Länder use their own funding guidelines and implementing rules, these, together with the coordination framework, serve as a basis for assessing the eligibility of an application for support. For example, Lower Saxony carries out 'planning rounds' and assesses the investment projects in question on the basis of a scoring scheme. Some countries differentiate the level of support rates according to criteria such as collective bargaining/collective pay or R & D orientation of companies.

An ex-ante breakdown of the total GRW budget between different sectors/by size of enterprise is generally not carried out in the individual Länder.

2.6. Please mention specific constraints or risks that may affect the implementation of the scheme, its expected impacts and the achievement of its objectives:

Pursuant to Article 91a of the Basic Law, half of the Federal Government participates in the financing of the GRW in the Länder. In order to be able to design and implement support to the extent envisaged, it is therefore imperative that the relevant funds be made available for co-financing in the Länder. Another challenge, especially at the current juncture, is the significant supply chain disruptions in key sectors, as well as increases in the price of certain raw materials and other inputs, which may dampen investment behaviour and thus jeopardise the existence of the key condition for support.

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:

Closely following the export-base theory, the basic idea of commercial support under the GRW is to create additional employment and income within the assisted areas by strengthening investment and thus significantly increase the total income in the relevant economic area in the long term (the 'primary effect'). This additional income, ceteris paribus, leads to an increase in the purchasing power of the regional population, which also increases demand for goods from predominantly local companies and has a positive impact on regional employment and income (secondary effects) in a further round of effects.

The main objective of the evaluation is to determine as valid as possible the impact of support for investment by the business economy on the behaviour of beneficiaries and the main targets of the support (employment and income). More specifically, it examines the following issues, among others:

(a) Direct effects:

- Did the GRW support actually have an incentive effect on the investment activities of the supported farms?
- What was the causal effect of the GRW support on the development of income and employment of the supported farms?
- Can different effects (e.g. for certain farm sizes, sectors/sectors, by structure of employees, aid intensity and regions) be observed (effect heterogeneity)?
- Can effects on the competitiveness of the supported holdings be identified, as well as indirect results (e.g. skill levels of employees, R & D intensity of holdings)?

(b) Indirect effects:

- Can negative, distortive or other unplanned effects of the programme (e.g. intra- and inter-regional displacement) be expected?
- Can spillovers (e.g. sectoral or regional) be identified?

(C) Proportionality/adequacy:

• How is the cost-effectiveness of the programme to be assessed, i.e. what is the relationship between impact and resources spent?

4. Result 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.):

In order to examine the development of the supported holdings and the (possible) heterogeneous effects of measures, relevant indicators (depending on the specific data availability, see Section 6) are analysed. Deviations from the indicators listed below and in Table A1 in the Annex are possible if the relevant data are not available in the required regional breakdown and/or if the evaluators consider it necessary for methodological reasons.

(a) Direct effects:

Following the explanations on the research questions to be examined in 3.1, in addition to investment, the development of employment and income or wages, the main targets for the promotion of the business economy under the GRW and, consequently, the key indicators of the evaluation project (cf. bath/Alm (2010)). In addition, other targets have increasingly become the focus of the analysis of the causal effect of the GRW. This concerns, for example, competition (measured, in particular, by labour productivity or export ratios, see for example: Brachert et al. (2018)) and the innovativeness (measured, for example, by indicators on patent applications or R & D intensity) of the supported farms.

(b) Indirect effects:

The relevant indicators (employment trends, wages, investment, etc.) at the appropriate level (e.g. for non-assisted sectors or neighbouring regions) should be used to analyse possible spill-over effects. The same applies to possible displacement effects of employment or investment. Alternatively, direct and indirect effects of the demand stimulus triggered by GRW support on production and employment for the individual sectors of the economy can be calculated using an input-output analysis. The relevant model components (including value added rates, labour coefficients and compensation of employees) can be derived from the respective input-output tables.

(C) Proportionality/adequacy:

For example, an assessment of the programme's cost-effectiveness can be made by comparing GRW support with certain social benefits in relation to selected target indicators (development of investment and employment, regional inequality) (cf. Siegloch et al. (2021)).

Detailed explanations of the respective data sources can be found in Section 6.

Please explain why the chosen indicators are the most relevant for measuring the expected impact of the scheme:

See above.

5. Methods envisaged 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 discarding other methods (for example, reasons related to the design of the scheme)⁶:

A Methodology for the additional report (due 06/30/2027)

The analysis of the causal effect of the GRW on the supported farms reveals a number of methodological difficulties which can be roughly divided into two groups: The first difficulty arises from the fact that a farm has been either supported or not supported, but cannot be the case at the same time. It is not known how a supported holding would have developed under the assumption of its non-funding. It is therefore impossible in principle to compare actual/observable development with the result of the hypothetical/counterfactual situation, which is usually referred to in the literature as a 'fundamental evaluation problem'. Apart from this lack of counterfactual evidence, the second major methodological difficulty is the "selection problem" (including "selfselection"): Although non-supported holdings can be observed, they provide a 'true' picture of the counterfactual development of the supported holdings if they are not supported, provided that there is no systematic distortion between the two groups of those variables which — in addition to the probability of support — also influence the target size(s). This condition would be met if the allocation of funding and thus the division of holdings into the testing and control group were not carried out in a discretionary manner, but were the result of a random control trial. However, the supported holdings are not selected randomly, but on the basis of the above-mentioned eligibility conditions/selection criteria, with particular emphasis on the expected regional economic impact of the projects.

The central task of external scientists is to solve both methodological difficulties sufficiently well by using an appropriate econometric evaluation procedure and thus to avoid misinterpretation of the causal effect of GRW funding. In other words: it must be ensured that (i) the development of the supported holdings which would have occurred if the holdings had not participated in the programme is examined by simulating the counterfactual situation and (ii) the elimination of systematic distortion between the testing and control groups. For the selection of analytical methods, the internationally recognised standards of effect research are used (see, for example, Khandker et al. (2010), European Commission (2014), Madaleno and Waights (2016) or Storey (2017)).

Different approaches (see, inter alia, Alm (2013)), such as a regression-discontinuity design (RDD), an estimation based on instrument variables (IV approach) and a difference-of-difference approach (DID) are fundamentally suitable for identifying the causal effect of GRW support.

In practice, an RDD approach seems to be only partially appropriate, as the necessary information on eligible running variables is generally not available or not in a uniform

Please make reference to SWD(2014)179 final of 28.5.2014.

format for all countries. As set out in 2.1 and 2.5, the Länder may set their own funding priorities and thus define their own selection criteria. The underlying valuation grids could be used as a running variable. However, these data are not currently available in a standardised and uniform form at national level. Under the IV approach, a variable would have to be found which only indirectly affects the target size through the funding status and therefore has no direct effect on the target size. For example, in the context of the GRW support considered here. Changes in policy parameters defined at European level as IV in question. However, it would be essential for these changes to be sufficiently long to be able to monitor the evolution of target levels over a longer period of time. A DID approach is based on the assumption that the farms supported by GRW would have developed in the same way as without GRW support if they had not been supported. As this assumption is not directly testable, matching procedures can be used to form the control group. In doing so, the aid should be as close as possible to non-supported undertakings in the control group in important characteristics relating to the target size. Matching variables come, for example. Measure of sector, size class, competitiveness or variables used to map the structure of the enterprise's workforce. The specific selection of matching variables is partly determined by the information available in the datasets used.

For all the estimations chosen, care should be taken to control the relevant determinants of the target sizes. In particular, efforts should also be made to develop an approach to take account of the possible influence of other funding programmes. This is currently possible only to a very limited extent due to different data standards. In this regard, however, the new Federal Government's coalition agreement 2021-2025 provides for the establishment of data as uniform as possible. Where appropriate possibilities exist at the time the evaluation is carried out, these shall be used where reasonable by reasonable means.

Indirect effects that go beyond the direct effects of GRW investment aid on 'reputed' firms and individuals (especially spill-over effects) can be estimated, for example, on the basis of 'geographical' models. Alternatively, the macroeconomic effects of the demand stimulus triggered by GRW support can be calculated using an input-output model. This approach makes it possible to identify direct and indirect effects. In addition, the output, value added, employment and income effects triggered by the use of labour income can be approximated. Proportionality/adequacy effects can be achieved, for example, by comparing the cost-effectiveness of the GRW programme with certain social benefits. An example can be found in Siegloch et al. (2021).

Depending on the methodology chosen, all analyses shall be supplemented with robustness tests. For example, where matching is used, various such procedures should be used (e.g.: Radius matching and Coarsened Exact Matching). In addition, the 'promotional effect' should be analysed over time (e.g. via panel regressions) by subdividing the average aid effect into partial effects.

B Methodology for the final report (due 09/30/2023)

The methodological principles described under A) will also be applied in the upcoming evaluation of the GRW under the General Block Exemption Regulation (GBER). In line with these principles, this evaluation includes an analysis of the causal impact of the GRW

on the supported farms for the 2014-2020 period. In addition, in a descriptive part, first data on the start of the new GRW funding period for 2022 are compiled and presented in an overview form. In the form of tables and graphs, for example: Data from the authorisation statistics (details in Section 6) on total investments supported, the number of projects supported or the jobs created (in addition, where possible, by economic activity or farm size class). In addition, at this very early stage of the new funding period, the allocation of GRW funds at regional level can be traced as far as possible.

On the basis of these initial descriptive classifications and the findings related to impact analyses, assessments of possible strengths and weaknesses of the evaluation approach described under A) can be made and, where appropriate, approaches to adaptation can also be outlined. These may be taken into account in the call for tenders for the subsequent evaluation project.

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. Please describe in detail the composition and the significance of the control group:

See the detailed explanations in sections 5.1, 5.3 and 6.1.

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

The selection process described in 2.5 means that the projects and holdings selected under the GRW support cannot constitute a purely random selection of holdings in Germany. It follows directly from this that, in certain characteristics, the supported holdings may be systematically different from the other non-subsidised holdings. If there are systematic differences between treatment and control groups, while at the same time influencing farm results, this could potentially distort the effect of the support. The selection of appropriate evaluation methods (details in section 5.1) must therefore ensure that these potential selection distortions are adequately addressed. See also Section 6.

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:

6. Data collection

6.1. Please provide information on the mechanisms and sources for collecting and processing data about the aid beneficiaries and about the envisaged counterfactual.⁸ Please provide a

For 2021, at the time of the evaluation under the GBER (see section 7.1 for the timetable), not all the required data sets are yet available at the required level of detail. This concerns, in particular, operational and employment data from the Institute for Labour Market and Vocational Research (IAB).

Please note that the evaluation may 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.

description of all the relevant information that relates to the selection phase: data collected on aid applicants, data submitted by applicants and selection outcomes. So please explain any potential issue as regards data availability:

In order to be able to answer the research questions of the evaluation as comprehensively as possible, different data sources will be narrowed down. In the absence of comprehensive and detailed data, key assumptions of the possible econometric methods to analyse the impact of the support cannot be tested and the results may be distorted.

The starting point for individual farm analyses is the data from the GRW funding statistics, which can be broadly broken down into the areas of authorisation and expenditure statistics. The approval statistics introduced in 1972 ('statistics of approved aid cases') are based on notifications submitted monthly by the Länder to the Federal Office for Economic Affairs and Export Control (BAFA). Notifications on authorisation statistics must be made if:

- funds from the joint scheme for an investment project were granted for the first time (initial notification);
- changes to the initial authorisation occur in the course of the implementation of the investment project until the end of the verification of the use of funds, in so far as these changes affect statistically relevant facts (change notification),
- Funding from the Land for the reinforcement of the joint task has been granted in accordance with the rules of the coordination framework and in addition to the funds of the joint task, or an authorisation decision has been revoked by revocation or revocation.

Since the target data from the authorisation statistics collected at the start of the investment may differ from the actual end-of-investment data as a result of possible changes to the plans during the implementation of the investment project, the statistics on expenditure were added to the funding statistics in 1994. This data source provides the actual values of investment and GRW funds and operational information on the additional and secured permanent jobs after completion of the investment project. In 2007, a further element was added to the funding statistics. Since then, the number of jobs occupied in the supported establishments has been collected in an additional five years after the end of the investment, and thus after the expiry of the validity period, as part of a second check on the use of funds.

Since the funding statistics do not include all relevant indicators, other data sources are also used. More specifically, employment statistics from the Federal Employment Agency and official company data from the Statistical Offices of the Federal Government and the Länder are available. The employment statistics of the Federal Employment Agency (detailed information is available, for example, in Ganzer et al. (2020)) represents a total survey of all employees subject to social security contributions in the Federal Republic of Germany. It includes all the information provided by employers in connection with a multi-stage registration procedure for the statutory sickness, pension and unemployment insurance for their full social security contributions and for minor employees with a place of work in the Federal territory. Workers not subject to compulsory social security cover are excluded from this group. These are civil servants, self-employed persons, family

workers, judges, professional soldiers, conscripts, persons called up for civilian service and regular students.

The Federal Agency's employment statistics primarily contain information on the labour market characteristics of establishments. Statements on investment and competition-related aspects cannot be analysed with this dataset. The official company data for Germany (AFID, detailed information available at:

http://www.forschungsdatenzentrum.de/bestand/afid-

panel_industrieunternehmen/index.asp), and in particular the AFID Panel Industrial and Industrial Enterprises. These link information from various official statistics (annual reports, investment survey, cost structure survey) from the statistical offices of the Federal Government and the Länder. The most relevant information for the evaluation of the GRW is the sector, location, employment, turnover, investment, wages and salaries. This dataset is a full survey of enterprises/holdings with more than 20 employees from the economic sections of manufacturing, mining and quarrying for Germany. Establishments in these sectors are the largest group of applicants in the GRW programme. The annual reporting group currently includes around 68 000 companies. Alternatively, the use of datasets from private providers (e.g.: Bureau van Dijk). These mostly ensure better sectoral coverage. However, the data quality of these datasets is generally much worse than official data (such as the AFID data proposed here).

These data sets allow for impact analyses. As explained in Sections 2.5 and 5.3, the group of holdings supported by GRW is not a random selection from the German farm landscape. The analytical methods must adequately address this situation. One possibility is, for example, to precede a matching process. This must be based on operational characteristics that affect both the probability of participation and the target size.

Differences between supported and non-supported holdings can be observed and thus 'controlled' — and thus used to construct the counterfactual scenario — on the basis of the comprehensive data described above. Given the considerable size of the testing group, the potential control observations and a rich set of covariates, it can be assumed that the supported holdings and the non-supported holdings belonging to the control group do not differ in terms of the probability of support (or, in the case of a control group of ineligible holdings, there are no significant differences between the control group and the supported holdings).

It is of particular importance that the available vector of covariates contains the main determinants that determine the selection into treatment and target sizes. In theory, unobservable variables could nevertheless have some influence on the probability of support and targets. Unobservable, but not subject to change over time, characteristics can be adequately addressed by panel econometric methods. In summary, the following can be said: The specific characteristics of the data set for the evaluation of the GRW justify the

expectation that the testing and control holdings can also be regarded as largely statistical twins with regard to the specific nature of the unobservable characteristics.

See Section 7 for the data status and possible period of analysis of the operational impact analyses described above. Data for possible input-output analyses are provided, for example, by the Federal Statistical Office (starting with 1995).

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?

See section 6.1.

6.3. Please indicate whether the access to the necessary data for conducting the evaluation may be hindered by laws and regulations governing confidentiality of data and how these issues would be addressed. Please mention other possible challenges related to data collection and how they would be overcome:

See section 6.1.

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:

Surveys of beneficiaries are not planned.

7. Proposed timeline of the evaluation

7.1. Please indicate the 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:

A Timeline for the final report (due 09/30/2023)

IWH scientists responsible for evaluating the 2014-2021 GRW funding period (SA.39460/Brachert et al. (2020)) will also carry out the analyses described in section 5.1 A). The preparation of the corresponding data sets has already started. First interim results are expected by mid-2022. For reasons of data availability, a descriptive analysis of first data at the beginning of the new funding period can be carried out at the earliest by the end of the first quarter of 2023. The evaluation report shall be submitted by 30 September 2023. Interim reports are not foreseen.

B Timeline for the additional report (due 06/30/2027)

As regards the timing of the evaluation, the principle of "as early as possible, as late as necessary" applies. On the one hand, the group of supported enterprises must reach a certain size in order to allow for robust statements on the effects of the support (especially because of the intended regional, sectoral and farm-specific differentiation of analyses). This means that a certain period of time must elapse before the start of the evaluation project. On the other hand, the observation period must be of a certain length in order to be able to gain insight into the non-short-term effects of the support. Both considerations support the view that the evaluation project should start in 2025 and that the period 2022-2024 should be chosen as the study period, depending on the availability

of data (depending on data availability, it must be examined whether and to what extent information regarding GRW support from previous years can also be used). In order to comply with this timetable, the evaluation project must be publicly tendered in the second quarter of 2024 at the latest. In order to measure the longer-term effects of the support, the evaluation report to be submitted by 30 June 2027 should be supplemented by a further report drawn up after the end of the funding period. Data for the full 2022-2027 funding period will be used in this additional report. Interim reports are not foreseen. The results of this evaluation will be comparable to similar analyses carried out by other Member States. This also means that the evaluation of the GRW can be used as part of a meta-evaluation at EU level.

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

The short and long version of the evaluation will be sent in good time before the end of the funding period (at the latest on 30.06.2027).

7.3. Please mention factors that may affect the prospective timeline:

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 next evaluation of the GRW will also seek to maximise the credibility and acceptance of the results of the investigations. A first condition for this is the independence of evaluators, who, in compliance with public procurement rules, will be selected on the basis of a negotiated procedure with a prior competition. The award decision will take into account various criteria justified by the subject of the contract (primarily the quality of the tender and the competence of potential contractors, appropriateness of the service, price). The contract will be awarded to the most economically advantageous tender, taking into account all the circumstances (the lowest tender price alone is not decisive). The evaluation (including the call for tenders) must be carried out in accordance with the requirements of the Federal Budget Code.

- **8.2.** Please provide information on the independence of the body conducting the evaluation and on how possible conflict of interest will be excluded during the selection process:
 - The evaluation will also be carried out by external scientists during the 2022-2027 funding period.
- **8.3.** Please indicate the relevant experience and skills of the body conducting the evaluation or how these skills will be ensured during the selection process:
 - The expertise of the suppliers will be assessed in the context of the tender procedure.
- **8.4.** Please indicate which arrangements the granting authority will make to manage and monitor the conduct of the evaluation:
 - In addition to regular project meetings, several presentations of interim results to the GRW Sub-Committee are planned to accompany the evaluation project on a continuous basis.

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:

The resources needed will be identified as part of the procurement procedure.

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:

The Federal Ministry of Economic Affairs and Climate Protection will publish the evaluation in a short and long version and the evaluation plan on a website accessible to the general public (www.bmwk.de). The summary summarises the main findings and recommendations for action of the analyses in an easily understandable and comprehensible presentation. The full text also contains, in particular, all essential information on the methodological approach, the data base and differentiated empirical results. The results of ongoing monitoring and funding statistics, as well as the descriptive statistics on the development of holdings, which are thus made possible, are also included in the full text. In order to allow the results to be replicated, the external scientists provide the Federal Ministry of Economic Affairs and Climate Protection with the evaluation files (in particular the codes for data processing and calculations) and the data sets on which the analyses are based (where this is possible for data protection reasons). The Federal Government of the Federal Republic of Germany undertakes to make the relevant datasets available to the European Commission (in anonymised form). The Federal Government will also send the short and long version of the evaluation to the European Commission in good time before the end of the funding period (at the latest on 30 September 2027). The preliminary final results of the evaluation may be subject to informal exchanges with the European Commission. In addition, the Federal Government of the Federal Republic of Germany agrees to inform the European Commission informally about the progress of the evaluation and any difficulties that may arise which would jeopardise the implementation of the evaluation plan.

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 in previous GRW evaluations, regular presentations of interim results are foreseen in the GRW Sub-Committee and discussions with the Länder are foreseen. The preliminary final results of the evaluation may be subject to informal exchanges with the European Commission.

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

The results and recommendations for action of the GRW evaluation will be taken into account in the further development of the GRW.

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:

Funding data in anonymised form shall be made available on request for scientific purposes.

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

The evaluation plan does not contain confidential information.

10. Other information

	Please indicate here any other information you consider relevant for the assessment of e evaluation plan:
	Please list all documents attached to the notification and providing paper copies or direct ternet links to the documents concerned:
••••	

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Annex

Table A1: Overview of possible result indicators

Tuble 111. Gverview	(Result) indicators	Comparison group	Data source	Frequency of data collection	Level of survey	Population	Identification strategy
Direct effects on beneficiaries	primarily: Investment (incentive effect), employment, income/wage; in addition: Labour productivity; alternatively: Value added rates, labour coefficients, compensation of employees	non-assisted holdings	Federal Office for Economic Affairs and Export Control (BAFA), Institute for Labour and Professional Research (IAB), official company data for Germany (AFID)	quarterly/annual	Investment project, farm level	Total survey for enterprises with 20+ employees/total survey of all employees subject to social security contributions (where appropriate, differentiated according to e.g. Regions, sectors or farm size classes)	DID (upstream matching)/input- output analyses
Indirect effects (positive/negative)	primarily: Investment (incentive effect), employment, income/wage; alternatively: Value added rates, labour coefficients, compensation of employees	for example, non- supported sectors, neighbouring regions (e.g. Spillovers, intra- and inter-regional displacements)	Federal Office for Economic Affairs and Export Control (BAFA), Institute for Labour and Professional Research (IAB), official company data for Germany (AFID), Federal Statistical Office	quarterly/annual	Investment project, farm level, regional level	Total survey for enterprises with 20+ employees/total survey of all employees subject to social security contributions (where appropriate, differentiated according to e.g. Regions, sectors or farm size classes)	spatial models/input output Analyses
Proportionality/adequacy	Investment, employment	e.g. See districts above or below the best. Threshold	Federal Office for Economic Affairs and Export Control (BAFA), Institute for Labour and Professional Research (IAB), official company data for Germany (AFID), Federal Ministry of Digital and Transport	quarterly/annual	Investment project, farm level, regional level	Total survey for enterprises with 20+ employees/total survey of all employees subject to social security contributions (where appropriate, differentiated according to e.g. Regions, sectors or farm size classes)	e.g. Event Study Design