**The evaluation study on the effects of the support measures for enterprises (including SMEs) and their innovativeness and internationalisation in the Lower Silesian Voivodeship in the perspective 2014-2020**

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Authors:

Maciej Gajewski (Study Leader),

Jan Szczucki, Robert Kubajek, Bogdan Pietrzak, Justyna Witkowska

Contractor:

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| **Policy & Action Group Uniconsult Sp. z o. o.**  00-728 Warsaw, ul. Kierbedzia 4  Tel. 22 256 39 00, Fax. 22 256 39 10  biuro@pag-uniconsult.pl⎪www.pag-uniconsult.pl | Logo PAG Uniconsult |

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# List of abbreviations

|  |  |
| --- | --- |
| Abbreviation | Definition |
| BGK | Bank Gospodarstwa Krajowego |
| DSD | Development Services Database |
| CAWI | Interview conducted through the Internet/Internet webpage (Computer-Assisted Web Interview) |
| CATI | Computer- Assisted Telephone Interview |
| CAWI/CATI | Interview conducted by means of the CAWI technique, and (on a supplementary basis) the CATI technique (CAWI/CATI mixed mode) |
| LSSS | Lower Silesian Smart Specialisation (comp. RSS) |
| LS VLO | Lower Silesian Voivodeship Labour Office |
| ESF | European Social Fund |
| FGI | Focus Group Interview |
| IDI | Individual in-depth interview |
| BEI | Business environment institution (institutions) |
| IB of the ROP LS | Intermediate Body (in the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020) |
| MA of the ROP LS | Managing Authority of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020 |
| SMEs/MSMEs | Micro, small and medium-sized enterprises |
| PA | Priority Axis of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020 |
| RESs | Renewable energy sources |
| PLO | Poviat Labour Office |
| RSS | Regional Smart Specialisation (in the meaning of the Development Strategy for Voivodeship Smart Specialisations, including the EU guidelines RSS3) |
| RIS LS | Regional Innovation Strategy for the Lower Silesian Voivodeship (2011-2020) |
| ROP LS | Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020 (hereinafter referred to as the ‘Programme’) |
| CASA | Call and Assessment System of Applications under the ROP LS 2014-2020 (CASA) |
| DDCS | Detailed Description of the Contract Subject |
| CS | Case study |
| ITIs | Integrated Territorial Investments |

# Executive Summary

The study on the effects of the support measures for enterprises (including SMEs) addressed several vital components. In particular, it referred to the identification of the logic of public intervention as regards the support oriented towards research and development (R&D), innovativeness and competitiveness of enterprises, intervention in the area of the low-emission economy and also selected support instruments for SMEs and individuals in relation to the restructuring processes influencing the labour market.

The study on the functioning of the Lower Silesian Smart Specialisation (LSSS) comprised a separate research component. As a result of this part of the analysis, the functioning of the concept of smart specialisations of Lower Silesia can be correct. At the same time, specific proposals can be put forward to enhance its functioning to become an operational tool to a greater extent, focusing the distribution of support from public funds (Regional Operational Programme ‘Lower Silesia’, in particular the new perspective).

As for the support measures under Priority Axis 1 (PA1) of the ROP LS, their functioning can be confirmed consistent with the assumed logic of the intervention. As a result, the development triggered by the support measures programmed under this Axis significantly contribute to attaining its objectives (through implementing specific objectives of the respective measures) and ultimately the principal objective of the Programme. Similar conclusions can be formulated about the analysed measures under PA3 and PA8.

Moreover, 76% of the beneficiaries evaluated the support measures under PA1 of the ROP LS to be adequate to their needs to a great or very high extent. The evaluation gives similar results for the analysed measures of PA 3, i.e. the sum of opinions underlining a very high or high adjustment of the intervention to the needs of the financed projects is 86% in Measure 3.1 and approx. 78% in Measure 3.2.

In view of the objectives of intervention in the area of supporting R&D&I activities, of crucial importance were two measures (Measures 1.2 and 1.5), which proved to be highly effective. Both instruments triggered a development stimulus encouraging research and development activities in enterprises (in particular SMEs) and also supporting the implementation of innovative solutions (products and manufacturing methods) in the SME sector in Lower Silesia. The interventions mostly focused on the projects matching the Lower Silesian Smart Specialisations, while providing an effective tool for implementing the Lower Silesian Strategy for Regional Smart Specialisations.

Due to certain shortcomings, Measure 1.4 turned out to be more arguable, regarding support for the internationalization of enterprises along with the creation of new business models. In particular, support for preparing strategies for entering new foreign markets attracted rather widespread criticism – the usefulness of such documents was minimal in most situations.

However, as for the support in the form of innovation vouchers (generally assessed favourably), it was highlighted that the list of eligible service providers should be extended (only research units were eligible as a rule) to cover, among other things, the services provided by research laboratories or entities with the status of a R&D centre. In general, voucher programmes were welcomed as initiatives that are highly capable to trigger interest in the research and development cooperation between enterprises in the SME sector and the science. It was emphasized that they must be continued, whereby it was pointed out that it would be justified to make them more attractive (by expanding – as mentioned earlier – the catalogue of service providers in the voucher programme or increasing the value of vouchers). The opinions about the grant programmes, under which advisory services for SMEs were co-financed, were somehow contrary to the highly favourable evaluation of the voucher programmes The entities implementing the projects emphasized a relatively limited interest in such form of support and the difficulties in evaluating its usefulness from the point of view of the final beneficiaries' interests, as well its adequacy and effectiveness for the objectives of the regional intervention.

The greatest support under PA 1 per one economic entity was recorded in the Oławski, Dzierżoniowski and Świdnicki Poviats, whereas the lowest one in the western and northern parts of the region (in the Zgorzelecki and Lubiński Poviats and the Legnica and Jelenia Góra City Poviats).

As for the evaluated measures related to the labour market, the general effectiveness of the support and the proper preparation of all projects implemented under these measures are confirmed by the results of both qualitative and quantitative studies. In the area related to the support for outplacement activities, the contractors' representatives believe that the projects were implemented without major problems (the first project was the only one that did not attain all assumed objectives, which was due to the limited unemployment level and a small number of liquidated companies/redundancies during the project implementation, and the competitive support under Measure 8.3 <’Self-employment, entrepreneurship and creation of new jobs’>). The opinions of the final beneficiaries are also very positive – 71% of the respondents highlighted that their professional situation improved thanks to the project.

Similar favourable opinions were expressed about the support for increasing the competitiveness of enterprises and entrepreneurs from the MSME sector by co-funding the so-called development services (in particular trainings). 82% of the entrepreneurs believe that the development services addressed the training needs of the respective entities well. On the other hand, 73% of the final beneficiaries taking part in the evaluation study are definitely of the opinion or rather think that the development services contributed to increasing their chances on the labour market in case they would need to find a new job, while 86% stated that they gained new competences. In future, it is worth considering how to solve the problem of a severe disproportion between the supply of measures and the respective demand, in particular in Wrocław and in its neighbouring municipalities, which sometimes resulted in closing the calls for applications after ten minutes or so.

Considering the management of the ROP LS, the idea of grant projects proved successful, in particular those implemented by the business environment institutions based in the region. These projects revealed only certain problems with cash flows because of the lengthy analysis of payment applications that were examined in the same procedure as the payment applications of individual entrepreneurs implementing projects financed with a grant. It should however be discussed further whether it is reasonable to implement the support measures in the area of entrepreneurship with the use of the Integrated Territorial Investments; such solution brings both advantages and limitations with it.

In terms of the applied criteria for evaluating the project applications, a significant part of the beneficiaries participating in the study and ineffective applicants (depending on the measure - 76% up to 90%) deem the applied evaluation criteria rather or definitely understandable. Other features of the adopted evaluation system were also welcomed. However, the greatest criticism (though still a minority) referred to the timeliness of the evaluation process (approx. 32% of the respondents had some reservations in this respect).

The conclusions and recommendations from the study, concern the following matters:

* Perfecting the concept of the Lower Silesian Smart Specialisations, including a review (using the entrepreneurial discovery mechanism) and possible modifications of the catalogue of the specialisation areas, as well as refining the tool for monitoring how the Smart Specialisations evolve under the influence of the targeted public support.
* It is also justified to strengthen the importance of the Lower Silesian Smart Specialisations in the support distribution processes by using them to a larger scale as a mechanism for selecting projects co-financed from public funds, contributing to R&D&I activities (through the requirement that the projects must be consistent with the specialisation areas in the research and development projects, eventually innovative projects, or at least through strengthening the importance of the specialisation as a mechanism favouring the selection of projects).
* In the future financial perspective of the ROP LS, it is recommended to continue the intervention in its thematic form corresponding to the scope of the support offered under Measure 1.2 (Supporting R&D activities) and Measure 1.5 (Supporting innovativeness and competitiveness), with particular focus to be place on continuing the support measures in the form of ‘Innovation voucher’ programmes, and improving their current offer (especially in terms of increasing the available individual support, ensuring a broad and uninterrupted availability of the support measures and expanding the catalogue of eligible service providers). The rationality to continue such support arises from the need to support the development of collaboration between SMEs and scientific and research institutions.
* Implementing certain support schemes through the operators of grant programmes (mainly Business Environment Institutions) proved to be a very successful solution. The only limitation that must be corrected in the subsequent programming period relates to the settlement of expenses and the transfer of funds, as these areas require specific adjustments. Within the framework of the ROP LS 2021-2027, if feasible for formal reasons, it will be necessary to maintain the possibility that the grant programmes are managed by external operators on behalf of companies, while the settlement of management costs should simultaneously be simplified (it would be ideal if they could be settled on a lump-sum basis) and a separate and swift path for settling co-financed expenditures should be developed.
* The role of the Integrated Territorial Investments (ITIs) and intermediate bodies in individual areas of the ITIs for entrepreneurship (in fact only the grant projects for enterprises because the usefulness of the ITI approach is obvious in the projects concerning the infrastructure for supporting entrepreneurship) should be analysed and discussed. While directing separate financial allocations for supporting entrepreneurs in individual sub-regions seems reasonable, the benefits resulting from the ITI mechanism should be analysed in depth, although the adopted ITI mechanism has several advantages. Therefore, the drawbacks and advantages of using the ITI mechanism for supporting individual entrepreneurs should be analysed carefully.
* The substantive evaluation of the projects for entrepreneurs was mostly performed[[1]](#footnote-2) by the staff of the intermediate bodies rather than external experts. As a result, the R&D projects were sometimes evaluated by persons who did not possess sufficient technical knowledge. Moreover, the formula of an expert panel holding meetings with applicants was hardly used, although being highly valuable, especially for evaluating complex, innovative projects. Hence, we recommend that within the framework of the ROP LS 2021-2027 external experts should be engaged more often, above all to evaluate the most complex, highly innovative projects and R&D projects that require the most technical knowledge. In both areas, the experiences of the Polish Agency for Enterprise Development and the National Centre for Research and Development in evaluating R&D projects and those implementing the results of R&D works (including the experiences in the organization and management of expert panels) can prove highly useful.
* The support targeted at entrepreneurs under the measures financed from the European Social Fund (Measure 8.5 and 8.6) is viewed very positively and addresses needs of entrepreneurs and their staff. Therefore, in the next programming period it would be worth considering whether the support in a similar form, as mentioned above, should be continued. In working on the rules for the support measures, it is worth considering the serious developments on the labour market (for continuing Measure 8.5), and designing such solutions that will counteract – especially in the Wrocław sub-region - the significant disproportion between the demand for support and the financing capacities (for continuing Measure 8.6).

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# Introduction

## Objectives and subject matter of the evaluation study

This Report is to present the results of the study entitled ‘Evaluation study on the effects of the support measures for enterprises (including SMEs) and their innovativeness and internationalization in the Lower Silesian Voivodeship in the perspective 2014-2020’, conducted during the 1. half of 2020. The evaluation study covered selected intervention instruments in the framework of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020 (hereinafter referred to as the ‘ROP LS’ or the ‘Programme’)[[3]](#footnote-4), under implementation during the current financial perspective.

The overriding objective of the evaluation study was to verify the implementation of the assumptions of the support measures of the Programme for the regional enterprise sector, in particular micro, small and medium-sized enterprises, on the basis of the analysis of experiences from the current implementation process of the ROP LS, with particular focus placed on the evaluation of the impacts of the interventions on the innovativeness, competitiveness and internationalization of SMEs operating in Lower Silesia. To supplement, attaining the overriding objective of the evaluation study will result in building a knowledge base that will be useful for programming the support measures in the following financial perspective of the ROP LS (2021+). Considering the general objective of the ROP LS (‘Increasing the competitiveness of Lower Silesia to ensure an improved standard of living of its inhabitants by respecting the principles of sustainable development’[[4]](#footnote-5)), it should be noted that the Programme is an instrument of support to address the objectives of intervention set out in the key strategic documents of the Lower Silesian Voivodeship, i.e. the Development Strategy of the Lower Silesian Voivodeship[[5]](#footnote-6) (DS LS) and the Regional Innovation Strategy for the Lower Silesian Voivodeship[[6]](#footnote-7) (RSI LS).

The overriding objective of the evaluation shall be decomposed into a set of specific objectives. These objectives shall include:

1. the evaluation of the relevance, usefulness and timeliness of the intervention logic of the Programme, the objectives pursued and the forms of support in relation to the current needs of beneficiaries, as well as the evaluation of the effectiveness and efficiency of the support measures targeted at the SME sector and of the management of the related processes,
2. the identification of factors having an adverse impact on the objectives pursued and the correct implementation of the objectives of the ROP LS; and
3. the formulation of recommendations to specify actions to strengthen the pursued objectives of the ROP LS with regard to the support measures for the SME sector.

The defined specific objectives cover several key research areas being of a horizontal nature. In this respect, the following should be mentioned above all else: the evaluation of the availability of support in the context of the objectives of the ROP LS, the evaluation of the operational effectiveness of the project selection system (e.g. with a view to fostering innovation and internationalization of the Lower Silesian SME sector), the evaluation of expected developments at the level of beneficiaries and final support recipients, the significance of the implementation context of the Programme, the applied monitoring arrangements and the proposed actions recommended for improving the competitiveness and innovation of the Lower Silesian regional economy in future.

The implementation of these evaluation objectives was based on the analysis (study) of a specific set of intervention instruments that are implemented under the Programme. For the purposes of this evaluation, they encompass:

**Diagram 1.** Subject matter of the evaluation - selected intervention instruments of the ROP LS.

*Source: Own study.*

* **Priority Axis 1 (PA1)** ‘Enterprises and innovations’. The intervention of this Axis focuses on two thematic objectives: (TO1) ‘Strengthening research, the technological development and innovation’ and (TO3) ‘strengthening the competitiveness of SMEs/…/’. For the TO1 interventions (as indicated below in Measures 1.1 and 1.2, according to the nomenclature defined in the Detailed Description of the Priority Axes[[7]](#footnote-8) of the ROP LS), the support measures were planned only for the projects that fall within the areas defined in the Regional Strategy for Smart Specialisations of the Lower Silesian Voivodeship (Measures 1.1 and 1.2), and for one of the TO3 measures (Measure 1.5; for the promotion of product and process innovation), preferences were planned for the projects that correspond to the smart specialisations of the Voivodeship. In line with the scope of the thematic objectives and the accompanying investment priorities, the intervention under this Priority Axis concentrates on five measures being (with all of them being covered by this study):
* **Measure 1.1** ‘Strengthening the R&D potential and the implementation potential of universities and scientific units’; orienting the support measures towards increasing the research potential, quality and scope of application of the scientific research on a regional basis,
* **Measure 1.2** ‘Innovative enterprises’ on increasing the scale of the enterprises’ R&D activities, increasing investments in such activities, and including the financing of professional pro-innovation services,
* **Measure** **1.3 ‘**Entrepreneurship development’, to be attained through increasing the level of investment in the SME sector and improving the conditions for the enterprise development (including those being in the initial stage of development) - preparation of investment sites, infrastructure for enterprise development and advisory services,
* **Measure** **1.4** ‘Internationalization of enterprises’, focusing on financing the creation of new business models to internationalize the Lower Silesian SMEs, implement the models, and to promote the region's economic offer,
* **Measure** **1.5** ‘Development of products and services in SMEs”[[8]](#footnote-9), aimed at improving the competitiveness and technological and organizational advancement of enterprises, through supporting the product and process innovativeness in the SME sector, as well as the investments to implement the R&D results attained under Measure 1.2.
* **Priority Axis 3 (PA 3)** ‘Low-carbon economy’[[9]](#footnote-10). The support measures under this Priority Axis refer to the thematic objective ‘Supporting the transition towards the low-carbon economy in all sectors’ (TO4). The intervention covers the areas of: (1) producing energy from renewable energy sources, (2) energy efficiency in SMEs, (3) energy efficiency of public-utility buildings and multi-family residential buildings, (4) producing of energy in high-efficiency installations, and (5) reducing low transport/chimney emissions as part of comprehensive low-carbon strategies. This evaluation of two of the above instruments, i.e.:
* **Measure 3.1** ‘Producing and distributing renewable energy’, ensuring the development of new, less environmentally intrusive, pro-saving and pro-efficient renewable energy technologies and contributing to building the region's energy safety;
* **Measure 3.2** ‘Energy efficiency in SMEs’, targeting projects to reduce conventional energy demand in the SME sector and to reduce the electricity consumption in the production processes.
* **Priority Axis 8 (PA 8)** ‘Labour market’. The intervention of this Priority Axis covers the thematic objective of ‘Promoting sustainable and high-quality employment and labour mobility’ (TO8). This Priority Axis covers interventions in several areas, including two interventions that are considered in this evaluation[[10]](#footnote-11). They include:
* **Measure 8.5** ‘Adapting to the developments in the economy as part of the outplacement actions’, providing support to those made redundant, planned to be made redundant or at risk of redundancy for reasons relating to the work establishment, and to those leaving agriculture, targeting at starting non-agricultural employment, in the form of outplacement programmes (a comprehensive set of measures tailored to the individual needs of the support recipients);
* **Measure 8.6** ‘Increasing the competitiveness of enterprises and entrepreneurs in the MSME sector’ (micro, small and medium-sized enterprises), addressed to the SMEs and their employees, concerning the development of competences (of workers) and comprehensive development services in line with business needs. Support distributed by means of the demand financing mechanism for development services through the Development Services Database.

On the following pages (Table1), we present a supplementary specification of the intervention instruments that are subject to this evaluation.

**Table 1.**  Intervention instruments of the ROP LS considered in the evaluation.

| IP | Measure of the DDPA ROP LS | Types of projects/support schemes | Type of beneficiary |
| --- | --- | --- | --- |
| IP 1.1 (IP 1.a) | Measure 1.1 (IP 1a)  Strengthening the R&D potential  and the implementation potential of universities and scientific units | Supporting the development of research and development infrastructure:   * purchasing of fixed assets and intangible assets necessary for carrying out R&D work for enterprises, * building investments in the construction, reconstruction, development of R&D infrastructure may be part of the support. | * public scientific units and their consortia * public universities/high schools and their consortia * consortia of public scientific units/universities/high schools (acting as consortium leaders) with entrepreneurs |
| IP 1.2 (IP 1.b) | Measure 1.2 (IP 1b)  Innovative enterprises | 1.2.A. Support for enterprises wishing to start or develop the R&D activities:   * financing the innovation development process, * purchasing and adaptation to implement the results of R&D work and intellectual property rights.   1.2.B. Building and developing R&D infrastructure for enterprises:   * creating and developing R&D facilities in the field of: specialist laboratories, R&D departments, R&D centres.   1.2.C. Business services:  a. professional pro-innovation services provided by the BEIs;  b. non-repayable support in the voucher formula - subsidies to the services for SMEs.  1.2.D. Development and professionalization of the support offer of the pro-innovation business environment. Projects for supplementing R&D infrastructure - Business Environment Institutions (BEIs). | * for project types 1.2.A. 1.2.B, 1.2.C.a: enterprises and consortia with their participation * for project types 1.2.C.b.: SGUs and BEIs * for project types 1.2.D: BEIs |
| IP 1.3 (IP 3.1) | Measure 1.3 (IP 3a)  Entrepreneurship development | 1.3.A. Preparing investment sites  1.3.B. Support for enterprise-related infrastructure  1.3.C. Advisory services for SMEs (excluding the advisory services planned in Measure 1.2 and in Measure 1.4) | * for project types 1.3.A: SGUs and BEIs * for project types 1.3.B: as above + LAGs and universities * for project types 1.3.C: BEIs, LAGs, SMEs |
| IP 1.4 (IP 3.b) | Measure 1.4 (IP 3b)  Internationalization of enterprises | 1.4.A. Creating new business models for SMEs  1.4.B. Strengthening the international expansion of SMEs by implementing new business models and strengthening expansion into external markets  1.4.B.a. Long-term business strategies  1.4.B.b. Modern management methods  1.4.b.c. Economic contacts and promotion on domestic and international markets  1.4.C. Promoting the region's economic offer on domestic and international markets. | * for project types: 1.4.A, 1.4.B.a and 1.4.B.b: SMEs, LAGs * for project types 1.4.B.c: SMEs, LAGs, SGUs * for project types 1.4.C: SGUs, BEIs |
| IP 1.5 (IP 3.c) | Measure 1.5 (IP 3c)  Development of products and services in SMEs | 1.5.A. Support for product and process innovation of SMEs  1.5.B. Support for investments in implementing the R&D results of Measure 1.2  1.5.C. Support through financial instruments | * for project types 1.5.A and 1.5.B: SMEs * for project type 1.5.C: entity implementing the financial instrument in the fund of funds formula |
| IP 3.1 (IP 4.a) | Measure 3.1 (IP 4a)  Producing and distributing renewable energy | 3.1.A. Projects aimed at producing electricity and/or heat through building and modernizing the infrastructure for producing renewable energy  3.1.B. Construction, modernization of the electricity grid enabling renewable electricity generation units to be connected to the National Energy System by operators of the distribution system  3.1.C. Grant projects - construction of micro-installations for producing renewable energy  3.1.D. Support through financial instruments  Projects aimed at producing electricity and/or heat through building and modernizing the infrastructure for producing renewable energy | Multiple entities including:   * SGUs * energy enterprises * SMEs * social enterprises * housing cooperatives and housing communities |
| IP 3.2 (IP 4.b) | Measure 3.2 (IP 4b)  Energy effectiveness in SMEs | 3.2.A. Extensive energy modernization of facilities, including the replacement or modernization of energy sources, with an aim to increase energy efficiency  3.2.B. Support for waste heat recovery installations  3.2.C. Using energy efficient technologies in the enterprise  3.2.D. Support through financial instruments (with the scope of support corresponding to the scope for schemes 3.2.A-C) | * SMEs * groups of agricultural producers * entity implementing the financial instrument in the fund of funds formula (3.2.D) * enterprises with the majority shareholding of the SGUs |
| IP 8.4 (IP 8.v) | Measure 8.5  Adapting to the developments in the economy  as part of the outplacement actions  (IP 8v) | Support for the adaptation and modernization outplacement processes (a comprehensive set of actions tailored to the individual needs of the project participants) | * A very large group of beneficiaries |
| Measure 8.6  Increasing the competitiveness of  enterprises and entrepreneurs  in the MSME sector (PI 8v) | Increasing the competitiveness of the Lower Silesian SMEs through services provided within the framework of the Development Services Database (enabling the development of the enterprise and/or its staff, in particular the purchase or validation of qualifications, the improvement of the processes or operating areas of the enterprise, a partial or complete revision of the business profile) | * A very large group of beneficiaries |

Source: DDPA ROP LS 2014-2020

## Methodology of the study

The methodology used in the evaluation was determined by two factors:

* the objectives and subject matter of the evaluation study, and
* the initial catalogue of the required study techniques (as a minimum methodology).

The specialist subject matter of the evaluation required to use a study methodology that would cover a wide range of different techniques, both within the range of qualitative and quantitative methods, which would enable empirical data to be collected according to the objectives and broad scope of the study. An important element of the study instrumentation was also the analysis of legacy sources, including documents, expert opinions and publications related to the subject matter and objectives of the study[[11]](#footnote-12). This technique was particularly important in the implementation of a dedicated study component, which was the identification of the distribution of projects funded from the ROP LS by Regional (Lower Silesian) Smart Specialisations. This analysis covered projects funded under PA 1. It was mainly based on the analysis of project applications from the Call and Assessment System of Applications under the ROP LS 2014-2020 (CASA) and (on a supplementary basis) on the query of information from the Internet websites of the beneficiaries of the support measures.

**Table 2.**  Summary of study techniques

| No. | Technique and group of respondents | Study perspective | Sample | Method |
| --- | --- | --- | --- | --- |
| ❶ | Analysis of existing documents (sources) - *desk research* | Including applicants under PA 1 projects | All applicants | Qualitative |
| ❷ | Individual in-depth interviews | Representatives of the institutions/bodies involved in the implementation of the ROP LS (systemic and implementation perspective) | 19 IDIs | Qualitative |
| ❸ | Individual in-depth interviews | Beneficiaries of the ROP LS | 16 IDIs | Qualitative |
| ❹ | Case studies - Beneficiaries of the ROP LS[[12]](#footnote-13) | Beneficiaries of the ROP LS | 3 CSs | Qualitative |
| ❺ | CAWI/CATI study (mixed mode) | Beneficiaries of the ROP LS (PA 1 + PA 3) | y/y = 354 CAWI/CATI questionnaires | Quantitative |
| ❻ | CAWI/CATI study (mixed mode) | Applicants implementing the projects and ineffective applicants (PA 1 + PA 3 | y/y = 352 CAWI/CATI questionnaires | Quantitative |
| ❼ | CAWI/CATI study (mixed mode) | Beneficiaries (entrepreneurs) and project participants (natural persons)  (Measures 8.5 and 8.6) | y/y = 1,212 CAWI/CATI questionnaires | Quantitative |
| ❽ | Focus Group Interview[[13]](#footnote-14) | Representatives of the Business Environment Institutions engaged in the implementation of the ROP LS (e.g. representatives of the institutions implementing grant projects) | 2 FGIs, performed in the form of telephone interviews (12 x ITI) | Qualitative |
| ❾ | Expert panel | Institutions/bodies engaged in the implementation of the ROP LS (e.g. representatives of the Managing Authority, the Intermedia Bodies, the Monitoring Committee) | 1 EP | Qualitative |

Source: The summary was compiled on the basis of the Methodological Report and the implementation of study techniques.

## Remarks concerning the evaluation process

The study material used as a source of information for preparing this Report was collected (upon the agreement of the Methodological Report) during the period from mid-February until mid-May 2020 or so. However, it was originally planned to complete the field studies in early April.

Unfortunately, the spread of the COVID-19 virus in Poland turned out to be a serious barrier in performing all the field techniques (both qualitative and quantitative) according to the assumptions made upon preparing the Methodological Report. Practically starting from mid-March, the quantitative studies performed at that time and the attempts to arrange direct interviews have not brought satisfactory results (contrary to the studies launched in the 2. half of February and performed until early March). This was caused by the immobilization of many enterprises and the switching to remote working (as a result, the databases, used to contact potential respondents, turned out to be highly incompatible). Soon afterwards, the direct contacts were hardly possible due to the introduction of administrative restrictions along with the imposed rules of social distancing.

The aforementioned situation made it necessary to restructure the manner in which the research techniques were to be used (i.e. to transform the interviews planned in the direct formula into interviews carried out in the remote formula - via telephone or Internet communication platforms), as well as to extend the duration of the study. The latter factor was triggered by the need to repeat study tours by means quantitative techniques. Appropriate arrangements were agreed by the Contracting Authority and the Contractor by the middle of April 2020[[14]](#footnote-15). The changes implemented at that time partly improved the effectiveness of the study. As for the quantitative studies, the implementation level of samples achieved through the extension of the study process was indeed incomplete, but proved to be sufficient (satisfactory) for formulating conclusions according to the objectives of the study.

Since the majority of the quantitative and qualitative studies[[15]](#footnote-16) were performed during the COVID-19 pandemic, the collected empirical observations must be conditional to some extent, as they have been influenced by the pandemic. If the crisis ceases to exist within a short period of time, the Authors believe that the conclusions drawn from the study will remain valid to a large extent (although probably not completely). Otherwise, in case the economic crisis deteriorates, some of them may unfortunately cease to be valid - at least partially.

# Analysis of the intervention logic for the analysed R&D support instruments under the ROP LS 2014-2020

## Objectives and intervention instruments of the ROP LS 2014-2020

The instruments analysed in this evaluation are the solutions under which public support is implemented. These instruments fall within the three Priority Axes of the Programme (PA 1, PA3 and PA 8). All of them are intervention mechanisms aimed at implementing the overriding objective of the ROP LS, i.e. ‘Increasing the competitiveness of Lower Silesia to ensure an improved standard of living of its inhabitants by respecting the principles of sustainable development’, by considering the (specific) logic characteristic for each individual Priority Axis.

In analysing the logic of the support offered under the ROP LS, it should be noted that the very Programme is an instrument for implementing the broader strategic objectives of the voivodeship's development. It is operational and implementing in nature. It was therefore established as an instrument for implementing the provisions of the Development Strategy of the Lower Silesian Voivodeship, specifying the bundles of support measures envisaged for implementation in accordance with the established financing and implementation system that are its founding components.

The analysis of the intervention logic reveals that the Programme is consistent with the assumptions of the Voivodeship Strategy, both in terms of objectives and measures. This applies both to the strategy that formed the basis for intervention and to the theoretical framework of the Programme upon its formulation (DS LS 2020[[16]](#footnote-17)), and to the new version covering the period up to 2030 (DS LS 2030[[17]](#footnote-18)).

As for the former document, the objectives[[18]](#footnote-19) and measures under different Priority Axes of the Programme correspond to the interventions specified in the strategy ‘Macro-sphere’ (depending on the specific nature of the problem area covered by the Macro-sphere), as well as the specific objectives of the strategy[[19]](#footnote-20):

* the first specific objective - ‘Knowledge-based economic growth’,
* the second specific objective - ‘Increasing the competitiveness of enterprises, in particular SMEs’ (for both objectives, the Programme envisages measures to be implemented under PA 1),
* the third specific objective - ‘Environmental protection, resource efficiency and adaptation to climate change and improvement of safety” (PA 3 of the Programme), and
* the sixth specific objective - ‘Increasing employment and labour mobility’ (the Programme refers to the measures programmed under PA 8).

The structure of interventions resulting from the ROP LS highly corresponds to the second (current) Voivodeship Strategy[[20]](#footnote-21), which (currently) constitutes the substantive basis for designing the support measures within the framework of the new Lower Silesian Regional Operational Programme (ROP LS 2021-2027).

Referring back to the current Programme (2014-2020), the compatibility of the interventions envisages in Priority Axes and measures analysed herein reflects above all in the strategic objectives of the DS LS 2030, as well as the corresponding operational objectives and the accompanying operational objectives of the so-called strategic projects/groups of strategic tasks, i.e.[[21]](#footnote-22):

* with regard to the first strategic objective (‘An effective us of the economic potential of the region’) - operational objectives 1.2 and 1.3 (respectively) to strengthen the competitiveness of the region on a national and European basis and to develop innovativeness, including the eco-innovation of the region; in this respect, the most strategic projects/groups of strategic tasks (e.g. support for entrepreneurship, the development of business environment services, internationalization, the promotion of the region/regional brands, the development of regional specialisations, the development of innovation services and stimulating the cooperation between the economic and scientific sectors),
* with regard to the third strategic objective (‘Strengthening the regional human and social capital’) - operational objective 3.3, aimed at improving the regional and local labour markets; for projects/groups of strategic tasks, it should be pointed out that it is consistent with the area of ‘Supporting and boosting economic activity of the residents of the region’, and
* with regard to the fourth strategic objective (‘A responsible use of resources and the protection of the assets of the environment and cultural heritage’) - operational objective 4.4., aimed at supporting the production of renewable energy and at promoting energy safety; in particular the strategic projects covering the stimulation of research works and the implementations related to the production of renewable energy and the measures aimed at energy saving and improving the effects of the energy consumption.

In conclusion, the objectives and measures under the three analysed Priority Axes continuously correspond to the revised strategic arrangements. This also means that the envisaged intervention instruments concern relatively persistent problem areas for the development of the Lower Silesian Voivodeship, in fact those well identified in the context of the most important socio-economic challenges facing the Lower Silesian Voivodeship (besides, these are not specific challenges for the voivodship, but they are universal in nature and refer to the entire country).

An important supplementing factor determining the strategic adequacy of the from the ROP LS 2014-2020 involves its alignment with the objectives of the different strategic document being ‘The Regional Innovation Strategy for the Lower Silesian Voivodeship 2011-2020’ (RIS LS)[[22]](#footnote-23), in particular in the light of the assumptions and objectives of PA 1, ‘Enterprises and Innovations’, most strongly referring to the content of this Strategy. The RIS LS offers a tool for implementing the innovation policy of the voivodeship, focused on the objectives related to the pro-innovation development of enterprises, the diffusion of knowledge, the support for the marketing of new products, services and processes. The Strategy sets out four strategic objectives two of which are directly reflected in PA 3 of the Programme. They include[[23]](#footnote-24):

* Strategic objective 2 - ‘Increasing the chances of success for innovative business projects’ and its specific objectives, including the availability of support in the form of capital, knowledge and infrastructure, as well as the promotion of R&D activities in enterprises; this area (practically) covers all the measures under PA 1, in particular Measures 1.2 and 1.5, including (in Measure 1.5) the scheme of financial instruments;
* Strategic objective 3 - ‘Increasing the innovation potential of the Lower Silesian scientific units’, which includes two specific objectives: the first objective assuming that the Lower Silesian Voivodeship will become a leader in the implementation of the strategies for regional smart specialisation, and the second objective concerning the improvement of knowledge commercialization processes in the scientific units - in principle, the assumptions are at least partially implemented through the projects financed from Measure 1.1 of the ROP LS and (less often) under the infrastructural projects financed from Measure 1.3 of the ROP LS.

As for the remaining strategic objectives of the RIS LS, it is difficult to point out, in relation to the activities analysed in this evaluation, broader direct links between the intervention instruments and the innovation strategy (however, given the remaining measures of the Programme - outside of the scope of this Report - such links are probable to exist).

In this respect, the ongoing evaluation of the RIS LS may be referred to on a supplementary basis[[24]](#footnote-25). In general, its results reveal the need to actualise this document (the Innovation Strategy) due to the changes in the strategic intervention directions that have taken place in recent years and have been reflected (inter alia) in the EU documents. In this area, the evaluators highlighted above all the matters of the ‘circular economy’, the Industry 4.0, and the further internationalization of the regional economic system and the wider digitization (e.g. the DIH concept involving the Digital Innovation Hubs). It should simultaneously be emphasized that the assumptions and objectives of the RIS LS, attained only in part, remained consistent with the objectives set by the overarching strategy documents at the level of the voivodship, Poland and the European Union. On the other hand, the results achieved by the voivodeship in the area of innovativeness confirm the validity of the defined objectives. It was also noted that the RIS LS had some weaknesses, mainly in terms of the formulation of the strategic objectives ‘that should be simplified and made easier to understand’. The evaluators of the RIS LS deemed the dispersion of funding sources to be a weakness in the strategy.

Given the general intervention logic of PA 1 of the Programme, it should also be pointed out that certain of its measures are embedded in the Lower Silesian Strategy for Regional Smart Specialisations. Measures 1.1 and 1.2 involved a formal requirement that the projects financed therefrom must correspond to the Regional Smart Specialisations. On the other hand, Measure 1.5 envisages that the consistency with a smart specialisation would be given preference at the stage of selecting projects to be co-financed from the ROP LS.

The thread concerning the process of creating and formulating the smart specialisations for the Lower Silesian Voivodeship reflected in the aforementioned evaluation of the RIS LS. It was concluded in this respect that the implemented process of selecting the smart specialisations for the voivodship had fulfilled the formal requirements for preparing such documents. However, the evaluators state that there were some problems with meeting the condition of ‘social inclusion, which was included at a relatively late stage, which finally resulted in an insufficient involvement of the stakeholders of the regional innovation system in the implementation and development of a bottom-up process for setting priorities. Nevertheless, a catalogue of regional smart specialisations was defined, which was ultimately used to target the support within the support measures under PA 1 of the Programme.

The overall evaluation of the alignment of the intervention instruments of the ROP LS, which are analysed in this study, with the main strategic documents is completely satisfactory. This is confirmed by the results of the specific analyses performed for individual Priority Axes of the Programme, which take into account the assumptions of the intervention of all the instruments covered by this study (the measures under the analysed Priority Axes). Within their thematic areas and the development impulses caused, all of them reveal an appropriate adjustment to the strategic assumptions for the voivodeship’s development. This also means that in terms of the adequacy of the strategic challenges for the regional economy of Lower Silesia, the adopted approaches to target the public intervention may - in principle - be replicated in the future financial perspective of the ROP LS.

## Intervention logic of the Programme under the analysed measures

The following sections restore the logic of the interventions analysed in the evaluation, the selected supporting measures of the three Priority Axes (PA 1, PA 3 and PA 8.) of the ROP LS 2014-2020.

The results of the analyses reveal three general schemes, one scheme for each of the analysed Priority Axes (Diagram 2 - Support under PA 1 ‘Enterprises and innovations’, Diagram 3 - PA 3 ‘Low-carbon economy’ and Diagram 4 – PA 8 ‘Labour market’). The diagrams below include all the specific intervention instruments (measures) that fall under the analysed Priority Axes covered by the evaluation.

The description (diagrams) were prepared in the following manner:

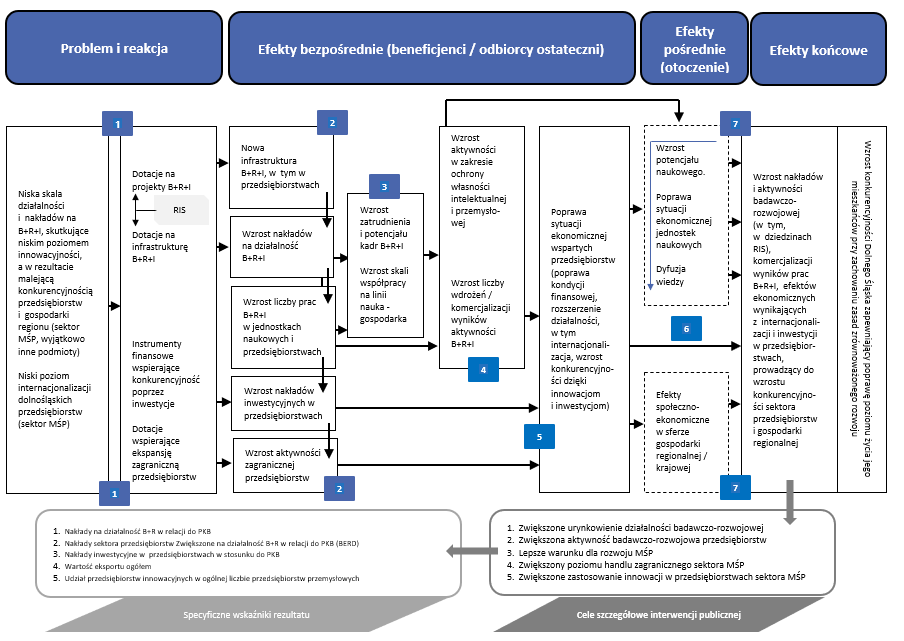
* the logic is restored on the basis of a model which starts from a specific problem situation, which was the basis for programming the public intervention in the form of specific forms of support (the analysed measures involve two forms, i.e. grants or financial instruments - however, the operational mechanism is based on grants to a larger extent);
* afterwards, the model is used to identify potential effects of the public support in the form of two types of effects:
* direct effects, i.e. those relating to the beneficiaries of the support (the final recipients of the measures under which the projects implemented by the beneficiary would involve a further distribution of the support to the final recipient), and
* indirect effects impacting a broader environment in which the beneficiaries/final recipients of the intervention operate;
* finally, the diagrams show the most important final effects of the support.

The presented models are an attempt to theoretically reflect the basic objectives of the Programme's intervention and its expected results. The authors draw attention to their key elements, deliberately seeking to make some simplification in order to make the models more transparent (therefore, these models do not fully reflect the reality of such type of support, but focus on the fundamental issues corresponding to the objectives and subject matter of this evaluation). The programming documentation of the analysed support measures is a point of reference for the presented descriptions.

Arrows are used to connect the ‘blocks presented on the diagrams, characterizing individual elements of the logic of the support measures. They indicate the relationship between the various elements of the logic. The selected dependencies are assigned numbers to facilitate the description of the relationship and the conditions for the assumed effects to occur. The descriptions to individual diagrams characterize the main relationships and conditions.

### Enterprises and innovations - PA 1

**Diagram 2.** Priority Axis 1 - logic of intervention.

**

*Source: Own study.*

Problem and reaction

1. Low scale of R&D activity and expenditures resulting in a low level of innovativeness and, in consequence, a deteriorating competitiveness of enterprises and of the regional economy (the SME sector, exceptionally other entities).

Low level of internationalisation of the Lower Silesian enterprises (the SME sector).

Grants for R&D projects -> LSSSs

Grants for R&D&I infrastructure

Financial instruments for supporting the competitiveness through investments

Grants for supporting the international expansion of enterprises

Direct effects (beneficiaries/final recipients)

2. New R&D&I infrastructure, including in enterprises

Increased expenditures for R&D&I activities

Increased number of R&D&I projects in scientific units and enterprises

Increased investment expenditures in enterprises

Increased international activity of enterprises

3. Increased employment and potential of the R&D&I staff

Increased scale of cooperation between the science and the economy

4. Increased activity in the protection of intellectual and industrial property

Increased number of implementations/commercialisations of the results of R&D&I work

5. Improved economic situation of the supported enterprises (improved financial condition, expansion, including internationalisation, increased competitiveness thanks to innovations and investments)

6. Increased scientific potential

Improved economic situation of scientific units

Diffusion of knowledge

Socio-economic effects in the regional/national economy

Indirect effects (environment)

7. Increased expenditures and R&D activity (including in the fields of the RSSs), commercialisation of the results of R&D&I work, economic effects of the internationalisation and investments in enterprises, boosting the competitiveness of the enterprise sector and of the regional economy

Final effects

Increased competitiveness of Lower Silesia, contributing to improving the standard of living of its residents subject to the sustainable development rules

Social result indicators

1. R&D expenditures to GDP

2. Expenditures of the enterprise sector. Increased R&D expenditures to GDP (BERD)

3. Investment expenditures in enterprises to GDP

4. Total value of exports

5. Share of innovative enterprises in the total number of industrial enterprises

Specific objectives of the public intervention

1. Increased commercialisation of R&D activities

2. Increased R&D activities of enterprises

3. Improved conditions for the development of SMEs

4. Increased share of international trade of the SME sector

5. Increased use of innovations in enterprises of the SME sector

Intervention under PA 1 ‘Enterprises and innovations’, taking the form of the measures programmed and implemented thereunder, addresses two key problems:

1

* the low scale and value of R&D expenditures (mainly in the regional SME sector), resulting in a low level of innovation, which ultimately translates into a declining competitiveness of the Lower Silesian economy, and
* the low level of internationalization of the Lower Silesian SMEs, resulting in a limited level of participation in international exchanges and, consequently, limited opportunities to derive benefits from such exchanges.

The response to the aforementioned problems, based on the instruments of public support instruments, involves grants and financial instruments that are offered in the five support measures under this Axis. The former (grants) apply to all the analysed measures: 1.1, 1.2, 1.3, 1.4 and 1.5, while the financial instruments were identified as a separate scheme in Measure 1.5 (Scheme C)[[25]](#footnote-26).

Part of the instruments (Measures 1.1 and 1.2) envisage that the projects are obligatorily targeted at the Lower Silesian Smart Specialisations. On the other hand, the projects funded under Measure 1.5 specify that preference will be given to the projects being consistent with the regional specialisations. Thus, certain measures supporting PA 1 are specific instruments to implement/develop the Lower Silesian Smart Specialisations. Such border conditions determine the specifications relating to the subject matter and theme of the projects supported under the aforementioned measures.

The implementation of the different types of projects covered by PA 1 -according to the specifics of the individual support measures - in terms of their direct effects (i.e. the effects arising by the grant beneficiaries or final recipients of support) - results in the development of new R&D and innovation infrastructure (R&D&I) and, above all, increases the expenditures for R&D and innovation activities being accompanied by an increasing number of R&D and innovation projects[[26]](#footnote-27). The R&D expenditures incurred increase the investment expenditures in the enterprises being the beneficiaries of the support and by the final recipients of the support (mainly in the SME sector in both cases), in the form of financial instruments aimed at financing the investments increasing their competitiveness (Measure 1.5, Scheme C, ‘Support through financial instruments’), or of voucher and grant programmes that are targeted (respectively) at the technological development and the activation of the business-science and at increasing the competitiveness of enterprises (grants for advisory services). On the other hand, the support planned under Measure 1.4, through financing the development of short - and long-term internationalization strategies, export business development plans and the implementation of new business models in enterprises, should contribute to the internationalization of the Lower Silesian SMEs and their international competitiveness (new cooperation relationships, launching/testing of export sales, new export contracts, entering into distribution channels on foreign markets).

2

The increased expenditures for R&D&I activities and the increased number of such projects that are implemented in the enterprise sector should contribute to increasing the number of the R&D staff in enterprises, while the involvement in new projects should gradually strengthen the potential of the staff in charge of the implementation of such projects. Given the specificities of the R&D projects, additional activity in this field translates into an intensified cooperation between the enterprise sector (especially SMEs) and the scientific and research units (e.g. universities). These results, combined with the key factor being the result of the direct support, i.e. the increased investment expenditures, trigger new market implementations or an effective commercialization of the R&D&I results. For some solutions, these results will be accompanied by an increased activity of the beneficiaries with regard to the protection of intellectual property and industrial (e.g. new patents).

3+4

[key direct result of the intervention] All the aforementioned partial direct effects generate a positive change in the economic condition of the supported enterprises. This change reflects (inter alia) in the expansion of their activities, including through the internationalization, the improved financial condition and - more generally - the increased competitiveness resulting from the effectively implemented/marketed innovations and launched investments that improve the manufacturing quality and sales capacity.

5

The direct effects, i.e. those affecting the beneficiaries or final recipients of the support measures, result in a positive change in the environment (by generating certain indirect effects). As for the intervention instruments under PA 1 in particular, such developments may be expected in terms of the increasing scientific capacity, the improving economic condition of the scientific units that increasingly use the commercial services (specific result of Measures 1.1 and 1.2, and partly of Measure 1.5), as well as in the processes of knowledge diffusion that are the most general direct effect of the support measures. All the partial effects of a direct nature, which contribute to improving competitiveness and, consequently, the economic condition of enterprises, translate into positive effects in the broader socio-economic sphere of the voivodship.

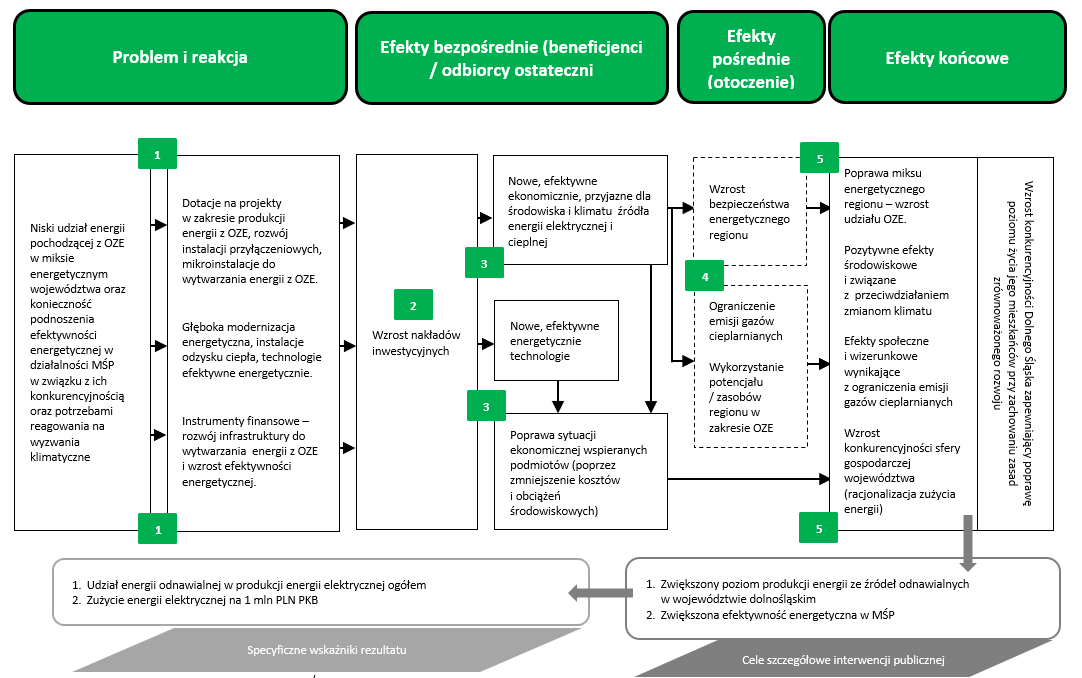
6

The public intervention, implemented through the support measures under PA 1, ultimately contributes to increasing the R&D expenditures and activities (including in the areas covered by the Regional Smart Specialisations), the commercialization of the R&D&I results, as well as the economic effects of the internationalization and investments in enterprises, while strengthening the competitiveness of the enterprise sector (SMEs) and of the regional economy. It can certainly be concluded that these effects correspond to the overriding objective of the ROP LS and to the development objectives resulting from all these strategies thanks to its relevance to the specific objectives of the DS LS 2020 and the DS LS 2030. Such intervention ultimately results in an improved standard of living of the residents of the Lower Silesian Voivodeship.

7

### Low-carbon economy - PA 3

**Diagram 3.** Measures 3.1 and 3.2 - logic of intervention.

**

*Source: Own study.*

Problem and reaction

1. Low share of energy from RESs in the energy mix of the voivodeship and the necessity to improve energy efficiency in the activities of SMEs in terms of their competitiveness and the necessity to react to climate challenges

Grants for projects in the production of energy from RESs, development of connection installations, micro-installations for producing energy from RESs

Thorough energy modernisation, heat recovery installations, energy efficient technologies

Financial instruments – development of the infrastructure for producing energy from RESs and increased energy efficiency

Direct effects (beneficiaries/final recipients)

2. Increased investment expenditures

3. New cost-effective, environmentally and friendly sources of electricity and heat energy

New energy efficient technologies

Improved economic situation of the supported enterprises (through decreasing costs and environmental burdens)

Indirect effects (environment)

4. Reduced emissions of greenhouse gases

Using the potential/resources of the region in the field of RESs

5. Increased energy safety of the region

Improved energy mix of the region – increased share of RESs

Positive environmental effects and positive effects in combating climate change

Social and image-related effects resulting from the reduced emissions of greenhouse gases

Increased competitiveness of the economic sector of the voivodeship (rationalisation of the energy consumption)

Final effects

Increased competitiveness of Lower Silesia, contributing to improving the standard of living of its residents subject to the sustainable development rules

Social result indicators

1. Share of renewable energy in the total production of energy

2. Electricity consumption per PLN 1 million GDP

Specific objectives of the public intervention

1. Increased production of energy from renewable sources in the Lower Silesian Voivodeship

2. Increased energy efficiency in SMEs

The intervention of PA 3 envisages two support measures. In this case, the logic of the support is linked with a broadly understood environmental aspect (the environment), including the management of its non-renewable resources. There is also a specific focus on the competitiveness of the support beneficiaries (in particular for the projects implemented by SMEs). The problems underlying the intervention include:

1

* the low share of energy in the energy mix of the voivodship, and
* the necessity to improve energy efficiency in the activities of SMEs for their competitiveness.

Both of the aforementioned elements form the problem that triggers a response in the form of the support programmed in Measures 3.1 and 3.2 for a broader range of contemporary socio-economic challenges that arise from climate change accelerated by greenhouse gas emissions.

Therefore, the main forms of intervention are grants that constitute a source of public support for production-related projects (through building new or modernizing existing installations) for energy (electricity and heat) from RES, the development of connection facilities that are used to transfer energy to the National Energy System, the launch of micro-installations for the production of energy from renewable sources (Measure 3.1) and the projects improving the efficiency of energy management (mainly through savings in energy consumption - the so-called in-depth energy modernization), enabling to recover waste energy (heat energy recovery installations), as well as financing the implementation of new energy efficient technologies in enterprises (Measure 3.2). The set of instruments for PA 3 (the aforementioned measures) is supplemented by the financial instruments targeted at the SME sector for financing both the infrastructure for producing energy from renewable sources and the projects improving the energy efficiency of the enterprise (the financial instruments were programmed in separate schemes under both measures).

The absorption of the support from Measures 3.1 and 3.2 results in increased investment expenditures by the beneficiaries of the interventions or final recipients. This is the most evident direct effect of the support, resulting from the creation or modernization of existing renewable energy sources or from the launch of new equipment and technologies for improving energy efficiency. The implementation of the interventions takes the form of the existence of new, cost-effective and climate- and environment-friendly sources of electricity and heat, produced from renewable sources and reducing greenhouse gas emissions. On the other hand, it may be concluded that the fundamental element of the intervention under Measure 3.2 in terms of direct effects includes the technical and technological transformations, leading to a decreased energy consumption in enterprises, which directly improve the profitability of their activities (reduction of costs, including those from the environmental burdens).

2+3

The intervention also generates certain indirect effects. It should be concluded that the improve energy safety of the region, being a result of the growing share of safe and permanently available sources of renewable energy in the energy mix, is one of the key effects. At the same time, the intervention contributes to reducing greenhouse gas emissions and the use of the regional resources for the production of renewable energy (an indirect effect is also the development of economic areas/sectors that are related to the RES technologies and the solutions and technologies for decreasing the energy consumption, in particular in the industry).

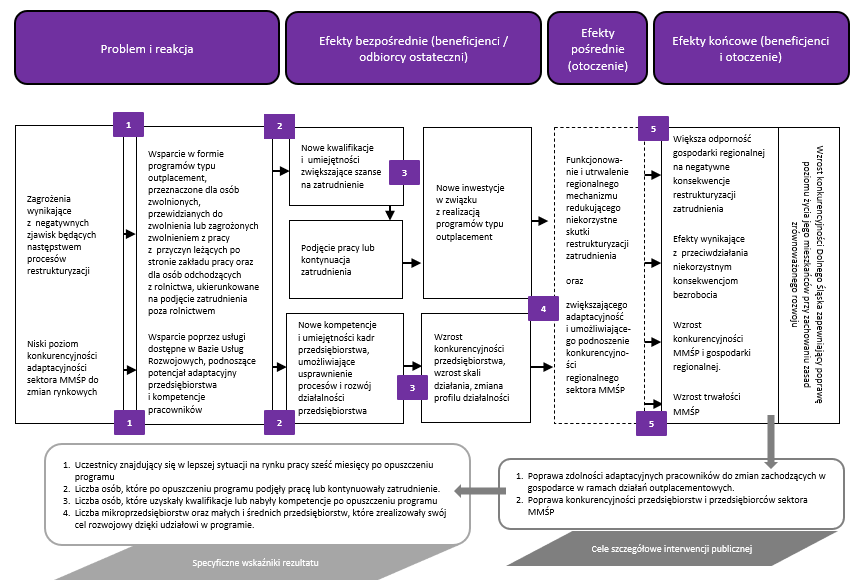
4

The final effects of the public intervention of the analysed measures under PA 3 focus on improving the structure of the energy mix in the Lower Silesian Voivodeship, which consists in increasing the share of renewable energy and in the (resulting) positive environmental results, in particular those related to combating climate change. These effects will be accompanied by positive changes in the image of the voivodship, which will cause that the region will be viewed as a friendly unit that attempts to reduce the risks associated with greenhouse gas emissions being one of the key challenges nowadays. Finally, the intervention contributes to increasing the competitiveness of the economic sector of the voivodship in its part resulting from the rationalization of the energy consumption in the industry. The overall change contributes to the overriding objective of the ROP LS (and indirectly the objectives of the remaining strategy documents for the region).

5

### Labour market - PA 8

**Diagram 4.** Measures 8.5 and 8.6 - logic of intervention.

**

*Source: Own study.*

Problem and reaction

1. Threats resulting from adverse phenomena following the restructuring process

Low level of competitiveness, adaptability of the MSME sector to market developments

Support in the form of outplacement programmes, targeted at those made redundant or planned to be made redundant or threatened by redundancy for reasons attributable to the work establishment, and at those leaving agriculture, aimed at taking up employment outside of agriculture

Support through services of the Development Services Database, contributing to increasing the adaptation potential of the enterprises and the staff’s competences

Direct effects (beneficiaries/final recipients)

2. New qualifications and skills increasing employability

Starting a job or continuing education

New competences and skills of the enterprise’s staff, facilitating the processes and developing the enterprise’s activities

3. New investments in relation to the outplacement programmes

Increased competitiveness of enterprises, expansion, changed business profile

Indirect effects (environment)

4. Operation and preserving the regional mechanism for mitigating adverse effects of the employment restructuring processes, and increasing the adaptability and strengthening the competitiveness of the regional MSME sector

5. Increased resistance of the regional economy to adverse consequences of the employment restructuring processes

Effects resulting from combating adverse effects of the unemployment

Increased competitiveness of MSMEs and of the regional economy

Increased sustainability of MSMEs

Final effects

Increased competitiveness of Lower Silesia, contributing to improving the standard of living of its residents subject to the sustainable development rules

Social result indicators

1. Participants in a better situation on the labour market six months after leaving the programme

2. Number of persons who started a job or continued employment after leaving the programme

3. Number of persons who acquired qualifications or gained competences after leaving the programme

4. Number of micro-enterprises and small and medium-sized enterprises that implemented their development objective thanks to participating in the programme

Specific objectives of the public intervention

1. Improved adaptation skills of the staff to developments in the economy under the outplacement activities

2. Increased competitiveness of entrepreneurs and enterprises of the MSME sector

The intervention concerning the analysed support measures under PA 8 was determined by the need to address two main threats. Both of them are continuously related to:

1

* the broadly understood development of the regional labour market, in particular the creation and development of the staff’s capacity to find a job on the constantly changing labour market due to the ongoing economic restructuring processes (Measure 8.5) - these issues are related to strengthening the regional human capital, including the appropriate use of its resources, and
* increasing the constantly insufficient competitiveness of the regional MSME sector (in particular the smaller economic entities), which affects the demand for labour and the level of employment (Measure 8.6).

For the support measures analysed herein, the intervention takes shall take the following dual form:

* Firstly, the support offered to the final recipients takes the form of *outplacement* programmes for those made redundant, planned to be made redundant or at risk of redundancy for reasons attributable to the work establishment and for those leaving agriculture, aimed at taking up employment outside agriculture; the respective projects include comprehensive sets of measures that are tailored to the individual needs of the recipients, in particular in the form of counselling support, trainings, traineeships and financing (subsidies for the remuneration costs, travel and relocation costs, or the financial support for taking up own economic activity);
* Secondly, the intervention relates to the measures aimed at improving the sustainability of enterprises (MSMEs) through improving their adaptability to ongoing market developments and through improving the qualifications and skills of their staff (improving the quality of the enterprise staff) - implemented within the framework of the Development Services Database; a feature of the intervention is its high flexibility based on the self-profiling of the scope of development services by the very entrepreneurs according to their needs, operation and the specifics of the markets they operate on.

In the most complex outplacement programmes, the most direct and evident effect of the interventions is to provide their participants with new qualifications and skills to maintain or improve their employability (including their self-employment).

2

On the other hand, as for increasing the adaptability of SMEs to market conditions, providing the enterprise staff with new competences and skills provides an opportunity to improve the economic processes and generates development incentives. This ultimately improves the competitiveness of the enterprises.

In the *outplacement* programmes, the offered support also results (on a different scale, being rather negligible) in new investments (e.g. the financial expenditures incurred while switching to self-employment/setting up own business - the respective expenditures are not particularly high but they indeed exist).

3

However, the measures aimed at improving the adaptability of MSMEs result in adjustment effects, having in fact a highly diversified nature, determined by the condition of an enterprise - to give an example, they can contribute to a gradual expansion of its activities (which factually means an increased competitiveness of the enterprise and its increased development potential), entering new markets, changing the business profile or sometimes the entire business model of the enterprise.

Among the indirect effects of such support, particular attention should be paid to the development of a sustainable mechanism offering support to improve the adaptability of the staff to the changing labour market, as well as to the enterprises (MSMEs) in the light of ongoing economic developments, i.e. the sector being the main source of jobs in the regional economy.

4

The presence of such an instrument (enhancing the adaptability) within the structure of support measures makes it possible to respond to various socio-economic shocks by mitigating their adverse impacts.

The main results, illustrating the final effects of the analysed support measures under AP 8, take the form of:

5

* an increased resilience of the regional economy to the adverse impacts of the employment restructuring which is a continuous and increasingly important phenomenon,
* social effects of combating the adverse impacts of unemployment, affecting both the social (as a consequence of the income deficits) and economic (the loss of resources or their sub-optimal use) spheres,
* an increased competitiveness of MSMEs and of the regional economy, favourably affecting the overall socio-economic situation in the region,
* a strengthened sustainability of the MSME sector, particularly if regarded as the main source of employment.

## General description of the interventions of the Programme

### Implementation of the analysed support instruments

The 68 calls for applications that have been announced so far (as of 30 April 2020) generated more than 3 thousand applications for co-financing. The vast majority (nearly 90%) of the applications concerning the analysed measures were submitted under PA 1.

**Table 3.**  Calls for applications under the analysed measures of PA 1 as of 30.04.2020.

|  |  |  |
| --- | --- | --- |
| Measure/Priority Axis | Number of calls for applications | Number of submitted applications |
| * Measure 1.1 | 3 | 5 |
| * Measure 1.2 | 15 | 609 |
| * Measure 1.3 | 16 | 110 |
| * Measure 1.4 | 10 | 585 |
| * Measure 1.5 | 12 | 1,401 |
| Total - Priority Axis 1 | 56 | 2,710 |
| * Measure 3.1 | 4 | 159 |
| * Measure 3.2 | 3 | 126 |
| Total - Measures 3.1 and 3.2 | 7 | 285 |
| * Measure 8.5 | 3 | 16 |
| * Measure 8.6 | 2 | 9 |
| Total - Measures 8.5 and 8.6 | 5 | 25 |
| Total | **68** | **3,020** |

*Source: Own study on the basis of the data on the implementation of the ROP LS.*

The analysis of the number and value of the co-financing contracts reveals the dominant importance of the support based on the intervention instruments implemented under PA 1. Namely, 873 of the total number of 973 contracts concluded by the end of April 2020 refer to PA 1(nearly 90%). To compare, there were 96 contracts under Measures 3.1 and 3.2 (approx. 10% of the total number of the analysed contracts), and 4 contracts under Measures 8.5 and 8.6.

The manner in which Measures 8.5 and 8.6 are implemented causes that the table below (Table 5) does not inform about the projects supported thereunder or other categories of support recipients.

**Table 4.**  Contracts concluded under the analysed measures of the ROP LS 2014-2020 as of 30.04.2020.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Measure/PA | Number of contracts | Number of contracts (% structure) | Total value of contracts (PLN million) | Number of contracts (% structure) | EU co-financing for the contracts (PLN million) |
| * Measure 1.1 | 3 | 0.3% | 226 | 9% | 156 |
| * Measure 1.2 | 119 | 12.2% | 314 | 13% | 182 |
| * Measure 1.3 | 42 | 4.3% | 249 | 10% | 152 |
| * Measure 1.4 | 267 | 27.4% | 34 | 1% | 25 |
| * Measure 1.5 | 442 | 45.4% | 1,055 | 44% | 566 |
| Total - Priority Axis 1 | 873 | 89.7% | 1,879 | 78% | 1,081 |
| * Measure 3.1 | 47 | 4.8% | 268 | 11% | 189 |
| * Measure 3.2 | 49 | 5.0% | 164 | 7% | 111 |
| Total - Measures 3.1 and 3.2 | 96 | 9.9% | 432 | 18% | 300 |
| * Measure 8.5 | 2 | 0.2% | 27 | 1% | 23 |
| * Measure 8.6 | 2 | 0.2% | 82 | 3% | 69 |
| Total - Measures 8.5 and 8.6 | 4 | 0.4% | 109 | 5% | 92 |
| Sum | **973** | **100.0%** | **2,419** | **100%** | **1,473** |

*Source: Own study on the basis of the data on the implementation of the ROP LS.*

In addition, the distribution of the number of contracts under PA 1, the measures involving direct support to enterprises (i.e. Measures 1.2, 1.3, 1.4 and 1.5) among the poviats of the Lower Silesian Voivodeship (on the basis of the ‘location’ of the support by poviat) was analysed. The number of such contracts amounted to 811, which accounts for 93% of the total number of projects supported under PA 1.

Individual poviats of the Lower Silesian Voivodeship had different numbers of projects. This is only partially driven by the diversified distribution of SMEs among them. The territorial distribution of the support is determined above all by the diversified economic potential of individual territorial units, in particular the potential of the enterprises based therein (while the number of SMEs in individual poviats is one of the premises indicating that such potential does exist).

**Table 5.** Number of contracts for the direct support for enterprises under PA 1 in the poviats of the Lower Silesian Voivodeship as of 30.04.2020.

| Poviat | Measure 1.2 | Measure 1.4 | Measure 1.5 | Sum Measures 1.2, 1.4, 1.5 | Percentage (%) share |
| --- | --- | --- | --- | --- | --- |
| Bolesławiecki | 3 | 3 | 6 | 12 | 1.5% |
| Dzierżoniowski | **2** | **12** | **23** | **37** | **4.6%** |
| Głogowski | 1 |  | 5 | 6 | 0.7% |
| Górowski |  |  | 3 | 3 | 0.4% |
| Jaworski |  | 3 | 8 | 11 | 1.4% |
| Jelenia Góra | 3 | 2 | 5 | 10 | 1.2% |
| Jeleniogórski | 2 | 2 | 10 | 14 | 1.7% |
| Kamiennogórski |  | 1 | 8 | 9 | 1.1% |
| Kłodzki | 1 | 3 | 12 | 16 | 2.0% |
| Legnica | 1 | 2 | 5 | 8 | 1.0% |
| Legnicki | 2 |  | 3 | 5 | 0.6% |
| Lubański |  |  | 6 | 6 | 0.7% |
| Lubiński |  | 1 | 3 | 4 | 0.5% |
| Lwówecki |  |  | 4 | 4 | 0.5% |
| Milicki |  |  | 7 | 7 | 0.9% |
| Oleśnicki |  | **3** | **25** | **28** | **3.5%** |
| Oławski | **4** | **7** | **17** | **28** | **3.5%** |
| Polkowicki |  | 1 | 1 | 2 | 0.2% |
| Strzeliński |  |  | 3 | 3 | 0.4% |
| Średzki | 3 | 4 | 10 | 17 | 2.1% |
| Świdnicki | **4** | **12** | **82** | **98** | **12.1%** |
| Trzebnicki | 3 | 9 | 11 | 23 | 2.8% |
| Wałbrzych |  | 2 | 17 | 19 | 2.3% |
| Wałbrzyski |  | 1 | 7 | 8 | 1.0% |
| Wołowski | 1 |  | 6 | 7 | 0.9% |
| Wrocław | **69** | **153** | **99** | **321** | **39.6%** |
| Wrocławski | **7** | **30** | **36** | **73** | **9.0%** |
| Ząbkowicki |  | 3 | 8 | 11 | 1.4% |
| Zgorzelecki |  | 2 | 2 | 4 | 0.5% |
| Złotoryjski |  | 3 | 2 | 5 | 0.6% |
| *more than 1 poviat/entire country* | 5 |  | 7 | 12 | 1.5% |
| Total | **111** | **259** | **441** | **811** | **100.0%** |

*Source: Own study on the basis of the list of projects financed from the European Funds in Poland in the years 2014-2020 (data from the SL 2014 system as of 30.04.2020).*

Similar to the distribution of contracts, the value of projects per poviat may be indicated. Their value ranges from PLN 2-3 million in three poviats up to over PLN 100 million in two poviats.

**Table 6.** Value of contracts for the direct support for enterprises under PA 1 as of 30.04.2020 (PLN million).

| Poviat | Measure 1.2 | Measure 1.4 | Measure 1.5 | Sum Measures 1.2, 1.4, 1.5 | Percentage (%) share |
| --- | --- | --- | --- | --- | --- |
| Bolesławiecki | 4.1 | 0.2 | 10.5 | 14.7 | 1.6% |
| Dzierżoniowski | **1.2** | **0.9** | **50.4** | **52.5** | **5.6%** |
| Głogowski | 0.5 | 0.0 | 15.3 | 15.8 | 1.7% |
| Górowski | 0.0 | 0.0 | 3.2 | 3.2 | 0.3% |
| Jaworski | 0.0 | 0.3 | 15.8 | 16.1 | 1.7% |
| Jelenia Góra | 3.9 | 0.2 | 1.8 | 6.0 | 0.6% |
| Jeleniogórski | 4.1 | 0.1 | 25.4 | 29.6 | 3.2% |
| Kamiennogórski | 0.0 | 0.1 | 12.9 | 12.9 | 1.4% |
| Kłodzki | 2.7 | 0.3 | 12.5 | 15.4 | 1.7% |
| Legnica | 3.1 | 0.1 | 3.4 | 6.5 | 0.7% |
| Legnicki | 3.4 | 0.0 | 1.2 | 4.5 | 0.5% |
| Lubański | 0.0 | 0.0 | 5.4 | 5.4 | 0.6% |
| Lubiński | 0.0 | 0.1 | 2.4 | 2.4 | 0.3% |
| Lwówecki | 0.0 | 0.0 | 11.4 | 11.4 | 1.2% |
| Milicki | 0.0 | 0.0 | 15.3 | 15.3 | 1.6% |
| Oleśnicki | **0.0** | **0.2** | **39.1** | **39.4** | **4.2%** |
| Oławski | **28.4** | **0.5** | **38.4** | **67.3** | **7.2%** |
| Polkowicki | 0.0 | 0.0 | 2.8 | 2.9 | 0.3% |
| Strzeliński | 0.0 | 0.0 | 7.2 | 7.2 | 0.8% |
| Średzki | 1.9 | 0.4 | 11.8 | 14.1 | 1.5% |
| Świdnicki | **8.4** | **1.1** | **106.4** | **115.9** | **12.4%** |
| Trzebnicki | 1.6 | 1.0 | 14.6 | 17.3 | 1.9% |
| Wałbrzych | 0.0 | 0.1 | 16.4 | 16.5 | 1.8% |
| Wałbrzyski | 0.0 | 0.0 | 13.4 | 13.5 | 1.4% |
| Wołowski | 0.2 | 0.0 | 12.9 | 13.1 | 1.4% |
| Wrocław | **160.6** | **12.9** | **113.6** | **287.1** | **30.8%** |
| Wrocławski | **17.7** | **2.6** | **53.1** | **73.4** | **7.9%** |
| Ząbkowicki | 0.0 | 0.3 | 15.0 | 15.3 | 1.6% |
| Zgorzelecki | 0.0 | 0.2 | 2.1 | 2.3 | 0.3% |
| Złotoryjski | 0.0 | 0.4 | 5.7 | 6.2 | 0.7% |
| *entire region/entire country* | 12.3 | 0.0 | 16.2 | 28.6 | 3.1% |
| Total | **254.1** | **22.2** | **655.6** | **931.8** | **100.0%** |

*Source: Own study on the basis of the list of projects financed from the European Funds in Poland in the years 2014-2020 (data from the SL 2014 system as of 30.04.2020).*

A small volume of the support granted to enterprises is attributed/implemented in more than one poviat - 12 projects with a total value of nearly PLN 29 million.

The analysis of the co-financing applications, which made it possible to specify the location of the project on the basis of detailed data at the application stage, reveals that the support concentrates in Wrocław and its surrounding poviats. In these poviats, the value of the support per one entity registered in the REGON database and with over 250 employees significantly exceeded the voivodeship average of PLN 2.4 thousand. The lower support per one entity was recorded above all in the western and northern poviats of the region (i.e. Zgorzelecki, Legnicki, Polkowicki, Lubiński, Lubański Górowski, Legnica, Jelenia Góra). The relatively high disproportions may be driven by the diversified potential and sector-based specifics of the enterprises based in different regions of Lower Silesia. Figure 1shows detailed data to illustrate the above statement.

**Figure 1.** Value of the concluded contracts (Measures 1.2, 1.4 and 1.5) per one entity of the national economy registered in the REGON register per the assumed location (poviat) of the project (PLN thousand).

Average value for the Lower Silesian Voivodeship = PLN 2.4 thousand.

*Source: Own study on the basis of the list of projects financed from the European Funds in Poland in the years 2014-2020 (data from the SL 2014 system as of 30.04.2020) and of the data on the number of enterprises recorded in the REGON system in 2019 (entities with less than 250 employees), Local Databank of the Central Statistical Office of Poland.*

Part of the support granted to enterprises under PA 1 is implemented across the entire voivodship or country (inter alia) in the form of projects where the support is transferred by the intervention beneficiary to the enterprises (the beneficiary acts as an intermediary in the distribution of the support), with no precise location being specified (when the application for co-financing is prepared). This is applicable to 17 projects (with a total value of PLN 475 million):

* 3 projects for granting an ‘innovation voucher’ to enterprises under Sub-measure 1.2.1 - with a value of PLN 22.9 million, implemented by the Lower Silesian Voivodeship, Wrocławska Agencja Rozwoju Regionalnego S.A. and the Association of Lower Silesian Employers,
* 2 projects for granting direct support to enterprises (planned for implementation across the entire country) under Measure 1.2 - with a value of PLN 3.1 million,
* 2 projects for granting advisory services to SMEs under Sub-measure 1.3.1 - with a value of PLN 3.2 million, implemented by the Fund of the Region of Wałbrzych and Wrocławska Agencja Rozwoju Regionalnego S.A.,
* 4 projects for supporting internationalization under Sub-measure 1.4.1 - with a value of PLN 7.9 million, implemented by the Lower Silesian Voivodeship, Wrocławski Park Technologiczny S.A. and Dolnośląska Agencja Współpracy Gospodarczej Sp. z o.o.,
* 5 projects for granting direct support to enterprises, planned for implementation across the entire country (the implementation of new products and services) under Sub-measure 1.5.1 - with a value of PLN 7.6 million,
* a high-value project (PLN 431 million) for the implementation of financial instruments under Measure 1.5 in the Lower Silesian Voivodeship[[27]](#footnote-28), with Bank Gospodarstwa Krajowego acting as a manager of the fund of funds.

The group of 96 projects supported under Measures 3.1 and 3.2 may be classified into three categories:

* the most numerous category of projects (78) for granting direct support to enterprises for the production and distribution of renewable energy (Measure 3.1 - 30 projects) and energy efficiency (Measure 3.2 - 48 projects),
* two projects by BGK for the two analysed measures under PA 3, with a total value of PLN 164 million, for the implementation of financial instruments,
* 16 projects for the production and distribution of renewable energy (Measure 3.1) - 15 grant projects implemented mainly by the self-government units, while one RES installation will be used to satisfy the beneficiary’s own needs - the Wrocław University of Environmental and Life Sciences.

### Financial progress in the analysed support instruments

The financial progress (measured by the proportion of the contribution of the European Union to the co-financing contracts to the agreed allocation) in the evaluated measures is highly diversified. By the end of April 2020, the allocation was used in 62% under PA 1 (from 40% in Measure 1.2 up to 78% in Measures 1.1 and 1.5), 83% under PA 3, and 87% under PA 8.

**Table 7.**  Financial progress in the analysed measures of the ROP LS 2014-2020 as of 30.04.2020.

| Measure/PA | Allocation (excl. implementation reserve)  (PLN million)\* | Contribution of the EU to the concluded co-financing contracts (PLN million) | Use of allocation - value of the concluded contracts | Contribution of the EU to the submitted payment requests (PLN million) | Use of allocation - value of the submitted payment requests |
| --- | --- | --- | --- | --- | --- |
| * Measure 1.1 | 201 | 156 | 78% | 78 | 39% |
| * Measure 1.2 | 459 | 182 | 40% | 69 | 15% |
| * Measure 1.3 | 312 | 152 | 49% | 71 | 23% |
| * Measure 1.4 | 43 | 25 | 58% | 17 | 40% |
| * Measure 1.5 | 722 | 566 | 78% | 339 | 47% |
| Total - Priority Axis 1 | 1,737 | 1,081 | 62% | 574 | 33% |
| * Measure 3.1 | 247 | 189 | 76% | 107 | 43% |
| * Measure 3.2 | 115 | 111 | 97% | 66 | 58% |
| Total - Measures 3.1 and 3.2 | 362 | 300 | 83% | 173 | 48% |
| * Measure 8.5 | 36 | 23 | 65% | 17 | 49% |
| * Measure 8.6 | 71 | 69 | 97% | 41 | 58% |
| Total - Measures 8.5 and 8.6 | 107 | 92 | 87% | 58 | 55% |
| Sum | **2,206** | **1,473** | **67%** | **806** | **37%** |

*\* Foreign exchange rate EUR 1 = PLN 4.4447.*

*Source: Own study on the basis of the data on the implementation of the ROP LS.*

Measures 1.2 and 1.3 show a particularly level of contracting (below 50%). On the other hand, Measures 3.2 and 8.6 show a particularly high level of contracting (over 90%).

The Managing Authority of the ROP recognized that there were problems, in particular in the implementation of PA 1, in relation to the lacking experience of SMEs in carrying out R&D activities and the lacking interest in pro-innovation services[[28]](#footnote-29). To address them, the threshold for project eligible expenditures was increased in 2019 (from EUR 1 to 4.7 million), which should ultimately (in 2020) increase the contracting level (it is assumed that the following calls attract projects with a higher total value, including a higher value of eligible costs; in turn, the number of larger enterprises from the SME sector will probable increase in the entire group of new applicants).

**Figure 2.** Contracting (proportion of the EU contribution to the co-financing contracts to the allocation) in the analysed measures of the ROP LS 2014-2020 as of 30.04.2020.

*Source: Own study on the basis of the data of the Marshall Office of the Lower Silesian Voivodeship.*

Measure 1.1 Measure 1.2 Measure 1.3 Measure 1.4 Measure 1.5 Total - Priority Axis 1

Measure 3.1 Measure 3.2 Total – Measures 3.1 and 3.2

Measure 8.5 Measure 8.6 Total – Measures 8.5 and 8.6

The financial progress measured by the share of the value of the payment requests submitted by beneficiaries (in the value of the allocation) was lower and ranged from less than 50% under PA 1 and PA 3 (33% and 48% respectively) up to 55% under PA 8. The data indicate a very moderate advancement in the supported projects on an average basis. This situation has specific implications for estimating the effects of the support in the light of the assumptions resulting from the intervention logic of individual measures and Priority Axes of the Programme. The current implementation status must be considered in analysing any effects that are currently noticeable.

# Analysis and evaluation of the interventions in the context of the implementation of the Lower Silesian Strategy for Regional Smart Specialisations

## The concept of the Smart Specialisations of the Lower Silesian Voivodeship

In the EU practice concerning the current financial perspective (2014-2020), smart specialisations (national/regional) are one of the instruments for concentrating support from the European Regional Development Fund (ERDF). They reflect a new, different approach to design the development priorities, with an aim to target the streams of public support at them at a later time[[29]](#footnote-30).

The current legitimacy for shaping development (engaging public funds) ‘through specialisations’ is legally embedded in the provisions of the so-called General Regulation (EU) No 1303/2013 of the European Parliament and of the Council of December 2013[[30]](#footnote-31) that formulates the concept of a smart specialisation strategy to be interpreted as ‘the national or regional innovation strategies which set priorities in order to build competitive advantage by developing and matching research and innovation own strengths to business needs in order to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts; a smart specialisation strategy may take the form of, or be included in, a national or regional research and innovation (R&I) strategic policy framework’[[31]](#footnote-32). The General Regulation (Annex XI) sets a preliminary condition for using the funds of the ERDF for supporting projects that are co-financed within the framework of all the investment priorities of thematic objective 1. (Strengthening research, technological development and innovation - R&D target), which obliges to prepare a strategy for the national smart specialisation[[32]](#footnote-33).

In accordance with the aforementioned requirements, the Lower Silesian Voivodeship adopted such a strategy in August 2015, by annexing the document entitled ‘The Strategic Framework for the Smart Specialisations of Lower Silesia’ to the RIS LS[[33]](#footnote-34). This document (as amended at a later time) was prepared in accordance with good practices[[34]](#footnote-35) and has become a tool to target the public support within the framework of the ROP LS (Measures 1.2 and 1.5).

**Diagram5.** Smart Specialisations of Lower Silesia.



*Source: Own study.*

Chemical and pharmaceutical industries 1

Spatial mobility 2

High-quality food 3

Natural and secondary raw materials 4

Production of machineries and devices, material processing 5

Information and Communication Technologies (ICT) 6

The Strategic Framework for the Smart Specialisations of Lower Silesia envisages six main smart specialisations and specific sub-areas - fields - that the describe each specialisation more precisely (the entire set lists over fifty sub-areas).

The Smart Specialisations of Lower Silesia were described in the form of relatively broad categories. They were identified in an analytical process (conducted in the formula of entrepreneurial discovery) which diagnosed:

* the structure of the leading economic branches, including those highly innovative and those developing very fast, and
* the leading scientific and technological areas (on the basis of the volume of publications, patents and activities in international research teams and scientific and industrial consortia),
* the demand for innovation in the enterprise sector (on the basis of the largest population of applicants under the interventions concerning the support for innovative solutions in enterprises and the region (according to the results of the distribution of support under the ROP LS 2007-2013).

Subsequently, the diagnostic findings were used as a basis for a cross-analysis of technological areas in the leading sectors of the regional economy. Finally, the findings on the basis of which the catalogue of the Lower Silesian Smart Specialisations was compiled were consulted with the economic and scientific sectors.

The evaluation of the RIS LS (which also covers the selection and functioning of the LSSSs) states that the objectives and directions of the RIS LS and the established structure of smart specialisations largely correspond to the current needs of the actors of the innovation system and to the priorities of the innovation policy[[35]](#footnote-36). A recommendation was also expressed to specify more in detail the current categories of LSSSs, which would make it possible to distribute the support in a more precise manner, if compared with the ‘current’ status: ‘/…/ which sometimes may result in a failed targeting of the support /…/’.[[36]](#footnote-37) However, the evaluation recommendations did not include more explicit and decisive conclusions thereon. It should be pointed out in this respect that the demands for specifying more in detail the LSSSs (in particular their sub-areas) were also formulated in the qualitative studies of this evaluation. They were pointed out, inter alia, by the experts who evaluated the applications under PA 1 and concluded that the LSSSs should (and could) become the strongest instrument for targeting the support in the regional programme. Therefore, they should be described more in detail. Such a description would make the catalogue of LSSSs more operational to some extent, which would facilitate to evaluate the applications by verifying whether they correspond to the subject matter of the project concerning the smart specialisations of Lower Silesia and their sub-areas.

## Identification of the LSSSs in the projects under PA 1 for the study

This study included an analysis of the targeting of the projects that are co-financed under PA 1 of the ROP LS at the Lower Silesian Smart Specialisations. The projects under all the measures of PA of the Programme were treated as a point of reference. The targeting of the co-financed projects was examined on the basis of their descriptions in the project applications and, on a supplementary basis, on the basis of the descriptions of the subject matter of the activities of the beneficiaries of the support measures. In this case, the study data were derived from the query of information that is made available on the beneficiaries' websites. During the study, the projects were assigned to the regional specialisations in the following process:

* if possible, the analysis of the targeting was based on the information included in the co-financing applications which directly indicated concrete specialisations and their specific fields (this was the case in the projects co-financed under Measures 1.1 and 1.2 and partially under Measure 1.5); irrespective of this ‘formal’ embedding of the indications concerning the specialisations, the application was reviewed and the assignment to a field of specialisation was verified thereon, with the decisive majority being deemed correct; however, there were very few changes with regard to the assigned specific fields of individual specialisations; they involved both the elimination and supplementation of certain indications,
* the assignment to the fields of the LSSSs also covered the projects for which no regional specialisation was specified in the project applications - this was the case in Measures 1.3 and 1.4 and partially in Measure 1.5; if this was the case, the information included in the co-financing applications and other source data (the query of the Internet website) were used to decide on whether the subject matter of a project may be deemed to correspond to the field or fields of the smart specialisations, and whether it was possible to indicate a specific field within the framework of a specialisation,
* additionally, the identification of the targeting of the projects at smart specialisations involved the analysis of the nature of the co-financed projects in terms of the existence and type of research and development work (by industrial research or research/development work or industrial research and development research/work).

The analytical work on the existence of the LSSSs in the co-financed projects, upon their classification to the fields of specialisation, the analyses of the targeting of the support at the LSSSs focused on the projects that were (or are) continued, i.e. for which the co-financing contracts were not terminated. Thus, the analytical part of the study reveals the factual targeting of the support from the ROP LS, while giving the real picture of the ‘functioning’ of the intervention in the context of the LSSSs[[37]](#footnote-38).

Structuring the projects financed from the ROP LS by LSSSs makes it possible, thanks to its completeness, to perform analysis for formulating evaluations and drawing conclusions on the functioning of the support from the ROP LS with regard to the specialisations. The following part of this Report presents the results of the analyses. They refer to certain dimensions of the description that seem to be the most interesting.

As many as 2/3 (661) of 992 co-financing contracts refer to the projects related to the smart specialisations of Lower Silesia, while 27% of projects (264) do not correspond to the LSSSs. To study the focus of the projects on the regional smart specialisations, we also identified a small group of projects (67 projects, i.e. nearly 7%), hereinafter referred to as the ‘LSSS supporting projects’, which did not directly refer to economic projects of enterprises, but the activities supporting such projects indirectly (e.g. the construction and launch of public research infrastructure or an enterprise/technology incubator, the delivery of investment sites, the distribution of innovation vouchers, etc.). None of these projects excluded the possibility to grant direct support to the enterprises operating in the fields specified in the LSSSs, while part of the ‘supporting projects’ may be deemed to be targeted even directly at the projects corresponding to concrete fields of specialisation (some of them were co-financed under Measure 1.2, so they had to correspond to the regional smart specialisations). Moreover, for certain projects, the main targeting factor could be their specific subject matter - specific types of research laboratories with regard to specific specialisations, being involved in the development projects for research and development infrastructure, may serve as an example.

The summary below contains information about the total number of projects co-financed within the framework of the intervention instruments under PA 1 (Table 8). On the other hand, the following summary illustrates the number of valid co-financing contracts that are a selection criterion for further analyses (Table 9).

**Table 8.** Contracts of the ROP LS analysed for their consistency with the LSSSs.

| Intervention instruments of the ROP LS | Contracts (projects) in general | Projects referring directly to the LSSSs | Projects not referring to the LSSSs | Projects ‘supporting’ the LSSSs |
| --- | --- | --- | --- | --- |
| Measure 1.1 | 4 |  |  | 100.0% |
| Measure 1.2 | 136 | 93.4% |  | 6.6% |
| * Sub-measure 1.2.1 | 116 | 95.7% |  | 4.3% |
| * Sub-measure 1.2.2 | 20 | 80.0% |  | 20.0% |
| Measure 1.3 | 46 |  |  | 100.0% |
| * Sub-measure 1.3.1 | 21 |  |  | 100.0% |
| * Sub-measure 1.3.2 | 12 |  |  | 100.0% |
| * Sub-measure 1.3.3 | 6 |  |  | 100.0% |
| * Sub-measure 1.3.4 | 7 |  |  | 100.0% |
| Measure 1.4 | 285 | 56.1% | 41.4% | 2.5% |
| * Sub-measure 1.4.1 | 248 | 54.8% | 42.7% | 2.4% |
| * Sub-measure 1.4.2 | 37 | 64.9% | 32.4% | 2.7% |
| Measure 1.5 | 521 | 71.8% | 28.0% | 0.2% |
| * Sub-measure 1.5.1 | 436 | 72.0% | 27.8% | 0.2% |
| * Sub-measure 1.5.2 | **85** | 70.6% | 29.4% |  |
| Total | **992** | **66.6%** | **26.6%** | **6.8%** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

**Table 9.**  Analysed contracts of the ROP LS by status (terminated or not terminated).

| Intervention instruments of the ROP LS | Not terminated contracts | Terminated contracts | Contracts in total | Percentage of terminated contracts |
| --- | --- | --- | --- | --- |
| Measure 1.1 | 3 | 1 | 4 | 25% |
| Measure 1.2 | 110 | 26 | 136 | 19% |
| * Sub-measure 1.2.1 | 94 | 22 | 116 | 19% |
| * Sub-measure 1.2.2 | 16 | 4 | 20 | 20% |
| Measure 1.3 | 42 | 4 | 46 | 9% |
| * Sub-measure 1.3.1 | 18 | 3 | 21 | 14% |
| * Sub-measure 1.3.2 | 12 | 0 | 12 | 0% |
| * Sub-measure 1.3.3 | 6 | 0 | 6 | 0% |
| * Sub-measure 1.3.4 | 6 | 1 | 7 | 14% |
| Measure 1.4 | 269 | 16 | 285 | 6% |
| * Sub-measure 1.4.1 | 235 | 13 | 248 | 5% |
| * Sub-measure 1.4.2 | 34 | 3 | 37 | 8% |
| Measure 1.5 | 445 | 76 | 521 | 15% |
| * Sub-measure 1.5.1 | 368 | 68 | 436 | 16% |
| * Sub-measure 1.5.2 | 77 | 8 | **85** | 9% |
| Total | **869** | **123** | **992** | **12%** |

*Source: Own study on the basis of the data on the ROP LS.*

## Targeting of the interventions under PA 1 at the Lower Silesian Smart Specialisations

### General distribution

The analysis covered 808 not terminated contracts of the total number of 925 projects (involving the direct support for enterprises, i.e. excluding the LSSS supporting projects). The theme of 569 projects corresponds to the fields of the LSSSs.

**Table 10.** Contracts of the ROP LS (not terminated) corresponding or not corresponding to the LSSSs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Intervention instruments of the ROP LS | Projects under the LSSSs | Projects outside of the LSSSs | Projects in total | Percentage of contracts concerning the LSSSs |
| Measure 1.2 | 102 | 0 | 102 | 100% |
| * Sub-measure 1.2.1 | 89 | 0 | 89 | 100% |
| * Sub-measure 1.2.2 | 13 | 0 | 13 | 100% |
| Measure 1.4 | 150 | 112 | 262 | 57% |
| * Sub-measure 1.4.1 | 128 | 101 | 229 | 56% |
| * Sub-measure 1.4.2 | 22 | 11 | 33 | 67% |
| Measure 1.5 | 317 | 127 | 444 | 71% |
| * Sub-measure 1.5.1 | 262 | 105 | 367 | 71% |
| * Sub-measure 1.5.2 | 55 | 22 | 77 | 71% |
| Total | **569** | **239** | **808** | **70%** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

The aforementioned results of the classification of projects by LSSS can be deemed to be highly precise. This statement is confirmed by the quantitative studies in which the audit question concerning the consistency/non-consistency of the project with the LSSSs was asked. The non-consistency with the LSSSs was highlighted by 20% of the beneficiaries (for n=405), and approx. 10% of them additionally responded ‘I do not know’ - at least part of the opinions may be attributed to the difficulties in the classification of projects by LSSS. In general, such a share of the opinions of the respondents participating in the quantitative survey is very close to the distribution established on the basis of the study of project applications and the query of Internet sources. It can also be added that the quantitative study also confirmed the predominant concentration on individual LSSSs (the respective information resulting from the examination of applications and the Internet query is presented in the following part of this Report), i.e. the focus on two smart specialties, i.e. LSSS5 - Production of machineries and devices, material processing (first), LSSS6 - Information and communication technologies (second) and LSSS1 - Chemical and pharmaceutical industries (third). Moreover, for the ineffective applicants (n = 239), a similar thematic concentration of projects was observed, with a clearly dominant share of LSSS5 (approx. 28% of the unsuccessful projects referred to the specialisation).

**Diagram 3.** Percentage of co-financing contracts corresponding to the LSSSs[[38]](#footnote-39).

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Measure 1.2 Sub-measure 1.2.1 Sub-measure 1.2.2

Measure 1.4 Sub-measure 1.4.1 Sub-measure 1.4.2

Measure 1.5 Sub-measure 1.5.1 Sub-measure 1.5.2

Total

The recorded share of projects corresponding to the LSSSs should be viewed as the first signal indicating that the catalogue of regional smart specialisations functions correctly. The decisive factor is the high share of projects that may be classified to the LSSSs and were not conditioned (on an access/obligatory basis) by the consistency with a regional smart specialisation to be deemed eligible for co-financing from the ROP LS (the consistency could only be preferred in the selection process) - the share amounts to 66%, which may be deemed high, if assumed that the support instruments (for the activities not being related to R&D work) attract any categories of projects, i.e. those being diversified by theme and branch. However (nevertheless), the support is accompanied by a high share of projects consistent with the LSSSs in this part. This translates into a good adjustment of the catalogue to the economic reality in the region.

In principle, the aforementioned statement is confirmed by distribution of projects by LSSS, for which the contracts were terminated. Namely, nearly 73% of the contracts terminated under Measures 1.4 and 1.5 (in total) also corresponded to the catalogue of smart specialisations. In other words, if the contracts were continued, the overall adjustment would be slightly better.

**Table 11.** Contracts of the ROP LS (terminated) corresponding or not corresponding to the LSSSs.

| Intervention instruments of the ROP LS | Projects under the LSSSs | Projects outside of the LSSSs | Projects in total | Percentage of contracts under the LSSSs |
| --- | --- | --- | --- | --- |
| Measure 1.2 | 25 |  | 25 | 100% |
| * Sub-measure 1.2.1 | 22 |  | 22 | 100% |
| * Sub-measure 1.2.2 | 3 |  | 3 | 100% |
| Measure 1.4 | 10 | 6 | 16 | 63% |
| * Sub-measure 1.4.1 | 8 | 5 | 13 | 62% |
| * Sub-measure 1.4.2 | 2 | 1 | 3 | 67% |
| Measure 1.5 | 57 | 19 | 76 | 75% |
| * Sub-measure 1.5.1 | 52 | 16 | 68 | 76% |
| * Sub-measure 1.5.2 | 5 | 3 | 8 | 63% |
| Total | **92** | **25** | **117** | **79%** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Irrespective of the aforementioned distribution of projects by their consistency with the LSSSs, the implementation of the smart specialisation strategy is determined by the distributions of projects by individual (main) fields of the LSSSs by the analysed intervention instruments of the ROP LS. The table below (Table 12) presents the results of the corresponding study.

The presented data make it possible to identify the dominant concentration of projects by different LSSSs - the general data in the table below. As shown below, the smart specialisation ‘Production of machineries and devices, material processing’ (LSSS5) (first) and ‘Information and communication technologies (ICT)’ (LSSS6) (second) are the most important (for all the projects for which the contract was not terminated). They are followed by two other categories with a similar share of 12.3% and 10.4% for: ‘Natural and secondary raw materials’ (LSSS4) and ‘Chemical and pharmaceutical industries’ (LSSS1).

**Table 12.** Contracts of the ROP LS (not terminated) in terms of their corresponding to the thematic scope of individual fields of the LSSSs\*.

| Intervention instruments of the ROP LS | Number of projects | LSSS1 | LSSS2 | LSSS3 | LSSS4 | LSSS5 | LSSS6 | Outside of the LSSSs |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Measure 1.2 | 102 | 16.7% | 7.8% | 7.8% | 8.8% | 32.4% | 36.3% | 0.0% |
| * Sub-measure 1.2.1 | 89 | 16.9% | 7.9% | 5.6% | 9.0% | 31.5% | 37.1% | 0.0% |
| * Sub-measure 1.2.2 | 13 | 15.4% | 7.7% | 23.1% | 7.7% | 38.5% | 30.8% | 0.0% |
| Measure 1.4 | 262 | 8.4% | 2.7% | 7.3% | 6.1% | 16.0% | 19.5% | 42.7% |
| * Sub-measure 1.4.1 | 229 | 8.3% | 2.6% | 7.9% | 6.6% | 15.3% | 17.9% | 44.1% |
| * Sub-measure 1.4.2 | 33 | 9.1% | 3.0% | 3.0% | 3.0% | 21.2% | 30.3% | 33.3% |
| Measure 1.5 | 444 | 10.1% | 5.6% | 4.3% | 16.7% | 30.6% | 8.8% | 28.6% |
| * Sub-measure 1.5.1 | 367 | 10.9% | 5.2% | 4.6% | 15.5% | 30.8% | 10.1% | 28.6% |
| * Sub-measure 1.5.2 | 77 | 6.5% | 7.8% | 2.6% | 22.1% | 29.9% | 2.6% | 28.6% |
| Total | **808** | **10.4%** | **5.0%** | **5.7%** | **12.3%** | **26.1%** | **15.7%** | **29.6%** |

*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 2 - Spatial mobility, 3 - High-quality food, 4 - Natural and secondary raw materials, 5 - Production of machineries and devices, material processing, 6 - ICT.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Significantly lower shares were recorded for: ‘High-quality food’ (LSSS3) and ‘Spatial mobility (LSSS2). Although these two fields of the LSSSs with the lowest shares were identified in the Strategic Framework for the Smart Specialisations of Lower Silesia, the presented results would indicate a need to reconsider whether these areas actually qualify as regional specialisations (on the basis of the historical targeting of the support). It can certainly be the case (irrespective of the low share in the distribution) due to the public selection implying that it was decided for some reasons that the voivodeship should specialise in these areas (under the assumption that the ‘selected’ specialisation must develop in a longer perspective). If this is the case, targeting the support at the specialisations should gradually strengthen these specialisations (which will ultimately reflect in an increasing share of projects concentrated in these fields).

To supplement, it is worth noting that the analysis of the distribution by LSSS fields for the projects for which the co-financing contracts were terminated does not show any specific differences compared to the distribution shown in the table above.

Returning to the projects for which contracts were not terminated and correspond to the LSSS fields, additional data may be used to illustrate the intensity of the specialisation fields. In particular, this refers to the situations in which a project cannot correspond to more than one specialisation field.

In the population of 569 projects corresponding to the themes of the LSSSs, we identified a total of 607 projects corresponding to individual LSSS fields (for some of them, the theme of the project referred to more than one specialisation category; however, this was not particularly frequent - the proportion of the projects corresponding to the LSSSs to the number of projects equals 1.06).

**Figure 4.** Distribution of the LSSSs in the contracts of the ROP LS (not terminated)\*[[39]](#footnote-40).

*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 2 - Spatial mobility, 3 - High-quality food, 4 - Natural and secondary raw materials, 5 - Production of machineries and devices, material processing, 6 - ICT.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Total

Sub-measure 1.5.2 Sub-measure 1.5.1 Measure 1.5

Sub-measure 1.4.2 Sub-measure 1.4.1 Measure 1.4

Sub-measure 1.2.2 Sub-measure 1.2.1 Measure 1.2

LSSS1 LSSS2 LSSS3 LSSS4 LSSS5 LSSS6

The analysis of the intensity of the LSSSs in the co-financed projects still shows that LSSS5 is dominant (‘Production of machineries and devices, material processing’), while the remaining specialities have a similar distribution. As illustrated, if compared with the remaining fields, LSSS5 becomes even more important by increasing its share in the overall distribution: the aforementioned summary shows a difference of approx. 14 pp. compared to LSSS6 (‘Information and communication technologies’), while it hardly exceeded 10 pp at an earlier time (comp. Table 12 above). The same is true for other specialisations (LSSS5 becomes more important; LSSS6 is also gaining slightly in importance, if compared with the remaining specialisations). The two specialisations with the lowest shares, i.e. LSSS3 and LSSS2 (‘High-quality food’ and ‘Spatial mobility’), gain the least. The aforementioned conclusions concerning the two specialisations are confirmed again.

The presented findings related to the intensity of the LSSSs in the projects of the ROP LS may be supplemented by the analysis of the value of the co-financed projects. In this respect, reference may also be made to the theoretical measure relating to the value of the co-financed projects to their specific specialisation indications. The corresponding data are presented in the table below.

**Table 13.** Value of contracts of the ROP LS by thematic scope of the LSSSs in the projects.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| LSSS\* | Number of indications for the LSSSs | Total value of projects (PLN million) | Share of the LSSSs in the total value of projects | Average value of the project per LSSS (PLN million) | Contribution of the EU  (PLN million) | Average contribution of the EU (PLN thousand) |
| LSSS1 | 84 | 98.7 | 11.6% | 1.2 | 35.9 | 427 |
| LSSS2 | 40 | 53.4 | 6.2% | 1.3 | 21.5 | 538 |
| LSSS3 | 46 | 52.1 | 6.1% | 1.1 | 22.5 | 490 |
| LSSS4 | 99 | 143.8 | 16.8% | 1.5 | 51.8 | 524 |
| LSSS5 | 211 | 354.5 | 41.5% | 1.7 | 124.0 | 588 |
| LSSS6 | 127 | 151.8 | 17.8% | 1.2 | 77.2 | 608 |
| Total | **607** | **854.2** | **100.0%** | **1.4** | **332.9** | **549** |

*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 2 - Spatial mobility, 3 - High-quality food, 4 - Natural and secondary raw materials, 5 - Production of machineries and devices, material processing, 6 - ICT.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

The leading nature of the specialisation ‘Production of machineries and devices, material processing’ is confirmed again - LSSS5 accounts for slightly more than 2/5 of the value of the projects supported under PA 1 of the ROP LS. If measured in this manner, the specialisation even gains in significance compared to the prior criteria. It may simultaneously be observed that LSSS6 (‘Information and communication technologies’) loses its significance compared to the remaining specialisations.

As pointed out in the introductory part, the Strategic Framework for the Smart Specialisations of Lower Silesia’ specify specific fields for individual specialisations (the so-called sub-areas). Given the intensity of the specialisation (its sub-areas) in terms of the number and value of the co-financed projects, additional comments may be formulared on the importance of the individual sub-areas under the LSSSs (Figure 5 on the following page). Namely:

* LSSS1 ‘Chemical and pharmaceutical industries’ - for this specialisation, the sub-areas ‘Design, development and implementation of innovative medicinal products, medical devices, cosmetics, economic chemistry and professional chemistry’, which brings together 17% of the projects accounting for approx. 17% of the total value, and the sub-area ‘Development and implementation of advanced medical technologies, including the cellular therapies, for the development of personalised medicine (17% of projects accounting for only 8% of the their value). A very important area is also ‘Design and development of new analytical and diagnostic techniques', with slightly fewer projects (15%), but these projects concentrate the highest value, including the LSSSs (19%);
* LSSS2 ‘Spatial mobility’ - the most important sub-area is ‘Devices and components for the means of transport’, bringing together 49% of projects accounting for 44% of their total value;
* LSSS3 ‘High-quality food’ - the dominant sub-area is ‘Organic, traditional, regional and local food’, bringing together 43% of projects accounting for 40% of their total values; one sub-area (‘Functional food and nutraceuticals’) has a decisively lower number of projects (16%) but a high value share (21%);
* LSSS4 ‘Natural and secondary raw materials’ - this specialisation is dominated by the sub-area entitled ‘Natural raw materials - gaining and advanced processing and usage’, which accounts for 63% of projects accounting for 62% of their total value. It is worth noting that this sub-area is quite complex, as it covers technologies for gaining various natural resources, risk monitoring around the mining plants, as well as new health and spa services provided with the use of natural resources;
* LSSS5 ‘Production of machineries and devices, material processing’ - this field is decisively dominated by the sub-area entitled ‘[Machineries and equipment] for common and specialist use’, accounting for 52% of projects creating 55% of their value;
* LSSS6 ‘Information and communication technologies’ - this specialisation is dominated by two (similar) sub-areas:
* ‘Management decision support systems - Business Process Management’ (15% of projects, 19% of their total value), and
* ‘Processing, modelling and analysis of imaging and multimedia data’ (15% of projects and 17% of their total value).

**Figure 5.** Intensity of the indications for the LSSS sub-areas in the co-financed projects of the ROP LS (by number of indications)\*.

|  |  |
| --- | --- |
|  |  |
| **LSSS1** - Chemical and pharmaceutical industries | **LSSS2** - Spatial mobility |
|  |  |
| **LSSS3** - High-quality food | **LSSS4** - Natural and secondary raw materials |
|  |  |
| **LSSS5** - Production of machineries and devices, material processing | **LSSS6** - Information and Communication Technologies (ICT) |

*\* Sub-areas coded according to the Strategic Framework for the Smart Specialisations of Lower Silesia.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

### Territorial distribution of the LSSSs (indications for specialisations and the corresponding value of projects)

The tables below present the territorial distribution of the projects co-financed from the ROP LS by considering their targeting at the Lower Silesian Smart Specialisations. The distribution refers to all the LSSSs indicated in the projects. It was presented by poviats of the Lower Silesian Voivodeship. The presented results illustrate:

* the number (1) and the value (2) of projects per territorial respectively, Table 14, page 62, Table 15, page 63,
* the average value of the project per smart specialisation on a supplementary basis, Table 16, page 64.

As results from the performed analyses, nearly 73% of the indications for the LSSSs and slightly 72% of their value refer to the projects located in six poviats of the Lower Silesian Voivodeship. The greatest concentration is recorded by the City of Wrocław (with nearly 38% of the indications and nearly 31% of the total value). Further concentration areas are the following Poviats:

* Świdnicki,
* Wrocławski (district),
* Oławski
* Dzierżoniowski
* Oleśnicki

**Table 14.** Contracts of the ROP LS by location of the project and thematic scope of the LSSS (number of indications for LSSSs)

| Poviat | LSSS1-N | Share in LSSS1-N | LSSS2-N | Share in LSSS1-N | LSSS3-N | Share in LSSS1-N | LSSS4-N | Share in LSSS1-N | LSSS5-N | Share in LSSS1-N | LSSS6-N | Share in LSSS1-N | TOTAL | Share in LSSS1-N |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bolesławiecki | 2 | 2.4% | 0 | 0.0% | 2 | 4.3% | 2 | 2.0% | 4 | 1.9% | 2 | 1.6% | 12 | 2.0% |
| Dzierżoniowski | **6** | **7.1%** | **2** | **5.0%** | **2** | **4.3%** | **3** | **3.0%** | **15** | **7.1%** | **1** | **0.8%** | **29** | **4.8%** |
| Głogowski | 2 | 2.4% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 4 | 1.9% | 0 | 0.0% | 7 | 1.2% |
| Górowski |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 2 | 0.9% | 0 | 0.0% | 3 | 0.5% |
| Jaworski | 1 | 1.2% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 4 | 1.9% | 0 | 0.0% | 6 | 1.0% |
| Jelenia Góra | 1 | 1.2% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 2 | 0.9% | 2 | 1.6% | 5 | 0.8% |
| Jeleniogórski |  | 0.0% | 0 | 0.0% | 1 | 2.2% | 2 | 2.0% | 4 | 1.9% | 1 | 0.8% | 8 | 1.3% |
| Kamiennogórski |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 4 | 1.9% | 1 | 0.8% | 5 | 0.8% |
| Kłodzki |  | 0.0% | 0 | 0.0% | 2 | 4.3% | 1 | 1.0% | 2 | 0.9% | 1 | 0.8% | 6 | 1.0% |
| Legnica | 1 | 1.2% | 0 | 0.0% | 0 | 0.0% | 2 | 2.0% | 3 | 1.4% | 1 | 0.8% | 7 | 1.2% |
| Legnicki |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 3.0% | 2 | 0.9% | 0 | 0.0% | 5 | 0.8% |
| Lubański | 1 | 1.2% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 4 | 1.9% | 0 | 0.0% | 6 | 1.0% |
| Lubiński | 1 | 1.2% | 0 | 0.0% | 1 | 2.2% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 2 | 0.3% |
| Lwówecki |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 2 | 2.0% | 0 | 0.0% | 1 | 0.8% | 3 | 0.5% |
| Milicki |  | 0.0% | 0 | 0.0% | 1 | 2.2% | 2 | 2.0% | 1 | 0.5% | 0 | 0.0% | 4 | 0.7% |
| Oleśnicki | **2** | **2.4%** | **5** | **12.5%** | **0** | **0.0%** | **7** | **7.1%** | **8** | **3.8%** | **4** | **3.1%** | **26** | **4.3%** |
| Oławski | **1** | **1.2%** | **3** | **7.5%** | **2** | **4.3%** | **3** | **3.0%** | **13** | **6.2%** | **1** | **0.8%** | **23** | **3.8%** |
| Polkowicki |  | 0.0% | 0 | 0.0% | 1 | 2.2% | 1 | 1.0% | 0 | 0.0% | 1 | 0.8% | 3 | 0.5% |
| Strzeliński |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 2 | 0.9% | 0 | 0.0% | 3 | 0.5% |
| Średzki | 2 | 2.4% | 0 | 0.0% | 1 | 2.2% | 2 | 2.0% | 6 | 2.8% | 0 | 0.0% | 11 | 1.8% |
| Świdnicki | **9** | **10.7%** | **7** | **17.5%** | **3** | **6.5%** | **22** | **22.2%** | **36** | **17.1%** | **2** | **1.6%** | **79** | **13.0%** |
| Trzebnicki | 7 | 8.3% | 2 | 5.0% | 0 | 0.0% | 2 | 2.0% | 6 | 2.8% | 1 | 0.8% | 18 | 3.0% |
| Wałbrzych | 2 | 2.4% | 0 | 0.0% | 0 | 0.0% | 3 | 3.0% | 3 | 1.4% | 1 | 0.8% | 9 | 1.5% |
| Wałbrzyski | 1 | 1.2% | 1 | 2.5% | 1 | 2.2% | 2 | 2.0% | 0 | 0.0% | 0 | 0.0% | 5 | 0.8% |
| Wołowski | 1 | 1.2% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 3 | 1.4% | 0 | 0.0% | 5 | 0.8% |
| Wrocław | **31** | **36.9%** | **14** | **35.0%** | **20** | **43.5%** | **15** | **15.2%** | **51** | **24.2%** | **96** | **75.6%** | **227** | **37.4%** |
| Wrocławski | **7** | **8.3%** | **6** | **15.0%** | **8** | **17.4%** | **8** | **8.1%** | **22** | **10.4%** | **7** | **5.5%** | **58** | **9.6%** |
| Ząbkowicki | 3 | 3.6% | 0 | 0.0% | 0 | 0.0% | 4 | 4.0% | 3 | 1.4% | 0 | 0.0% | 10 | 1.6% |
| Zgorzelecki |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 1.0% | 2 | 0.9% | 0 | 0.0% | 3 | 0.5% |
| Złotoryjski |  | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 3.0% | 0 | 0.0% | 0 | 0.0% | 3 | 0.5% |
| area of more than 1 poviat | 3 | 3.6% | 0 | 0.0% | 1 | 2.2% | 3 | 3.0% | 5 | 2.4% | 4 | 3.1% | 16 | 2.6% |
| Total | **84** | **100.0%** | **40** | **100.0%** | **46** | **100.0%** | **99** | **100.0%** | **211** | **100.0%** | **127** | **100.0%** | **607** | **100.0%** |

*\* Symbols: N - number of indications for the LSSSs under which the LSSSs are specified (PLN million)*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

**Table 15.** Contracts of the ROP LS by location of the project and thematic scope of the LSSS (value of the contracts for which the LSSSs were indicated, PLN million)

| Poviat | LSSS1-N | Share in LSSS1-N | LSSS2-N | Share in LSSS1-N | LSSS3-N | Share in LSSS1-N | LSSS4-N | Share in LSSS1-N | LSSS5-N | Share in LSSS1-N | LSSS6-N | Share in LSSS1-N | TOTAL | Share in LSSS1-N |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bolesławiecki | 2.4 | 2.4% | 0.0 | 0.0% | 5.0 | 9.6% | 1.1 | 0.8% | 11.1 | 3.1% | 0.6 | 0.4% | 20.1 | 2.4% |
| Dzierżoniowski | **4.9** | **5.0%** | **1.9** | **3.6%** | **8.1** | **15.5%** | **12.8** | **8.9%** | **24.1** | **6.8%** | **0.4** | **0.3%** | **52.3** | **6.1%** |
| Głogowski | 9.6 | 9.8% | 0.0 | 0.0% | 0.0 | 0.0% | 0.5 | 0.4% | 16.7 | 4.7% | 0.0 | 0.0% | 26.9 | 3.1% |
| Górowski | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 1.2 | 0.9% | 1.9 | 0.5% | 0.0 | 0.0% | 3.2 | 0.4% |
| Jaworski | 0.5 | 0.5% | 0.0 | 0.0% | 0.0 | 0.0% | 1.0 | 0.7% | 8.8 | 2.5% | 0.0 | 0.0% | 10.3 | 1.2% |
| Jelenia Góra | 2.1 | 2.1% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 1.0 | 0.3% | 1.2 | 0.8% | 4.3 | 0.5% |
| Jeleniogórski | 0.0 | 0.0% | 0.0 | 0.0% | 0.7 | 1.4% | 9.8 | 6.8% | 7.0 | 2.0% | 4.9 | 3.3% | 22.5 | 2.6% |
| Kamiennogórski | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 6.7 | 1.9% | 0.6 | 0.4% | 7.3 | 0.9% |
| Kłodzki | 0.0 | 0.0% | 0.0 | 0.0% | 7.5 | 14.5% | 0.6 | 0.4% | 3.7 | 1.0% | 0.3 | 0.2% | 12.2 | 1.4% |
| Legnica | 0.5 | 0.5% | 0.0 | 0.0% | 0.0 | 0.0% | 1.8 | 1.2% | 1.4 | 0.4% | 0.7 | 0.5% | 4.4 | 0.5% |
| Legnicki | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 4.0 | 2.8% | 0.5 | 0.1% | 0.0 | 0.0% | 4.5 | 0.5% |
| Lubański | 0.5 | 0.5% | 0.0 | 0.0% | 0.0 | 0.0% | 1.5 | 1.0% | 4.4 | 1.2% | 0.0 | 0.0% | 6.4 | 0.8% |
| Lubiński | 1.2 | 1.2% | 0.0 | 0.0% | 0.4 | 0.8% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 1.6 | 0.2% |
| Lwówecki | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 6.5 | 4.5% | 0.0 | 0.0% | 4.9 | 3.2% | 11.4 | 1.3% |
| Milicki | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.1% | 3.0 | 2.1% | 11.0 | 3.1% | 0.0 | 0.0% | 14.1 | 1.7% |
| Oleśnicki | **0.8** | **0.8%** | **6.0** | **11.3%** | **0.0** | **0.0%** | **13.9** | **9.7%** | **16.4** | **4.6%** | **2.1** | **1.4%** | **39.2** | **4.6%** |
| Oławski | **0.0** | **0.0%** | **8.6** | **16.1%** | **5.3** | **10.2%** | **5.1** | **3.5%** | **27.0** | **7.6%** | **14.7** | **9.7%** | **60.6** | **7.1%** |
| Polkowicki | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.1% | 3.1 | 2.1% | 0.0 | 0.0% | 0.9 | 0.6% | 4.1 | 0.5% |
| Strzeliński | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 4.2 | 2.9% | 3.6 | 1.0% | 0.0 | 0.0% | 7.8 | 0.9% |
| Średzki | 0.5 | 0.5% | 0.0 | 0.0% | 0.0 | 0.1% | 5.2 | 3.6% | 8.2 | 2.3% | 0.0 | 0.0% | 13.9 | 1.6% |
| Świdnicki | **8.7** | **8.9%** | **7.2** | **13.5%** | **1.3** | **2.5%** | **24.0** | **16.7%** | **67.9** | **19.2%** | **0.9** | **0.6%** | **110.0** | **12.9%** |
| Trzebnicki | 3.3 | 3.3% | 1.8 | 3.4% | 0.0 | 0.0% | 1.5 | 1.0% | 5.2 | 1.5% | 1.3 | 0.9% | 13.0 | 1.5% |
| Wałbrzych | 1.2 | 1.2% | 0.0 | 0.0% | 0.0 | 0.0% | 3.0 | 2.1% | 5.2 | 1.5% | 0.6 | 0.4% | 10.0 | 1.2% |
| Wałbrzyski | 0.0 | 0.1% | 5.3 | 10.0% | 0.2 | 0.5% | 1.7 | 1.2% | 0.0 | 0.0% | 0.0 | 0.0% | 7.3 | 0.9% |
| Wołowski | 0.3 | 0.3% | 0.0 | 0.0% | 0.0 | 0.0% | 2.0 | 1.4% | 9.3 | 2.6% | 0.0 | 0.0% | 11.6 | 1.4% |
| Wrocław | **48.7** | **49.3%** | **9.6** | **17.9%** | **19.1** | **36.7%** | **12.2** | **8.5%** | **75.1** | **21.2%** | **102.6** | **67.6%** | **267.2** | **31.3%** |
| Wrocławski | **8.1** | **8.2%** | **12.9** | **24.2%** | **2.9** | **5.6%** | **9.7** | **6.7%** | **28.6** | **8.1%** | **8.4** | **5.6%** | **70.7** | **8.3%** |
| Ząbkowicki | 0.8 | 0.8% | 0.0 | 0.0% | 0.0 | 0.0% | 5.2 | 3.6% | 1.0 | 0.3% | 0.0 | 0.0% | 6.9 | 0.8% |
| Zgorzelecki | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.2 | 0.1% | 2.1 | 0.6% | 0.0 | 0.0% | 2.3 | 0.3% |
| Złotoryjski | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 5.8 | 4.0% | 0.0 | 0.0% | 0.0 | 0.0% | 5.8 | 0.7% |
| area of more than 1 poviat | 4.7 | 4.8% | 0.0 | 0.0% | 1.3 | 2.5% | 3.2 | 2.2% | 6.4 | 1.8% | 6.6 | 4.4% | 22.3 | 2.6% |
| Total | **98.7** | **100.0%** | **53.4** | **100.0%** | **52.1** | **100.0%** | **143.8** | **100.0%** | **354.5** | **100.0%** | **151.8** | **100.0%** | **854.2** | **100.0%** |

*\* Symbols: V - value of the contracts for which the LSSSs are specified (PLN million)*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

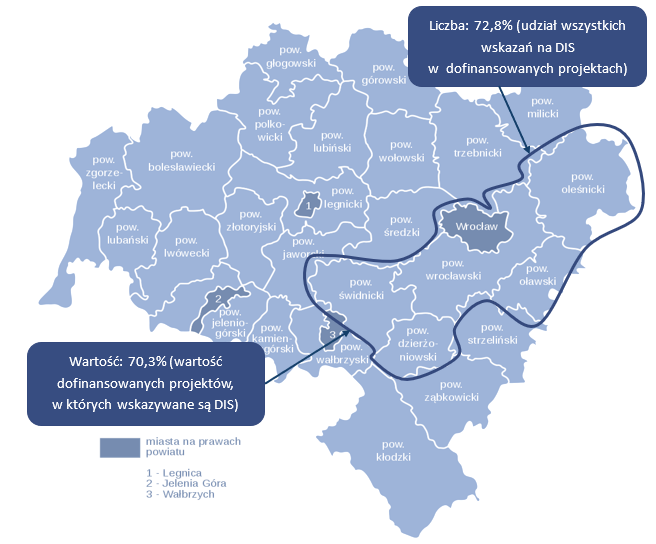
**Table 16.** Contracts of the ROP LS by location of the project and thematic scope of the LSSS (average value per one indication for the LSSSs, PLN million)

| Poviat | LSSS1-A | Average in total | LSSS2-A | Average in total | LSSS3-A | Average in total | LSSS4-A | Average in total | LSSS5-A | Average in total | LSSS6-A | Average in total | TOTAL | Average in total |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bolesławiecki | 1.2 | 102% |  |  | 2.5 | 220% | 0.6 | 38% | 2.8 | 165% | 0.3 | 25% | 1.7 | 119% |
| Dzierżoniowski | 0.8 | 69% | 0.9 | 71% | 4.0 | 357% | 4.3 | 295% | 1.6 | 96% | 0.4 | 37% | 1.8 | 128% |
| Głogowski | **4.8** | **410%** |  |  |  |  | **0.5** | **35%** | **4.2** | **249%** |  |  | **3.8** | **273%** |
| Górowski |  |  |  |  |  |  | 1.2 | 85% | 1.0 | 57% |  |  | 1.1 | 75% |
| Jaworski | 0.5 | 40% |  |  |  |  | 1.0 | 69% | 2.2 | 132% |  |  | 1.7 | 122% |
| Jelenia Góra | 2.1 | 178% |  |  |  |  |  |  | 0.5 | 30% | 0.6 | 51% | 0.9 | 61% |
| Jeleniogórski |  |  |  |  | **0.7** | **64%** | **4.9** | **339%** | **1.7** | **104%** | **4.9** | **413%** | **2.8** | **200%** |
| Kamiennogórski |  |  |  |  |  |  |  |  | 1.7 | 100% | 0.6 | 51% | 1.5 | 104% |
| Kłodzki |  |  |  |  | 3.8 | 333% | 0.6 | 43% | 1.9 | 110% | 0.3 | 26% | 2.0 | 144% |
| Legnica | 0.5 | 38% |  |  |  |  | 0.9 | 61% | 0.5 | 28% | 0.7 | 61% | 0.6 | 44% |
| Legnicki |  |  |  |  |  |  | 1.3 | 92% | 0.2 | 15% |  |  | 0.9 | 64% |
| Lubański | 0.5 | 46% |  |  |  |  | 1.5 | 102% | 1.1 | 65% |  |  | 1.1 | 76% |
| Lubiński | 1.2 | 99% |  |  | 0.4 | 38% |  |  |  |  |  |  | 0.8 | 56% |
| Lwówecki |  |  |  |  |  |  | **3.3** | **224%** |  |  | **4.9** | **409%** | **3.8** | **270%** |
| Milicki |  |  |  |  | 0.0 | 4% | 1.5 | 105% | 11.0 | 655% |  |  | 3.5 | 251% |
| Oleśnicki | 0.4 | 33% | 1.2 | 91% |  |  | 2.0 | 137% | 2.1 | 122% | 0.5 | 43% | 1.5 | 107% |
| Oławski | **0.0** | **4%** | **2.9** | **214%** | **2.7** | **235%** | **1.7** | **116%** | **2.1** | **123%** | **14.7** | **1228%** | **2.6** | **187%** |
| Polkowicki |  |  |  |  | 0.0 | 4% | 3.1 | 211% |  |  | 0.9 | 78% | 1.4 | 96% |
| Strzeliński |  |  |  |  |  |  | **4.2** | **292%** | **1.8** | **107%** |  |  | **2.6** | **186%** |
| Średzki | 0.2 | 20% |  |  | 0.0 | 4% | 2.6 | 179% | 1.4 | 81% |  |  | 1.3 | 90% |
| Świdnicki | 1.0 | 83% | 1.0 | 77% | 0.4 | 38% | 1.1 | 75% | 1.9 | 112% | 0.5 | 39% | 1.4 | 99% |
| Trzebnicki | 0.5 | 40% | 0.9 | 69% |  |  | 0.7 | 50% | 0.9 | 51% | 1.3 | 108% | 0.7 | 51% |
| Wałbrzych | 0.6 | 49% |  |  |  |  | 1.0 | 69% | 1.7 | 104% | 0.6 | 47% | 1.1 | 79% |
| Wałbrzyski | 0.0 | 4% | 5.3 | 399% | 0.2 | 22% | 0.8 | 57% |  |  |  |  | 1.5 | 103% |
| Wołowski | 0.3 | 22% |  |  |  |  | 2.0 | 138% | 3.1 | 185% |  |  | 2.3 | 165% |
| Wrocław | 1.6 | 134% | 0.7 | 51% | 1.0 | 84% | 0.8 | 56% | 1.5 | 88% | 1.1 | 89% | 1.2 | 84% |
| Wrocławski | 1.2 | 99% | 2.2 | 162% | 0.4 | 32% | 1.2 | 83% | 1.3 | 77% | 1.2 | 101% | 1.2 | 87% |
| Ząbkowicki | 0.3 | 21% |  |  |  |  | 1.3 | 89% | 0.3 | 19% |  |  | 0.7 | 49% |
| Zgorzelecki |  |  |  |  |  |  | 0.2 | 13% | 1.1 | 63% |  |  | 0.8 | 54% |
| Złotoryjski |  |  |  |  |  |  | 1.9 | 133% |  |  |  |  | 1.9 | 137% |
| area of more than 1 poviat | 1.6 | 134% |  |  | 1.3 | 114% | 1.1 | 74% | 1.3 | 76% | 1.7 | 138% | 1.4 | 99% |
| Total | **1.2** | **100%** | **1.3** | **100%** | **1.1** | **100%** | **1.5** | **100%** | **1.7** | **100%** | **1.2** | **100%** | **1.4** | **100%** |

*\* Symbols: A - Average value per one indication for the LSSSs (PLN million)*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

**Map 1.** Projects of the ROP LS by location of the project and its thematic scope.

**

*Map: https://commons.wikimedia.org/w/index.php?curid=9558067.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Share: 72.8% (share of the indicated LSSSs in the co-financed projects)

Share: 70.3% (value of the co-financed projects under which the LSSSs were indicated)

Towns with poviat rights: Legnica, Jelenia Góra, Wałbrzych

### Other distributions of the LSSSs

These distributions present data on the concentration of the LSSSs by the size of the support beneficiaries (micro, small, medium-sized enterprises), the existence of a consortium-based model for the project implementation and the types of research and development work to be performed in the projects corresponding to the fields of the Lower Silesian Smart Specialisation.

The performed analysis of the distribution of the LSSSs by the size of the beneficiary covered projects under which the smart specialisations were indicated 602 times (the analysis included the enterprises founded in the most frequent legal forms, i.e. commercial companies and partnerships and business activity carried out by natural persons (the projects of 5 types of entities were excluded, including: 3 cooperatives, 1 foundation, and 1 entity with an unspecified legal form).

The table below illustrates the distribution of the LSSSs by the size of the beneficiary. The presented data reveal an equal distribution of indications in the projects that are implemented by micro and small enterprises. Medium-sized enterprises have a significant share, while the large ones have a very small one (the small share of the latter category may be attributed to the limitations for other entities, excluding the SMEs, in gaining support from the ROP LS; such entities could benefit from the support only in Measure 1.2 of the ROP LS subject to certain other conditions). In general, the presented distribution confirms the correct distribution of the support between individual categories of enterprises, including the micro ones to a large extent, i.e. those struggling particularly with formal requirements of the application process (and similarly at the implementation stage). It is thus evident that this category is capable to implement projects that correspond to the LSSS fields.

**Table 17.** Number and value of the support per LSSSs by the size of the enterprise (beneficiary)

| LSSS\* | Number of indications for the LSSSs | | | | | Value of projects  (PLN million) | | | | | Average value of the project per one indication for the LSSSs (PLN million) | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **micro** | **small** | **medium-sized** | **large** | **micro** | | **small** | **medium-sized** | **large** | **micro** | | **small** | **medium-sized** | **large** |
| LSSS1 | 39 | 33 | 8 | 4 | 32.5 | | 32.6 | 17.6 | 16.0 | 0.8 | | 1.0 | 2.2 | 4.0 |
| LSSS2 | 22 | 10 | 7 | 1 | 18.3 | | 21.2 | 11.4 | 2.5 | 0.8 | | 2.1 | 1.6 | 2.5 |
| LSSS3 | 24 | 14 | 8 |  | 13.7 | | 24.4 | 14.0 |  | 0.6 | | 1.7 | 1.8 |  |
| LSSS4 | 27 | 56 | 15 | 1 | 29.1 | | 88.2 | 24.0 | 2.5 | 1.1 | | 1.6 | 1.6 | 2.5 |
| LSSS5 | 70 | **85** | 51 | 2 | 77.0 | | 157.1 | 114.5 | 4.8 | 1.1 | | 1.8 | 2.2 | 2.4 |
| LSSS6 | 64 | 47 | 14 |  | 37.2 | | 99.6 | 14.8 |  | 0.6 | | 2.1 | 1.1 |  |
| Total | **246** | **245** | **103** | **8** | **207.7** | | **423.0** | **196.3** | **25.8** | **0.8** | | **1.7** | **1.9** | **3.2** |

*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 2 - Spatial mobility, 3 - High-quality food, 4 - Natural and secondary raw materials, 5 - Production of machineries and devices, material processing, 6 - ICT.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

Another specific measure of the distribution of the LSSSs in projects was the fact that the project was implemented in a consortium-based model under which the project is implemented by two or more partners at least one of which is an entrepreneur. The analysed population of the projects co-financed from the ROP LS did not have many projects implemented in this formula[[40]](#footnote-41). The population of projects corresponding to the LSSSs contained 23 such projects (4%) (the 546 remaining projects were implemented as individual projects - one beneficiary).

The table below illustrates the distribution of the LSSSs by consortium-based project. The projects focused on four LSSSs, with the most frequent LSSS being LSSS6 ‘Information and communication technologies’ (a half of the indications for this category in the entire population of consortium-based projects). The projects had a high value on an average basis, significantly exceeding the average value per one indication for the LSSS in the entire population of beneficiaries (PLN 1.48 million) whose projects corresponded to the LSSSs.

**Table 18.** Number and value of partnership contracts by thematic scope of the LSSSs\*.

|  |  |  |  |
| --- | --- | --- | --- |
| LSSS\*\* | Number | Value of projects  (PLN million) | Average value of the project per one indication for the LSSSs (PLN million) |
| LSSS1 | 1 | 4.8 | 4.8 |
| LSSS4 | 3 | 6.2 | 2.1 |
| LSSS5 | 6 | 13.6 | 2.3 |
| LSSS6 | 14 | 36.2 | 2.6 |
| Total | **24\*** | **60.7** | **2.5** |

*\* One of the projects corresponds to two LSSS fields, so the total number exceeds the number of consortium-based projects.*

*\*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 4 - Natural and secondary raw materials, 6 - ICT.*

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

The classification of projects by their targeting at the LSSSs also covered the identification of those projects for which research and development work was planned (these included all the projects co-financed under Measure 1.2 and part of those co-financed under Measure 1.5 of the ROP LS). As for the number of projects, there were 158 projects with planned R&D work (28% of all the projects corresponding to the LSSSs in the population).

To classify the projects by R&D component, the research work was divided into: development work or industrial and development work.[[41]](#footnote-42) Table 19 presents the identified distribution of the LSSSs in the research and development projects co-financed from the ROP LS. As results from the presented data, the R&D work covered the stage of industrial and development work or exclusively the stage of development work. The complete process covering the industrial and development work mostly referred to LSSS6 (‘Information and communication technologies’), LSSS5 (‘Production of machineries and devices, material processing’), and LSSS1 (‘Chemical and pharmaceutical industries’). From this point of view, the fields may be deemed (highly) ‘research’ intensive, so requiring - in principle - public support (the stage of industrial work will usually refer to the projects being at lower levels of technological readiness).

**Table 19.** Number and value of projects by type of R&D work and thematic scope of the LSSS\*.

| LSSS\*\* | Number of projects | | Value of projects (PLN million) | | Average value of the project (PLN million) | |
| --- | --- | --- | --- | --- | --- | --- |
|  | I/D | D | I/D | D | I/D | D |
| RSS1 | 16 | 7 | 41.6 | 22.7 | 2.6 | 3.2 |
| RSS2 | 6 | 6 | 14.4 | 12.0 | 2.4 | 2.0 |
| RSS3 | 6 | 5 | 15.3 | 4.9 | 2.6 | 1.0 |
| RSS4 | 5 | 11 | 10.5 | 19.8 | 2.1 | 1.8 |
| RSS5 | 24 | 34 | 44.4 | 83.8 | 1.9 | 2.5 |
| RSS6 | 26 | 12 | 65.5 | 34.2 | 2.5 | 2.9 |
| Total | **83** | **75** | **191.8** | **177.4** | **2.3** | **2.4** |

*\*\* D - development research, I/D - industrial and development research.*

*\* LSSS symbols: 1 - Chemical and pharmaceutical industries, 2 - Spatial mobility, 3 - High-quality food, 4 - Natural and secondary raw materials, 5 - Production of machineries and devices, material processing, 6 - ICT.*

*Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

On the other hand, the stage of development work is dominated by the projects implemented within the framework of LSSS5. As for the analysed projects covering different types of R&D works, it may be concluded that they require significant capital. The average values in the table (excluding LSSS3 in the area of development work) exceed the average project values per LSSSs in the entire population of the projects corresponding to the fields of the Lower Silesian Smart Specialisations (as mentioned above, the average value is approx. PLN 1.4 million). Additionally, it should be emphasized that the value of projects with a R&D component amounts to approx. PLN 370 million, which accounts for approx. 43% of the total value of the projects corresponding to the LSSSs. This makes it possible to conclude that the support focuses on the projects that may be characterised as being ‘research’ intensive.

## Projects supporting the intervention in the context of smart specialisations

Within the framework of the ROP LS, part of the support programmed under PA 1 was implemented in the form of projects that could be deemed to support the development of all the specialisations, if the smart specialisation strategy of Lower Silesia is considered. This refers to the projects under which the beneficiary gained funds for projects that should benefit other enterprises (final recipients). The beneficiary acted as an ‘intermediary’ in the distribution of the support. The role of such intermediaries was performed by the beneficiaries being mostly Business Environment Institutions (BEIs), or units of the self-government (municipalities) in the projects for preparing investment sites, and other types of entities ‘intermediating’ in the distribution of financial instruments.

As far as these projects are concerned, their supporting nature (for the Lower Silesian Strategy for Regional Smart Specialisations) consists in that a project does not exclude the transfer of support to the entities whose activities fall within the fields of the smart specialisation (in this sense, it is ‘open’, it may thus be concluded that it contributes to the implementation of at least one field of the Lower Silesian Smart Specialisations, depending cetainly on the specific characteristics of its final recipients, or of all the fields) or (in some cases) it required that the final recipient matched the Lower Silesian Smart Specialisations (this was the cased in the projects ‘innovation vouchers’ under Measure 1.2 of the ROP LS; such projects had to correspond to the Lower Silesian Smart Specialisations, which meant that this condition had to be fulfilled by the respective projects of the final recipients). Finally, the R&D infrastructure developed in the framework of Measure 1.1 has always been targeted at specific smart specialisation of the region, as determined by the type of infrastructure and the specialisation of the beneficiary.

The inclusion of such projects in the support structure of the ROP LS may be deemed to be its strength. This is due to the importance of such solutions for the implementation mechanism, as the decentralisation of the implementation function (in principle) increases the efficiency of the transfer of support (e.g. the efficiency is mostly dependant on the positive effects resulting from the location of the decision-making centre ‘closer to the final recipient; various burdens associated with the distribution of support, which the Managing Authority or the Intermediate Body[[42]](#footnote-43) would need, are simultaneously limited, and it becomes possible to make use of the knowledge and skills of the entity implementing the project - if this is the case, the positive effects will result from the specialisation of the ‘intermediary’, including its knowledge of the market). On the other hand, the fact that such projects are entrusted to various institutions (above all, it is important to engage the BEIs in their implementation) strengthens them and, in consequence, allows them to gain new experiences. Moreover, some of these projects were implemented in the consortium-based model (13 projects, i.e. approx. 1/5). This means that cooperation was developed between various institutions in these projects, which also triggered positive effects. A network of Business Environment Institutions is being developed (strengthened) in the region, which offers synergies on the basis of the specialisations of the cooperating units, the exchange of information and a greater territorial outreach of their offer across the region. It is also worth mentioning that the projects implemented by the consortia were ‘open to the entire catalogue of the Lower Silesian Smart Specialisations. Table 22 on page 72 includes further information.

Thus, involving various institutions from the environment of the enterprises, forming an intermediary level in the transfer of support, in the distribution of the support may develop and strengthen the sector of Business Environment Institutions that promote business development and entrepreneurship.

The table below includes information on the LSSS supporting projects.

**Table 20.** Number and value of projects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Intervention instruments of the ROP LS | Number of projects | Value  (PLN million) | Average value of the project (PLN million) | Number of contracts (%) |
| Measure 1.1 | **3** | **176.0** | **58.7** | **5%** |
| Measure 1.2 | **8** | **63.1** | **7.9** | **13%** |
| * Sub-measure 1.2.1 | 5 | 53.4 | 10.7 | 8% |
| * Sub-measure 1.2.2 | 3 | 9.8 | 3.3 | 5% |
| Measure 1.3 | **42** | **202.4** | **4.8** | **69%** |
| * Sub-measure 1.3.1 | 18 | 40.5 | 2.2 | 30% |
| * Sub-measure 1.3.2 | 12 | 104.6 | 8.7 | 20% |
| * Sub-measure 1.3.3 | 6 | 21.7 | 3.6 | 10% |
| * Sub-measure 1.3.4 | 6 | 35.7 | 5.9 | 10% |
| Measure 1.4 | **7** | **17.6** | **2.5** | **11%** |
| * Sub-measure 1.4.1 | 6 | 13.9 | 2.3 | 10% |
| * Sub-measure 1.4.2 | 1 | 3.8 | 3.8 | 2% |
| Measure 1.5 | **1** | **431.1** | **431.1** | **2%** |
| * Sub-measure 1.5.1 | 1 | 431.1 | 431.1 | 2% |
| Total | **61** | **890.3** | **14.6** | **100%** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

The following Table 21 (on the following page) presents the projects supporting the LSSS by their thematic scope and value. It is worth noting the relatively high number of bonus and advisory projects, as their mass scale may contribute to stimulating cooperation between the final recipients and various service providers (R&D&I), i.e. (inter alia) scientific units or advisors whose services will affect the innovativeness of the final recipients (at least the one developed by the company - final recipient). Infrastructural projects and the project concerning financial instruments are also specific because of the have high unit values due to their nature.

**Table 21.** Number and value of projects by type (not terminated contracts)

| Project type | Number of contracts | Value of contracts  (PLN million) | Average value of contracts (PLN million) |
| --- | --- | --- | --- |
| Vouchers for innovations | 6 | 35.2 | 5.9 |
| Advisory grants | 18 | 14.0 | 0.8 |
| Financial instruments[[43]](#footnote-44) | 1 | 431.1 | 431.1 |
| R&D Infrastructure | 5 | 203.9 | 40.8 |
| Infrastructure for entrepreneurship | 12 | 132.8 | 11.1 |
| Promotion | 7 | 17.6 | 2.5 |
| Development of investment sites | 12 | 55.5 | 4.6 |
| Total | **61** | **890.3** | **14.6** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

As pointed out above, the supporting nature of the projects for the LSSS reflects in that the projects do not contain any limitations that would eliminate the entities operating in the fields of the smart specialisations. This is illustrated by the classification of the supporting projects from the point of view of the LSSSs. Namely, all these projects fall within all the fields of the LSSSs, with some exceptions being the projects for R&D infrastructure, entrepreneurship infrastructure and promotion (this differentiation is due to their specific thematic targeting, e.g. the type of the research infrastructure being developed for specific types of research, e.g. specific for a specialisation).

**Table 22.** Number and value of projects by project type and LSSS field

| Project type | Number of projects | Number of indications for: | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| LSSS1 | LSSS2 | LSSS3 | LSSS4 | LSSS5 | LSSS6 |
| Vouchers for innovations | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Advisory grants | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Financial instruments | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| R&D Infrastructure | 5 | 4 | 2 | 4 | 2 | 2 | 1 |
| Infrastructure for entrepreneurship | 12 | 9 | 9 | 10 | 9 | 9 | 11 |
| Promotion | 7 | 5 | 5 | 5 | 4 | 5 | 6 |
| Development of investment sites | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total | **61** | **55** | **53** | **56** | **52** | **53** | **55** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

The table below presents information on the supporting projects - their locations and values.

**Table 23.** Number and value of LSSS supporting projects by location (by poviat)

| Poviat | Number of contracts | Value of contracts | Value of the EU contribution | Number of contracts (%) |
| --- | --- | --- | --- | --- |
| Bolesławiecki | 2 | 2.7 | 2.0 | 3.3% |
| Dzierżoniowski | 3 | 0.9 | 0.7 | 4.9% |
| Głogowski | 2 | 2.0 | 1.7 | 3.3% |
| Górowski | 1 | 0.7 | 0.6 | 1.6% |
| Jaworski | 1 | 0.4 | 0.3 | 1.6% |
| Jelenia Góra | 4 | 6.9 | 5.1 | 6.6% |
| Kamiennogórski | 3 | 1.9 | 1.4 | 4.9% |
| Kłodzki | 3 | 15.5 | 10.6 | 4.9% |
| Lubiński | 1 | 8.5 | 5.0 | 1.6% |
| Lwówecki | 2 | 7.0 | 5.5 | 3.3% |
| Oleśnicki | 4 | 3.0 | 2.5 | 6.6% |
| Oławski | 2 | 1.8 | 1.5 | 3.3% |
| Strzeliński | 1 | 3.2 | 1.7 | 1.6% |
| Średzki | 1 | 8.6 | 5.3 | 1.6% |
| Świdnicki | 2 | 27.5 | 17.3 | 3.3% |
| Trzebnicki | 1 | 51.1 | 35.0 | 1.6% |
| Wałbrzych | 1 | 6.2 | 3.5 | 1.6% |
| Wrocław | 11 | 242.6 | 161.8 | 18.0% |
| Wrocławski | 2 | 12.1 | 7.9 | 3.3% |
| Ząbkowicki | 1 | 2.7 | 2.3 | 1.6% |
| Złotoryjski | 1 | 8.0 | 4.8 | 1.6% |
| area of more than 1 poviat | 12 | 477.1 | 404.2 | 19.7% |
| Total | **61** | **890.3** | **680.8** | **100.0%** |

*Source: Own study on the basis of the data on the ROP LS and of the analysis of the targeting of the co-financed projects at the LSSSs.*

\*

\* \*

The data discussed in sections 3.2 to 3.4, illustrating the projects co-financed from the ROP LS in the context of the Smart Development Strategy of the Lower Silesian Voivodeship, were selected for this Report. The project database of projects of the Contracting Authority, encoded for the LSSSs for this evaluation, enables to present data in various dimensions.

# Analysis and evaluation of the effects of the interventions of the ROP LS 2014-2020 by their subject matter - the adequacy of support and the changes induced

## Intervention in the fields of innovation, competitiveness and internationalisation

### Adjustment of the support to the specifics/needs of the ongoing projects

Adjusting the interventions to the needs of the beneficiaries is crucial for the adequacy of the support distributed. For the projects of PA 1, implemented in Measures 1.2, 1.3, 1.4 and 1.5, the results of the quantitative study make it possible to conclude that the support is highly adequate (the respective results of the study are presented in: Figure 6 - for PA 1, and Figure 7 for intervention instruments).

**Figure 6.** Adjustment of the support to the needs related to the subject matter of the ongoing project (the aggregate evaluation for PA 1) (degree of adjustment).

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=402 (Measures 1.2, 1.3, 1.4 and 1.5).

The following figure presents the opinions expressed by the beneficiaries about the adjustment of the interventions to the needs of the ongoing projects by intervention instrument under PA 1.

For the projects implemented in three Measures (1.2, 1.3 and 1.5), the scoring of the adjustment of the support to the project needs is mostly positive - clearly dominated by the scores confirming a ‘very good’ or ‘good’ adjustment.

The scores granted by the beneficiaries of Measure 1.4 (Internationalisation) are slightly lower, whereby the overall evaluation remains positive. For this Measure, the share of the highest scores is decisively lower than for the remaining measures, and the share of the average and negative scores (a poor or very poor adjustment) is significantly higher.

**Figure 7.** Adjustment of the support to the needs related to the subject matter of the ongoing project (Question: To what extent did the support obtained from the ROP LS respond to your needs in the area related to the subject matter of the project?)

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

The evaluation of the adjustment of the intervention instrument to the needs of the project promoters is probably based on various factors. Nevertheless, two factors ere always key - the implementation period of the contract the possibility to finance specific expenditure thereunder (the acceptable category is defined by the catalogues of the so-called eligible costs). Therefore, this study also addresses the two matters, with the study data being depicted in the following figures.

**Figure 8.** Implementation period of the project (Question: Is/was the maximum admissible period for the project implementation sufficiently long in view of the scope of your project?)

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

**Figure 9.** (Overall evaluation of the analysed Measures of PA 1). Adequacy of the catalogue of eligible costs (Question: Was it possible/did you include all the necessary expenditures necessary for the successful implementation of the project in the admissible eligible expenditures in your project?)

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=402 (Measures 1.2, 1.3, 1.4 and 1.5).

**Figure 10.** (Evaluation by intervention instruments under PA 1) Adequacy of the catalogue of eligible costs (question as above)

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

As far as the first factor - the maximum implementation period of the project - is concerned, positive scores prevail for all the instruments. However, significant differences are noticeable for individual measures. For the projects under Measure 1.2, there are however multiple opinions that this parameter is not adjusted to some extent (more than for other measures). Similarly, very similar percentages of indications (and their content) are articulated by the beneficiaries of Measure 1.3. On the other hand, the opinions of the beneficiaries of Measure 1.4 are more favourable, while the opinions of the beneficiaries of Measure 1.5 are the most favourable. As for the projects under Measure 1.2, the opinions seem to be understandable to a large extent. They are probably determined by the research and development nature of the projects that are (in principle) difficult to implement, mainly due to the limited predictability of the R&D results (it often becomes necessary to repeat research or modify its scope - this has obviously certain consequences for the duration of the research work). The same is true for various infrastructural projects (e.g. frequent disruptions during the performance of investments) or the further distribution of support to the final recipients (e.g. requiring time and high layouts for the project promotion which is necessary to reach the relevant group of potential final beneficiaries), and such projects were supported in Measure 1.3. The results thus indicate that it is reasonable to diversify the specified implementation periods of the projects, as well as to adopt a flexible approach to some of them. It can also be assumed that this may be particularly important for projects with a high share of the research element).

The second factor - the adjustment of the catalogue of eligible costs to the project needs - seems to be of greater importance, as it determines the ultimate usefulness of the support. The results of the study show (Figure 10 above) that the relatively high number of negative evaluations concerned the project beneficiaries under Measures 1.2 and 1.4, particularly under Measure 1.4 (although satisfactory evaluations do prevail in both cases). This was certainly the main element that determined the (as mentioned above) higher share of poorer evaluations concerning the adjustment of the support to the needs of the project promoter (the specifics of the project). A similar distribution of evaluations applies to the beneficiaries of Measure 1.2 and is in principle justified. This is again determined by the most complex nature of the projects that are characteristic for Measure 1.2. It is beyond any doubt that the flexibility of the eligible costs and the possibility to swiftly transfer costs between different cost categories are important factors influencing the entire research process[[44]](#footnote-45) in the research projects.

The beneficiaries of the support measures under PA 1 also commented on the importance of various barriers to the project implementation. The existence of barriers to the project implementation was addressed by approx. 16% of the beneficiaries (the total number of indications: ‘definitely yes’ - 6%, and ‘rather yes’ - 10%) who were subsequently asked to evaluate their relevance (on the basis of the specified list of barriers).

It should be pointed out at the beginning that this number of the respondents signalling that there are barriers to the project implementation is small in principle, which probably also influenced the prevailing opinions, as mentioned above, highlighting the good adjustment of the intervention instruments with the needs of the beneficiaries in relation to their ongoing projects. The implementation process determined the general qualitative evaluation of the support. The (relatively small) percentage of the beneficiaries reporting barriers is certainly a positive signal in terms of the general evaluation of the entire intervention.

Figure 11 depicts the distribution of opinions about barriers to the project implementation. From the data presented above results that only a (smaller) part of the respondents find the specified barriers to be ‘significant’ or ‘very significant’ (moreover, some beneficiaries indicate that a barrier does not exist under the assumption that the respondents referred to the list provided in the study).

**Figure 11.** Barriers limiting the usefulness of the support at the implementation stage (Question: Please assess the importance of the following barriers, limiting the usefulness of the obtained support, with regard to the implementation stage of your project).

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=65 (Measures 1.2, 1.3, 1.4 and 1.5).

The analysis of the aforementioned summary of the identified opinions makes it possible to distinguish four dominant barriers. They include:

* the difficulties in obtaining explicit interpretations of the eligibility of project expenditures (the total number of the indications ‘very big’ and ‘big’ amounts to 49% for this barrier),
* the ambiguities related to the guidelines on the eligibility of project expenditures (the total number of the indications for the aforementioned categories = 45%),
* the problems with the interpretation or method for measuring the result indicators in the project (the total number of the indications for the aforementioned categories = 40%), and
* the difficulties with providing operational financing for the project (the total number of the indications for the aforementioned categories = 36%).

As demonstrated above, the first three barriers concern the formal legal matters governing the details of how projects are to be implemented, in relation to the evaluation of their effects. On the other hand, the last barrier refers to financing the project expenditures. It may be affected by the encountered problems with the timely settlement of the project (and the delayed/prolonged transfer of support funds), as well as indicate a limited capacity of the beneficiaries to finance the project costs during its implementation.

### Evaluation of the results of the support

The adjustment of the intervention instruments to the needs of the project promoters ultimately impacts the effects of the support. This matter is obviously of key importance, while being the core element of the logic underpinning public interventions.

At the current stage of the project implementation for the analysed measures of PA 1, it may be estimated that the effects generated by the granted support for the implementation of projects can be estimated[[45]](#footnote-46) are satisfactory.

The collective opinions expressed by the beneficiaries of the interventions under PA 1 on the implementation of the expected effects of the projects are presented in the following figure. The presented data confirm that there are decisively more opinions about very big or big effects or a high probability of the expected effects in future (in the opinion of the respondents) - as results from the figure below, the indications for a high or decisively high advancement of the expected results of the support account for nearly 3/4 for all the analysed measures under PA 1.

**Figure 12.** (Aggregate evaluation of the analysed measures under PA 1) Overall evaluation of the implementation of the expected project effects (degree of impact).

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=402 (Measures 1.2, 1.3, 1.4 and 1.5).

The following three tables deliver detailed information about the expected occurrence of certain effects as a result of the co-financed projects (under Measures 1.2, 1.4 and 1.5 respectively).

**Table 24.** Which of the following effects will become noticeable as the result of the project - beneficiaries of Measure 1.2?

| Specification | Yes | No | It is difficult to evaluate. |
| --- | --- | --- | --- |
| Increasing competences of the staff in the development of innovative solutions and carrying out research and development work | **91%** | 9% | 4% |
| Establishing new cooperation relations in the development and implementation of innovative solutions | **82%** | 8% | 2% |
| Placing a new product/service onto the market | **81%** | 42% | 8% |
| Implementing a new technology with good development perspectives | **81%** | 10% | 4% |
| Gaining a competitive advantage on the domestic market | 79% | 10% | 8% |
| Gaining new markets/domestic customers | 77% | 12% | 8% |
| Diversifying the offer of products/services | 77% | 11% | 9% |
| Strengthening cooperation with external actors in developing and implementing innovative solutions, including the scientific units | 75% | 50% | 12% |
| Increased expenditures for research and development work | 72% | 41% | 9% |
| Gaining of intellectual property (e.g. patent, license, know-how or other unpatented technical knowledge), being an important development asset | 70% | 18% | 8% |
| Gaining of infrastructure with the capacity to carrying out research and development work | 67% | 54% | 10% |
| Increased employment, strengthening the operational capacities | 63% | 53% | 10% |
| Cost rationalization for manufacturing products/rendering services | **53%** | 57% | 14% |
| Gaining a competitive advantage on a foreign market/foreign markets | **43%** | 66% | 12% |
| Gaining new markets/customers abroad | **42%** | 22% | 7% |
| Patenting a newly developed solution | **30%** | 29% | 8% |

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57.

**Table 25.** Which of the following effects will become noticeable as the result of the project - beneficiaries of Measure 1.5?

| Specification | Yes | No | It is difficult to evaluate. |
| --- | --- | --- | --- |
| Gaining new markets/domestic customers | **90%** | 8% | 2% |
| Placing a new product/service onto the market | **87%** | 9% | 4% |
| Implementing a new technology with good development perspectives | **86%** | 10% | 4% |
| Cost rationalization for manufacturing products/rendering services | **82%** | 10% | 8% |
| Diversifying the offer of products/services | 80% | 12% | 8% |
| Gaining a competitive advantage on the domestic market | 80% | 11% | 9% |
| Establishing new cooperation relations in the development and implementation of innovative solutions | 73% | 18% | 9% |
| Increased employment, strengthening the operational capacities | 72% | 22% | 7% |
| Increasing competences of the staff in the development of innovative solutions and carrying out research and development work | 62% | 29% | 8% |
| Gaining new markets/customers abroad | 50% | 42% | 8% |
| Strengthening cooperation with external actors in developing and implementing innovative solutions, including the scientific units | 50% | 41% | 9% |
| Gaining a competitive advantage on a foreign market/foreign markets | **38%** | 50% | 12% |
| Gaining of intellectual property (e.g. patent, license, know-how or other unpatented technical knowledge), being an important development asset | **37%** | 53% | 10% |
| Gaining of infrastructure with the capacity to carrying out research and development work | **36%** | 54% | 10% |
| Increased expenditures for research and development work | **29%** | 57% | 14% |
| Patenting a newly developed solution | **22%** | 66% | 12% |

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.5 n=212.

The estimated effects of the projects implemented under Measures 1.2 and 1.5 indicate that the most important results of Measure 1.5 refer to the competitiveness of the enterprise. On the other hand, they are much poorer in the R&D field (but this was not the key element of the intervention logic in this instrument). For Measure 1.2, the effects related to the increased competences of the research staff and to the establishment of relations with external entities (e.g. scientific units) in the development and implementation of innovative solutions are emphasised much more strongly.

What is interesting, no special effects are expected from the potential marketing of new products onto foreign markets, which may (to some extent) undermine the innovative nature of the developed solutions. No special activity in the protection of intellectual property is expected as well. Furthermore, much more beneficiaries of Measure 1.2 emphasize the increased expenditures for research and development activities (which is one of the key elements of the intervention logic in the research and development field).

The effects estimated by the beneficiaries of Measure 1.4 are presented below.

**Table 26.** Which of the following effects will become noticeable as the result of the project - beneficiaries of Measure 1.4?

| Specification | Yes | No | It is difficult to evaluate. |
| --- | --- | --- | --- |
| Establishing business relations with foreign entities, creating new development perspectives | **75%** | 14% | 11% |
| Gaining new markets/customers abroad | **69%** | 21% | 10% |
| Concluding new export contracts | **63%** | 25% | 12% |
| Increasing competences of the staff in the export of products/services and operating on foreign markets | 60% | 24% | 16% |
| Increased sales of our products/services to customers outside of Poland | 60% | 26% | 14% |
| Increasing profitability of our activities | 58% | 25% | 17% |
| Placing a new product/service onto the market | **45%** | 37% | 18% |
| Gaining a competitive advantage on a foreign market/foreign markets | **44%** | 36% | 20% |
| Increasing employment in our company | **40%** | 46% | 13% |

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.5 n=212.

The three key effects, which are indicated by the largest group of respondents and beneficiaries of Measure 1.4, are directly linked with the intervention logic underpinning the instrument. It is expected that the main effect will consist in establishing business relationships with foreign entities, gaining new markets/customers creating a basis for the development of the export activity, and the implementation of the effects in the form of new export contracts. The respondents believe that new innovative solutions will be subject to internationalisation less frequently, preceded rather by the products being currently on offer (adjusted to the requirements of foreign markets and the distribution channels operating therein). A relatively small group of entrepreneurs mention the effect of gaining a real (and lasting) competitive advantage on foreign markets. The projects implemented under Measure 1.4 will have a rather moderate impact on increasing employment by the beneficiaries of the support measures.

The estimated effects of the absorption of the support, as presented herein, contain multiple opinions about the generally positive impacts of the interventions. Such opinions result in a positive general opinion, however with regard to the status as of the date of the study (‘today’). Thus, referring to another question in the study, the responses received (Figure 13) indicate that the vast majority of respondents view the received support as triggering the expected effects (through their projects in aggregate). The opinions about a ‘very high’ and ‘high’ advancement of the projects account for approx. 73% of all the indications.

However, the analysis of individual instruments of PA 1 reveals certain discrepancies (Figure 14). The beneficiaries of Measures 1.3 and 1.4 expressed the worst opinions about the current advancement of the projects. These instruments attract less evaluations indicating their ‘very high’ advancement and, on the other hand, more evaluations indicating their ‘moderate’ advancement or negative evaluations (‘low’ and ‘very low’), whereby a similar share of negative evaluations is also characteristic for Measure 1.2). On this basis, it can be concluded that these measures are likely to produce effects, but in a (postponed) time perspective (therefore, their effects are less certain). Of course, this implies a greater risk that the effects will not occur or will occur on a limited scale. This situation is largely determined by the nature of the projects implemented in the framework of these measures. For example, it is difficult to expect that the export expansion will take place ‘overnight’, or the infrastructure developed for economic purposes will be used in full, e.g. due to the time needed to find investors to manage the investment sites. Similar comments may also be formulated for the projects for which grants for advisory services or innovation vouchers - as in Measure 1.2 - were granted. As pointed out above, the positive evaluations concerning the occurrence of the expected effects of the projects however prevail, which generally favours a positive evaluation of the support offered and used.

**Figure 13.** (Overall evaluation of the analysed Measures of PA 1). Overall evaluation of the implementation of the expected effects of the projects (Question: How to you evaluate in general the current advancement of the planned effect of the project for which you were granted co-financing from the ROP LS 2014-2020? The advancement is:)

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=402 (Measures 1.2, 1.3, 1.4 and 1.5).

**Figure 14.** (Evaluation by intervention instrument of PA 1) Overall evaluation of the implementation of the expected effects of the projects (question as above).

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

### Innovation degree of the results of the co-financed projects

The opinions about the estimated effects of the implementation of the co-financed projects may be complemented with the evaluations of their innovation degree. The respondents were asked about the innovation degree for Measure 1.2 and 1.5, as these instruments were focused on increasing the innovativeness of the developed solutions and those being implemented[[46]](#footnote-47).

**Figure 15.** Innovation degree of the results of the projects implemented under Measures 1.2 and 1.5 (Question: How do you assess the innovation degree of the results of the project co-financed from the ROP LS 2014-2020 in the light of the newly developed/improved products, services or technologies?)

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=51, Measure 1.5 n=212.

The distribution of the innovation degrees of the project results corresponds to the logic and subject matter of the support offered in the two analysed instruments. The financing for projects under Measure 1.2 was targeted more at developing brand-new solutions on the basis of the R&D work. Therefore, this instrument allows to expect a greater share of ‘ground-braking’ solutions in the adopted meaning of innovativeness. On the other hand, for the support under Measure 1.5, focused mainly on the implementation of new solutions, including those new for the enterprise, it could be expected that there would be more evolutionary (incremental) or imitative solutions with a lower innovation degree. These assumptions were fully confirmed by the results of the study.

### Sustainability and continuation of the co-financed projects

The positive opinions about the expected occurrence of the effects of the co-financed projects are accompanied by the beneficiaries’ plans to continue the ongoing projects. Figure 16 shows the distribution of the corresponding opinions. The results of the study reveal the general opinion that it is justify to continue the projects, i.e. to develop them further to consolidate their results and the competitive advantages attained. Relatively less beneficiaries of Measure 1.3 are (decisively) convinced about whether they should continue their projects (the number of indications ‘definitely yes’ is significantly lower than for other measures - the indications ‘rather yes’ do dominate). As for the remaining instruments, the share of the opinions confirming the ‘definite’ intention to continue the project is very high and similar as to the scale. The opinions may also be interpreted to confirm the adequacy of the original decisions to implement the projects.

**Figure 16.** Plans for continuing the ongoing projects (Question: Do you intend to continue the project for which you gained co-financing in the upcoming 2-3 year /…/?)

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

### The effect of barren loss

The effect of barren loss represents an adverse phenomenon indicating that the public intervention is not justified, while replacing only the private funds that would be sufficient to implement the co-financed projects and to attain specific results therefrom. In other words, the occurrence of such phenomenon indicates that the intervention does not generate any added value or generate a small added value.

The results of this study do not indicate a serious risk that such situation may be applicable to the group of beneficiaries participating in the study. It turns out that a major part of the project would not have been implemented if there had been no support available. As results from the study, there are not many (not more than approx. 1/5) opinions confirming explicitly (‘definitely yes’) that the projects would have been implemented even if there had been no public support (their number is even minimal for Measure 1.3, which is determined by its specifics and the types of the implemented projects). However, including the indications ‘rather yes’, the share of the statements confirming the implementation of the projects increases, however up to a maximum of 55% (Measure 1.2). Simultaneously, it may be observed that the share of such statements is still decisively lower for Measure 1.3.

**Figure 17.** Implementation of projects in case there is no support from public funds (Question: Would you decide to implement the project if there were no co-financing?).

Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.3 n=29, Measure 1.4 n=104, Measure 1.5 n=212.

According to the respondents, even if the projects were launched without public support, most of them would be implemented on a smaller scale and at a later time, namely:

* as far as the scope of the projects is concerned, it would be smaller in approx. 70% of the projects (and ‘much smaller’ in approx. 1/3 of the projects),
* the implementation period of the project would be decisively longer (in approx. 40% of the projects).

**Figure 18.** Changes to the scope of the projects in case there would be no co-financing from the ROP LS.

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=190 (Measures 1.2, 1.3, 1.4 and 1.5).

**Figure 19.** Implementation period of the projects in case there would be no co-financing from the ROP LS.

Source: CAWI / CATI (mix) with beneficiaries of PA 1, n=190 (Measures 1.2, 1.3, 1.4 and 1.5).

The two factors determined by the existence of public support clearly demonstrate that the intervention instruments generate a certain added value. Their occurrence made is possible to implement the projects on an appropriate scale, and, what is particularly important, by considering the high competitiveness of the environment in which the beneficiaries of the ROP LS operate, and the shorter period of their implementation.

To supplement, information about the fate of the rejected projects (of the ineffective beneficiaries) could be referred to.

As results from the study, a significant part of the projects were not continued, while some applicants limited the scale of the projects compared to their original assumptions. The share of the indications about the abandonment of the project and of the lack of the decision about the implementation of the project (which is rather pessimistic - such delays indicate rather their abandonment) ranges from approx. 51% to 74%, while being higher in case of the ineffective applicants under Measures 1.3 and 1.4. This means that the public funds may not be replaced with other types of financing in a highly flexible (easy) manner. Under the assumption that the rejected projects were not motivated only by the receipt of co-financing from the support instrument, it may be concluded that the public support generated an added value by enabling the implementation of certain projects.

**Figure 20.** Fates of the projects rejected under the ROP LS (multiple selection).

Source: CAWI/CATI (mix) with ineffective applicants of PA 1: Measure 1.2 n=65, Measure 1.3 n=10, Measure 1.4 n=30, Measure 1.5 n=134.

At the same time, it may be concluded that the results showing the fate of the ineffective projects under Measures 1.3 and 1.4 also indicate that the projects were less important for the interests of the applicants. This statement is also confirmed by the low engagement of own funds in the original projects in case no financing is received (similarly, in terms of the implementation of the projects on a limited scale, however with external financing) - in other words, the attempts made to implement the project seem to be smaller.

As for the fates of the projects of the ineffective applicants, the respondents expressed opinions about the consequences if the project had not been granted the co-financing (Figure 21 below). The tree most important consequences of the lack of co-financing affect the economic condition and competitiveness of the company (expressed as one factor in aggregate):

* the slow-down in the company's growth,
* the limited possibilities to expand into new markets,
* the impossibility to develop and implement a practice for the functioning of innovative solutions (e.g. new products).

The analysis of detailed data (by the analysed measures) reveals that these consequences are more frequently highlighted by the ineffective applicants under Measures 1.2 and 1.5. For example, the sum of indications highlighting the key or significant consequence of the slow-down in the enterprise development amounts to 72% and 75% for the ineffective applicants under both measures respectively, while the number of analogous opinions is lower for Measure 1.4 - 60%[[47]](#footnote-48)). This means in fact that the projects submitted to the measures were in general more important than the ineffective applications under Measure 1.4 - it is certainly justified by both the scale and specifics of the research and development projects or of the projects focused on the implementation of new solutions. This again confirms the lower qualitative significance of the projects co-financed from Measure 1.4.

**Figure 21.** Evaluation of the consequences of not gaining the co-financing under PA 1 (Question: What happened after the abandonment of the project with the use of co-financing from the ROP LS 2014-2020? Please comment on the below statements:)

Source: CAWI/CATI (mix) with ineffective applicants of PA 1: n=229 (Measures 1.2, 1.4 and 1.5).

### Forms for supporting projects

The analysed projects under Measures 1.2 and 1.5 were supported with grants (non-repayable financing)[[48]](#footnote-49). However, it may be assumed that repayable financing will be used for such projects. Therefore, the study tested the respective opinions of the beneficiaries.

The results of the study clearly indicate (Figure 22) that this form of repayable financing is found more adequate by the beneficiaries of Measure 1.5. This may certainly be attributed to the fact that the projects implemented thereunder are prepared better in technological terms, which implies a lower risk that the implementation of the new solution will not be effective.

**Figure 22.** Preferred forms for financing the research and development and innovative projects (Question: Would it be more reasonable to incur a repayable instrument (e.g. a credit or loan) to finance a similar project in future?)

*Source: CAWI/CATI (mix) with beneficiaries of PA 1: Measure 1.2 n=57, Measure 1.5 n=212.*

Of course, the opposite is true for the projects implemented under Measure 1.2, which are characterised by a lower degree of technological readiness, which increases the implementation risk, and sometimes even makes the project result uncertain. It may simultaneously be noticed that the projects under Measure 1.2 attracted a high share of indications ‘I do not know/It is difficult to evaluate’ - this also confirms that the decision-making process is difficult. In the light of the specifics of the R&D projects, the respondents would certainly find it more easy to answer the question if they knew concrete parameters of the product of debt financing. Of course, they had to be adjusted to the specifics, including the risk of the research and development activities (one of such products, implemented as a pilotage project in the current financial perspective of the ROP of the Pomeranian Voivodeship is exemplified below.

In general, the opinions of the respondents, as identified in the study, mean that the forms of support (repayable or non-repayable) may not be replaced in a flexible manner. The degree of such flexibility is determined by the specifics of a research and development projects, in particular its technological readiness.

It is worth noting in this respect that Poland does not have particularly favourable experiences in financing the projects with the R&D component, implemented with the use of repayable debt financing (loans) (implemented during the current financing period in certain regional programmes). In 2018, attempts were made to implement such an instrument (the long-term R&D loan with a value of up to PLN 2 million) in the framework of the ROP of the Kujavian and Pomeranian Voivodeship, but they failed[[49]](#footnote-50) and the instrument was ultimately abandoned. The Pomeranian Voivodeship is in a slightly better situation, as a financial intermediary was selected there to implement the ‘innovation loan’[[50]](#footnote-51), which represents a product for financing research and development work and the related implementations (granted for a period of up to 10 years, with a maximum value of up to PLN 5 million). During the period from early 2018, a portfolio of 7 loans was built to account for approx. a half of the allocation to the instrument in the amount of PLN 60 million - the implementation process is however highly complicated mainly due to the difficulties in the identification of borrowers and adequate projects (the main issues include the creditworthiness or the existence of an appropriate capacity/assets to secure the liability according to the requirements of the financial intermediary). In consequence, the financial intermediary is forced to increase high expenditures to reach adequate entities with its offer, and - in cooperation with them - to specify in detail the project in terms of the research and development component.

As regards the experiences related to the financial instruments under the ROP LS (Measure 1.5, Scheme C), there have been no major problems during their implementation so far[[51]](#footnote-52). The schemes offers a development loan (with two variants, in the form of a micro-loan of up to PLN 100 thousand for micro and small enterprises, and of a loan for micro, small and medium-sized enterprises in the amount of PLN 100 thousand up to 1 million).

As a result of the first tender for the selection of intermediaries, five contracts were concluded with the financial intermediaries for granting loans (both from the region and from outside of the region), whereby one of the contracts was terminated. All the contracts (excluding the terminated one) were implemented on time, 6 further intermediaries were appointed under the major part of the contracts.

In overall, the implementation of loan instruments under Measure 1.5 is progressing smoothly, without major problems, similarly to other regions. The instruments reveal a relatively low degree of complexity. In addition, the entrepreneur is required only to repay the loan and to settle the expenditures financed therefrom, while there are no requirements for achieving specific results. It is also important that the projects are implemented by both very experienced financial intermediaries based in the Lower Silesian Voivodeship (e.g. AGROREG or the Fund of the Wałbrzych Region), as well as strong intermediaries from outside of the region, but with experience in granting loans within the voivodeship (TISE and the Polish Entrepreneurship Foundation).

The scheme also includes one contract with the financial intermediary (POLFUND) for granting sureties, the project is in its final phase.

In the Lower Silesian Voivodeship, the vast majority of loans and sureties go to micro-enterprises, and they account for nearly 90% of the total volume of loan and surety contracts. In addition, 26% of the final recipients of loans are companies that started within the last 2 years. It can therefore be concluded that the financial instruments have been designed appropriately and reach companies that may potentially have the biggest problems with accessing the repayable financing (i.e. the micro and young enterprises).

The evaluation of the quality of customer service by the staff of the financial intermediaries is also strongly positive. As many as 50% of the total number of the final recipients under Measure 1.5 indicate that the main reason for using the offer of the loan or guarantee fund, rather than the offer of a commercial institution, was the individual approach to the customer, which places this factor third in terms of their importance (after - which is fairly obvious - the low interest rates and low commissions or their lack).

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\* \*

This part of the Report is to present complementary findings (the main conclusions findings) from the qualitative studies concerning the support under PA 1 (on the financing of advisory services in the projects of PA 1, certain matters related to the support for R&D projects and other selected matters that were frequently addressed in the qualitative interviews).

### Advisory services

As regards the grants for financing advisory services (the so-called grant projects under Measure 1.3 and the internationalisation projects under Measure 1.4), the respondents made relatively varied indications. They were largely determined by the support instrument. The support for the preparation of a strategy for the expansion into new foreign markets was usually criticised[[52]](#footnote-53); most of the respondents found that the money was wasted. Larger companies know the market much better than the vast majority of the consultants preparing the documents; while smaller companies had to prepare such strategies to participate in fairs, which does not seem to be the most effective solution. Many respondents believe that complex projects are much better suited to such type of support, where aid is offered in various forms, tailored to the specific characteristics of the company, while the preparation of the strategy is not obligatory. The project entitled ‘The Pomeranian Export Broker’[[53]](#footnote-54), financed from the Regional Operational Programme of the Pomeranian Voivodeship, was referred to as an example several times. In the light of such comments, it is justified to recommend that a different approach should be adopted to support the internationalisation of enterprises in future.

In turn, the effectiveness and efficiency of the support for other types of advisory services (which are not a condition for receiving an additional grant) are very difficult to assess and the added value of such support has therefore not been established. On one hand, it was pointed out that such financing was helpful for many enterprises (many companies seem to have benefited from the support to prepare for the GDPR[[54]](#footnote-55) that was to enter into force in mid-2018 ), on the other hand, it is very difficult to assess whether the effect would not have been identical if there had been no support of this type (it may happen that most companies would have financed the relevant advisory services from their own resources). Moreover, some promoters of the grant projects emphasized that the interest in this form of support was not particularly high - there were big problems in attracting final recipients. It was underlined that this was largely due to the fact that the final recipient was obliged to make its own contribution to the project. Additionally, the Polish SME sector, in particular the smallest enterprises, is still not ready to make use of the advisory services on a wider scale, apart from accounting and legal advisory). On the other hand, the expert panel appointed for this study expressed opinions that the offer of advisory services may be a problem. In particular, it is questionable whether the Business Environment Institutions operating in Lower Silesia can offer really useful services, to be rendered in a fully professional manner.

### Research and development projects

As regards the implementation of the R&D projects, the respondents in the qualitative studies reported certain problems in this respect. First of all, it was problematic in formal terms (although it was understandable in substantive terms) to interrupt the implementation of projects due to their failure at a certain stage of research and the justified need to stop the project with no chance of success. As the number of such project is certain to remain high in the subsequent perspective, it would be useful, upon consultation with the National Centre for Research and Development that is very experienced in this area, and potentially with the managing authorities of other regional operational programmes, to develop a manner for dealing with such situations so that there are no significant problems with regard to the indicators and the eligibility of expenditures.

It was also highlighted, what might be important in the next financial perspective of the ROP LS, that too little emphasis may still be placed on preparing the entrepreneurs’ staff for implementing the R&D projects, and on supervising them by the relevant intermediate bodies. The next programme should consider the design and financing of appropriate training and mentoring projects for both groups.

The respondents also pointed out that the potential for the R&D projects, as well as the availability of many scientific institutions are characteristic mainly for the Wrocław Agglomeration, while being very limited in the remaining sub-regions. Therefore, such competitions will still have to be rather horizontal, it would be very risky to split the allocation into sub-regions.

As for the support in the form of innovation vouchers (which is evaluated positively), it was pointed out that (above all) this form of support is worth continuing and it is worth making it more attractive, e.g. the extension of eligible service providers could be considered (until now, in principle, only scientific units in the meaning of the relevant legislation on higher education and science subject to some changes) to include (for example) the services rendered by research laboratories and the entities having the status of a research and development centre. The respondents also pointed out that the services provided by universities and research institutes are generally relatively expensive, also due to the surcharges on the costs of the relevant services. Therefore, the maximum support values in the form of innovation vouchers should be increased in the next programming period (making the vouchers more attractive, especially in terms of their value).

As pointed out by the respondents, a serious challenge faced by the research and development projects remains the support for Information and Communication Technologies (ICT), which are one of the Lower Silesian Smart Specialisations. It is very difficult (this problem is systemic) to determine which types of projects in this area are research and development projects. As the number of enterprises operating in this sector in Lower Silesia is quite high and this area is one of the regional specialisations, this problem is of particular importance. With regard to the enterprises operating in the ICT sector, there was one more thread in the interviews: namely, it was pointed out that a large part of such entities have a very small capital and they thus encounter serious problems while incurring new credits (e.g. for pre-financing the project or financing its own contribution to the project) due to the lack of sureties. It may therefore be worth promoting the offer of guarantee funds[[55]](#footnote-56) operating in the region among the project promoters in the new financial perspective of the ROP LS.

In the context of the implementation of the results of R&D work (although the implementation may also be partially financed from the projects with a R&D focus), it was pointed out that the calls for applications under Scheme 1.5.1.B[[56]](#footnote-57) should be, if possible, adjusted to the completion of large groups of projects under Measure 1.2 so that it is possible to move from the research state to the implementation stage[[57]](#footnote-58).

### Other matters

According to some respondents, Measure 1.5 lacked small competitions for micro-enterprises - a positive example was the competition for craftsmen[[58]](#footnote-59), it seems that such support should continue in the future.

Referring to the grant projects, the respondents pointed out that the operators of these projects did not always receive precise guidelines on how to interpret certain concepts and definitions in relation to the organized competitions appropriately in advance, or the interpretations were still ambiguous. It was also emphasized that - particularly for the smallest enterprises - it would be appropriate to allow for an advance transfer of funds, since some enterprises were unable to provide adequate working resources and abandoned the project.

Some respondents also indicated that at least the largest projects would find it useful to monitor their effectiveness in the long term, through the analysis of financial statements and of the so-called PNT forms[[59]](#footnote-60). It would become possible to design further support programme in a more accurate manner.

As for the support for the development of investment sites, the respondents reported one important problem which is unfortunately difficult to remove. The investments sites were available only for the SMEs. The problem arose when an enterprise from outside of the SME sector expressed its interest in an investment site - the support had to be reimbursed along with interest. Referring to the Lower Silesian Smart Specialisation in lower Silesia, in addition to the problems with assessing the extent to which the project applications correspond to their fields, as mentioned above, several respondents pointed out that the list of specialisations should be actualised on an ongoing basis in the light of the current developments in the region's economy, as part of the so-called entrepreneurial discovery process. In addition, it was indicated that the preparation and correction of the specialisation should be based on consultations and workshops with representatives of individual sectors to a larger extents, rather than on the statistics as the only source of information. The methodology for selecting the specialisation, which (as specified in the generally accepted regulations) should be strongly embedded in the participative approach bringing together different representative institutions of the Lower Silesian industry, was repeated.

### Material progress

The differences in the financial progress under PA 1 (far away from 100%, as depicted in Table 7, page 45) also cause that certain programme indicators are not implemented completely. In particular, it often happens that the attained values are low, as results from the latest payment requests. This trend is however understandable in case of the result indicators that require the investment to be completed first. An example is the indicator in Measure 1.1, which refers to the number of scientists working in the modernized research facilities - none of the planned 172 FTEs for researchers has not been created yet, but the beneficiaries have committed themselves to exceeding the plan by the end of 2023.

On the other hand, the implementation level of the indicators was underestimated only in few cases, on the basis of the assumptions the beneficiaries included in the co-financing contracts. This refers to the indicators under the following measures:

* 1.2 Private investments complementing the public support for enterprises (grants),
* 1.4 Number of companies that implemented organizational and process-based changes,
* 1.5. Private investments complementing the public support for enterprises (grants).

It should simultaneously be pointed out that many of the assumed indicators have been exceeded.

**Table 27.**  Programme indicators under PA 1 (as of 30 April 2020).

| Indicator | Unit | Forecasted value according to the co-financing contract | Attained value according to the payment requests | Target value (2023) | Advancement - forecasted value | Advancement - attained value |
| --- | --- | --- | --- | --- | --- | --- |
| Measure 1.1 | | | | | | | |
| Number of scientific units incurring investment expenditures for R&D activities (output) | piece | 2 | 1 | 2 | **100%** | **50%** |
| Private investments complementing the public support for innovation or research and development projects (IO 27) (output) | EUR | 7.5 million | 2.3 million | 0.6 million | **1,244%** | **387%** |
| Number of scientists working in the modernized research facilities (IO 25) (result) | EPC | 203 | 0 | 172 | **118%** | **0%** |
| Measure 1.2 | | | | | | | |
| Number of enterprises receiving support (IO 1) (output) | Enterprises | 617 | 637 | 246 | **251%** | **259%** |
| Number of enterprises receiving non-financing support (IO 4) (output) | Enterprises | 508 | 484 | 62 | **819%** | **781%** |
| Number of enterprises receiving grants (IO 2) (output) | Enterprises | 460 | 244 | 212 | **217%** | **115%** |
| Number of enterprises cooperating with research centres (IO 26) (output) | Enterprises | 414 | 152 | 74 | **559%** | **205%** |
| Private investments complementing the public support for enterprises (grants) (IO 6) (output) | EUR | 28.9 million | 14.6 million | 159.7 million | **18%** | **9%** |
| Measure 1.3 | | | | | | | |
| Number of supported business incubators (output) | piece | 11 | 2 | 9 | **122%** | **22%** |
| Surface of the supported (prepared) investment sites (output) | ha | 106 | 98 | 107 | **99%** | **91%** |
| Number of enterprises receiving support (IO 1) (output/result) | piece | 1,268 | 801 | 179 | **708%** | **447%** |
| Number of enterprises receiving non-financing support (IO 4) (output/result) | piece | 1,247 | 679 | 179 | **697%** | **379%** |
| Measure 1.4 | | | | | | | |
| Number of enterprises receiving support (IO 1) (output) | piece | 243 | 230 | 153 | **159%** | **150%** |
| Number of companies that implemented organizational and process-based changes (output) | piece | 56 | 47 | 115 | **49%** | **41%** |
| Number of enterprises receiving grants (IO 2) (output) | Enterprises | 229 | 215 | 153 | **150%** | **141%** |
| Measure 1.5 | | | | | | | |
| Number of enterprises receiving support (IO 1) (output) | Enterprises | 1,282 | 1,028 | 1,054 | **122%** | **98%** |
| Number of enterprises receiving grants (IO 2) (output) | Enterprises | 385 | 323 | 274 | **141%** | **118%** |
| Number of enterprises receiving financing support, excluding grants (IO 3) (output) | Enterprises | 897 | 712 | 897 | **100%** | **79%** |
| Private investments complementing the public support for enterprises (grants) (IO 6) (output) | EUR | 99.6 million | 73.9 million | 145.6 million | **68%** | **51%** |
| Private investments complementing the public support for enterprises (excluding grants) (IO 7) (output) | EUR | 31.1 million | 5.3 million | 32.7 million | **95%** | **16%** |
| Number of enterprises supported to place new products for the market (IO 28) (output) | Enterprises | 275 | 176 | 172 | **160%** | **102%** |
| Number of enterprises supported to place new products for the enterprise (IO 29) (output) | Enterprises | 368 | 473 | 118 | **312%** | **401%** |
| Increased employment in the supported enterprises (IO 8) (result) | EPC | 627 | 457 | 119 | **526%** | **384%** |

Source: Marshall Office of the Lower Silesian Voivodeship, ROP LS 2014-2020, Output and direct result indicators.

To summarize the section on the material progress, it should be added that the values of other indicators concerning the intervention logic are favourable under Measures 1.2 and 1.5. Two result indicators may be distinguished for Measure 1.2: (1) Number of R&D projects implemented with the use of the co-financed research infrastructure, (2) Number of submitted patent applications. Both indicators were significantly exceeded - the first one was implemented in approx. 493% of the target value, while the second one in 192%. For Measure 1.5, there is a set of indicators that illustrate the implemented innovations (their total number and types). The result indicator ‘Number of implemented innovations’ was implemented in approx. 283% of its target value under Measure 1.5. The indicators concerning the types of innovations, i.e. the number of product innovations and process innovations, were also significantly exceeded, i.e. 450% and 345% of the target value respectively. The indicator of the target number of non-technological innovations is still underperformed (52%). It may however be concluded in general that the current performance of the aforementioned indicators proves that the targeting of the projects is correct, respectively for the intervention logic under PA 1, for the supporting of R&D&I.

## Intervention in the field of the low-carbon economy

This part presents the conclusions from the study on the two evaluated measures of PA 3 of the ROP LS, i.e. Measure 3.1 ‘Producing and distributing renewable energy’, under which the intervention of the Programme was targeted at supporting the development of new, cost-efficient and effective technologies for producing energy from renewable sources of energy (RESs), and Measure 3.2 ‘Energy efficiency in SMEs’, aimed at supporting the projects of micro, small and medium-sized enterprises for reducing the demand for energy and contributing to reducing the electricity consumption in the production processes.

The aforementioned measures are analyses according to a similar scheme as applied for PA 1, which allows for comparing the instruments of both Priority Axes[[60]](#footnote-61).

### Adjustment of the support to the specifics/needs of the ongoing projects

While referring to the conclusions of the study, a general conclusion may be drawn that the support is adjusted to the needs of the beneficiaries to a large extent (the projects they submitted and were co-financed from the Programme). The respective data are presented in the following figure.

**Figure 23.** Adjustment of the support to the needs related to the subject matter of the ongoing project (the aggregate evaluation for PA 1).

Source: CAWI/CATI (mix) with beneficiaries of PA 3, n=43 (Measures 3.1 and 3.2).

In analysing the opinions of the respondents by measures, it may be added that the conclusion stated above remains valid with regard to the beneficiaries under each of the measures. The percentage of opinions underlining a very high or high adjustment of the intervention to the needs of the financed projects is 86% in Measure 3.1 and approx. 78% in Measure 3.2. What is interesting, none of the beneficiaries of Measure 3.2 gave extremely negative opinions (the support was adjusted to the needs to a ‘very small’ extent; furthermore, the percentage of the beneficiaries of Measure 3.1 reporting that the support had been adjusted to a ‘large’ extent was higher by 7 pp. than of the beneficiaries of Measure 3.2, reporting an ‘average’ adjustment). Although the scores granted by each of the groups of beneficiaries were generally high, the opinions of the beneficiaries of Measure 3.1 are more favourable.

In analysing the factors influencing the evaluation of the adjustment of the interventions to the needs of the financed projects, particular attention should be paid to two of them, i.e. the admissible implementation period and the flexibility of the catalogue of eligible costs (evaluated by the beneficiaries in the light of the specifics of the subject matter of the intervention). Both parameters highly influence the practical dimension of the project implementation; it may thus be concluded that they shape the general evaluation of the adequacy of the instruments to the specifics of the implemented project. The respective data are presented in the two following figures: Figure 24 (Admissible implementation period of the project) and Figure 25 (Adequacy of the catalogue of eligible costs).

**Figure 24.** Implementation period of the project (Question: Is/was the maximum admissible period for the project implementation sufficiently long in view of the scope of your project?)

Source: CAWI/CATI (mix) with beneficiaries of PA 3: Measure 3.1 n=15 and Measure 3.2 n=28.

**Figure 25.** Adequacy of the catalogue of eligible costs (Question: Was it possible/did you include all the necessary expenditures necessary for the successful implementation of the project in the admissible eligible expenditures in your project?)

Source: CAWI/CATI (mix) with beneficiaries of PA 3: Measure 3.1 n=15 and Measure 3.2 n=28.

The data presented in the two figures above reveal that the opinions confirming the correct configuration of the support parameters significantly outweigh the others, in terms of the admissible implementation period of the project and the adequacy of the catalogue of eligible costs.

The vast majority of the beneficiaries give positive opinions about the admissible implementation period of the projects, whereby the beneficiaries of Measure 3.1 are more supportive. Furthermore, less beneficiaries of Measure 3.2 share the opinion about the adequate flexibility of the catalogue of eligible expenditures, although the positive opinion dominates as well (73% of the positive evaluations under Measure 3.1, and 61% under Measure 3.2). This is certainly determined by the specifics of the projects aimed at the rationalisation of the electricity consumption in the production processes. Of course, this topic is broad in nature and may entail very specific situation, which may result in difficulties due to the limited possibilities to deem the expenditures eligible.

### Evaluation of the results of the support

The beneficiaries of the analysed measure of PA 3 were requested to evaluate the effects of the granted support that are (during the study) or will be noticeable as a result of the project in a close future.

**Figure 26.** Which of the following effects will become noticeable as the result of the project (beneficiaries of Measure 3.1 and 3.2)?

Source: CAWI/CATI (mix) with beneficiaries of PA 3, n=43 (Measures 3.1 and 3.2).

In principle, all the mentioned effects directly refer to the intervention logic of Measures 3.1 and 3.2.

The catalogue of the most frequent effects (top five) include: the basic effect related to the reduced burdens for the environment, including climate, and the economic effects, i.e. the reduced electricity consumption (and the heat consumption to a lesser extent - ranked sixth), boosting the profitability[[61]](#footnote-62). Finally, it may be concluded that the improved competences of the staff in the field of the low-carbon economy or of energy efficiency is an interesting and very advantageous effect - the effect is ‘soft’, but is certainly equally important as the remaining tangible effects. It is beyond any doubt that the improved competences will trigger long-term effects, and will facilitate the beneficiaries to ‘handle’ any matters in relation to the investments in RESs (e.g. they will facilitate to take up following projects of the same time), and energy efficiency in enterprises.

The opinions about the occurrence of certain effects as a result of the implemented projects and about the planned effects are a basis to formulate a general evaluation of the current performance of the objectives of the projects (Figure 27).

As for the analysed measure of PA 3, such overall evaluation is very good (it is additionally worth emphasizing that the evaluation is more favourable than the analogous evaluation formulated by the beneficiaries of PA 1, comp. Figure 13, page 84; for the analysed measures of PA 1, the aggregate share of the two highest scores amounted to 64%, i.e. by 17 pp. less, while the share of the highest score was equal to 12%, i.e. by 9 pp. less compared to PA 3).

Considering the nature of the expected specific results of the study by subject matters of Measures 3.1 and 3.2, it may be concluded that the intervention triggers correct impacts, corresponding to the objectives both at the level of individual measures and of the entire Priority Axis, and ultimately at the level of the entire Programme.

**Figure 27.** Overall evaluation of the implementation of the expected effects of the projects (Question: How to you evaluate in general the current advancement of the planned effect of the project for which you were granted co-financing from the ROP LS 2014-2020?) The advancement is:)

Source: CAWI/CATI (mix) with beneficiaries of PA 3, n=43 (Measures 3.1 and 3.2).

### Sustainability and continuation of the co-financed projects

The opinions of the beneficiaries of Measures 3.1 and 3.2 indicate that they are mostly determined to continue the projects similar to those supported, or to further develop the co-financed projects[[62]](#footnote-63) (Figure 28 below). More than 70% of the beneficiaries of Measure 3.1 and nearly 80% of the beneficiaries of Measure 3.2 stated that they are ‘definitely’ or ‘rather committed to continuing their projects. It is also worth noting there exists a high willingness to apply for future support, as expressed by the ineffective applicants in both Measures – more than a half of them, despite their previous failure to obtain support, are interested in applying for it in the future).

The positions of the beneficiaries of the analysed measures of PA 3 are probably due to the high evaluation of the usefulness of the support obtained, which allowed to gather certain positive experiences. The current experiences support such projects. This is undoubtedly a positive signal for the implementation of similar measures in the future, e.g. in the framework of the new financial perspective of the ROP LS (this is exemplified by the aforementioned individual interview with the beneficiary of Measure 3.1, who completed an investment in the construction of a photovoltaic power plant).

**Figure 28.** Plans for continuing the ongoing projects (Question: Do you intend to continue the project for which you gained co-financing in the upcoming 2-3 year /…/?)

Source: CAWI/CATI (mix) with beneficiaries of PA 3: Measure 3.1 n=15 and Measure 3.2 n=28.

### The effect of barren loss

The results of the study (Figure 29) do not reveal a high risk of the effect of barren loss (in fact, it is even lower here than for the projects of PA 1, comp. Figure 17, page 87).

It turns out that in case there were no co-financing from public funds, most projects (to a similar extent in both measures) would certainly or rather have been implemented. The share of the relevant opinions ‘definitely not’ and ‘rather not’ accounts for nearly 3/4, as presented in the figure. While referring to the detailed data, it may be observed that the opinions of the representatives of the beneficiaries of Measure 3.1 did not include any statement that the project would be implemented according to the original assumptions. Similar opinions were reported by the representatives of the ineffective applicants. Of the entities with such status in the study (a total of 22), 14 representatives (i.e. close to 2/3) reported that the project had been abandoned, and several others had not decided on the continuation of the project (in general, both situations were mentioned by the majority of the ineffective applicants[[63]](#footnote-64)).

Moreover, some of the beneficiaries declaring that the project would be implemented even if there were no public support stressed that these projects would be carried out with detail and probably on a smaller scale (whereby, half of the respondents believed that the scope would be ‘definitely smaller’).

**Figure 29.** Implementation of projects in case there is no support from public funds (Question: Would you decide to implement the project if there were no co-financing?).

Source: CAWI/CATI (mix) with beneficiaries of PA 3, n=43 (Measures 3.1 and 3.2).

### Forms for supporting projects

The beneficiaries of Measures 3.1 and 3.2 used the support in the form of non-repayable financing (grants). At the same time, for the subject matter of the analysed measures of PA 2, the Programme launched financial instruments aimed at financing projects for the production of electricity and/or heat, consisting in the construction and modernization of the infrastructure for producing energy from renewable energy sources (Measure 3.1, Scheme D), as well as providing funding for SMEs to implement solutions to improve the energy efficiency of production processes, including the use of energy efficient technologies (Measure 3.1, Scheme D).

Under the study, the beneficiaries of the analysed measures were requested to evaluate the substitutability of grants with repayable financial instruments, for the projects falling under the interventions of Measures 3.1 and 3.2. The figure below is to illustrate the summary of the respective opinions.

**Figure 30.** Preferred forms for financing the research and development and innovative projects (Question: Would it be more reasonable to incur a repayable instrument (e.g. a credit or loan) to finance a similar project in future?)

Source: CAWI/CATI (mix) with beneficiaries of PA 3, n=43 (Measures 3.1 and 3.2).

As results from the aforementioned data, the opinions about the substitutability of grants with financial instruments are roughly evenly divided (also by representatives of the project types corresponding to the scope of the activities analysed). The statements ‘definitely not’ against ‘definitely yes’ are similar, while the percentage of those evaluating that such a substitutability exists prevails.

The results of this study concerning the forms of financing may be supplemented by the findings of the ‘The ex-ante actualisation of the financial instruments /…/’[[64]](#footnote-65) for the lower Silesian Voivodeship.

The ROP LS involved the implementation of two financial instruments related to the renewable sources of energy and energy efficiency in SMEs.

* Starting from the end of 2018, an experienced financial intermediary (TISE S.A.) grants loans for the production and distribution of energy from RSEs. The co-financed project mainly involve the installation and production of electricity with the use of photovoltaic panels. The loan is used at a relatively slow pace, it is however expected that the entire allocation will be used.
* The second instrument is based on a loan for energy efficiency, supporting a thorough thermal modernization of buildings and a more energy efficient production in SMEs. The range of the investments financed from the loan includes the warming of building blocks, the exchange of heat sources, investments in heating, cooling and lighting systems, as well as the recovery of waste heat and the modernisation and expansion of production lines to make them more energy efficient. One condition of the loan is also that energy efficiency must increase by at least 25% and 30% of the CO2 reduction ‘in case of switching to a different fuel; the liquidation of the heat source must entail the installation of a new device’.

To use the loan for energy efficiency, in 2018 Bank Gospodarstwa Krajowego signed contracts with TISE and a consortium of the Fund of the Wałbrzych Region and the Wrocław Regional Development Agency. The loan is being used smoothly, although there are some delays. The main problem is the competition of the development loan offered under Measure 1.5, the parameters of which are generally similar but where there is no need to carry out an energy audit and to reach a threshold of at least 25% of energy savings.

### Material progress

The advancement of individual programme indicators is highly diversified and high in principle under Measures 3.1 and 3.2. There are only few cases that implementation level of the indicators was underestimated, on the basis of the assumptions the beneficiaries included in the co-financing contracts. Under Measure 3.1, the implementation of the indicator ‘Additional capacity to produce electricity from renewable energy sources (expressed in megawatt) is estimated at only 58%, despite the very high implementation level of the indicators ‘Number of production units for electricity from RESs’ and ‘Number of production units for heat from RESs’. Measure 3.2 however recorded a low number of supported enterprises, of compared with the assumptions, whereas the value of the indicator resulting from the related contracting is close (83%) to the target value.

**Table 28.**  Programme indicators in the analysed measures of PA 3(as of 30 April 2020).

| Indicator | Unit | Forecasted value according to the co-financing contract | Attained value according to the payment requests | Target value (2023) | Advancement - forecasted value | Advancement - attained value |
| --- | --- | --- | --- | --- | --- | --- |
| Measure 3.1 | | | | | | |
| Number of production units for electricity from RESs (output) | piece | 1,595 | 1,064 | 5 | **31,900%** | **21,280%** |
| Number of production units for heat from RESs (output) | piece | 571 | 341 | 32 | **1,784%** | **1,066%** |
| Estimated annual decrease in the greenhouse gas emissions (IO 34) (result) | CO2 equivalent tonnes | 17,197 | 8,223 | 9,410 | **183%** | **87%** |
| Additional capacity to produce electricity from renewable energy sources (IO 30) (result) | MW | 34 | 6 | 59 | **58%** | **10%** |
| Measure 3.2 | | | | | | |
| Usable floor space of the buildings subject to the thermal modernization (output) | m2 | 167 thousand | 72 thousand | 147 thousand | **114%** | **49%** |
| Number of enterprises receiving support (IO 1) (output) | Enterprises | 166 | 62 | 201 | **83%** | **31%** |
| Estimated annual decrease in the greenhouse gas emissions (IO 34) (result) | CO2 equivalent tonnes | 7,748 | 6,638 | 1,980 | **391%** | **335%** |

Source: Marshall Office of the Lower Silesian Voivodeship, ROP LS 2014-2020, Output and direct result indicators.

## Intervention in the field of the labour market

This evaluation covered two measures co-financed from the European Social Fund, with non-repayable financing, for enterprises and their staff. A general description of both measures is included in the preceding chapters. The two measures co-financed from the ESF are targeted at enterprises and their staff. They include: Measure 8.5 ‘Adapting to the developments in the economy as part of the outplacement actions’ and Measure 8.6 ‘Increasing the competitiveness of enterprises and entrepreneurs from the MSME sector’. Acting as the Intermediate Body, the Lower Silesian Voivodeship Labour Office is responsible for the implementation of both measures. The main conclusions from the implementation of both measures are discussed below.

### Adapting to the developments in the economic environment

The objective of Measure 8.5 ‘Adapting to the developments in the economy as part of the outplacement actions’ was to improving the adaptation skills to the staff to the developments in the economy in the framework of the outplacement actions. The objective of the Measure was to support the employees and - indirectly - the employers laying off employees, partly before the redundancies. The support consisted in preparing those being made redundant for starting a new job, assisting them in finding such a job, or starting independent economic activity.

There were 3 competitions announced for selecting the project promoters under the Measure, to implement relevant projects.

The EU allocation for the Measure amounted to EUR 8 million. The first competition was completed in April 2016, the second in September 2017, with applications being evaluated in the last one.

The direct beneficiary (project promoter) of Measure 8.5 is the Lower Silesian Agency of Economic Cooperation (Dolnośląska Agencja Współpracy Gospodarczej), operating in partnership with: ARLEG S.A., AGROREG S.A. and Karkonoska Agencja Rozwoju Regionalnego S.A. (and Dolnośląski Park Innowacji i Nauki S.A. in the second edition). In the last competition (the application is still under evaluation), a project was also submitted by a similar consortium, whereby AGROREG S.A. was replaced by the Wrocław Regional Development Agency (Wrocławska Agencja Rozwoju Regionalnego S.A.).

Under Measure 8.5, financial support may be granted for starting independent economic activity and training and advisory support. The financial support is targeted above all at those made redundant for reasons that may not be attributed to the employee, and at those being during the notice period of their employment or employment relationship. The first project was implemented between the end of July 2016 and the end of November 2018, while the second project is being implemented from the beginning of October 2018, the implementation of the third project has not yet started and will be launched only after the completion of the second project and the use of the available allocation of funds.

The nature of both projects involved that the first project was completed in a very good situation on the labour market in the country and the region, while the second project was implemented in such a situation to a large extent (although the situation on the labour market situation started changing substantially since March 2020, as a result of the COVID-19 pandemic, these changes will certainly intensify). It may however be assumed that closing stage of the second project and the third project will be implemented in a completely different socio-economic situation. It may forecasted with a high degree of certainty that such projects will be requested and the demand services for the related services will record a very significant increase. On the other hand, they will be much more difficult to implement, although there will probably be no problems in the recruitment of participants, but they may arise in the context of facilitating the job search or the successful establishment and continuation of economic activity, both of which may be difficult during the expected recession.

The overall effectiveness of the support and the good preparation of projects are demonstrated by the results of the qualitative and quantitative studies described below. According to the representatives of the contractors of both projects, the projects were implemented without major problems in principle, although one of the projected indicators could not be achieved. This may be attributed to the relatively good situation on the labour market, as described above (many of those made redundant were able to find a job independently) and to the small number of liquidated enterprises/redundancies, and the competition by the support instruments under Measure 8.3 of the ROP LS[[65]](#footnote-66), above all in its grant-based form.

To reach out to appropriate enterprises and the employees being made redundant, it was very important that both projects of Measure 8.5 were implemented by a consortium of experienced Business Environment Institutions located in individual sub-regions of the voivodship. In addition, some of these institutions had implemented similar projects in the past, which facilitated their good preparation and reaching to potential final recipients.

The qualitative studies also prove that a natural challenge was caused by the diversified conditions existing in individual sub-regions of the voivodeship, attributable mainly to the situation on the local labour market and to the approach of the staff of the poviat labour offices to cooperating with the project consortium. From this point of view, it was important that the consortium in charge of both projects brought together experience institutions with contacts in individual sub-regions. Fortunately, the cooperation with the poviat employment services usually worked well: individual labour offices provided the project consortium with information about the planned or already completed mass redundancies in a work establishment, while the representatives of both institutions approach the enterprise to discuss with its representatives and employees and to present the support available under the implemented project. Unfortunately, the employers demonstrated a highly diversified approach: ranging from their full cooperation to firm reluctance. It therefore appears that an appropriate solution would be that project offer should be addressed mainly to natural persons, with the employers playing only a supportive role.

The main sources of information about the project offer included the cooperation with the Poviat Labour Offices and the units of the local self-government (project materials were often available in the municipal offices and city halls), as well as the representatives and the Internet websites of the consortium partners (including the Internet website of the project). As results from the quantitative studies, the highest number of the final recipients obtained information from the Internet website of the project (34%), a significant group obtained this information from friends (20%), a slightly smaller group from the Internet website of the Lower Silesian Labour Office or the Lower Silesian Intermediate Body (14%) and from their current employer (11%). In general, the promotional activities were carried out primarily by the entities implementing the project.

The representatives of the consortium implementing the project[[66]](#footnote-67) believe that both projects were in general planned correctly. In future, they are of the opinion that the following matters should be considered in case such types of projects are to be implemented:

* it is advisable to maintain the solution allowing to modify the allocation of funds for different forms of support, if justified, upon the consent of the competent intermediate body; it is difficult to precisely plan the demand for individual forms of support;
* due to the project complexity, it would be useful to consult its assumptions with potential project promoters at the preparation stage;
* for grants for starting economic activity, the instrument should be separated from other relevant support instruments very precisely so that the support from the public funds does not compete with other support instruments from the same source.

From the formal point of view, it would also be useful to find a way to solve a specific problem, namely the need to apply a competitive mode for selecting the service providers providing support to the final recipients. If a specific person supported by a project was to be provided with a training in an area (and it was not possible to create a larger group), to purchase such training, the entity implementing the project (as the value of contracts under the project accumulates) had to select a contractor in a competition mode, which was obviously very time-consuming and, on the other hand, caused that some contractors were not interested in submitting tenders because a training appealed only to one person, to give an example. It seems that the relevant procedures should be simplified in the subsequent perspective.

The participants of the projects implemented under Measure 8.5 of the ROP LS were asked about how they evaluate the transparency of the rules on the participation in the project, as well as the information support during the recruitment stage. The respective evaluations are generally very positive, as illustrated by the figure below.

**Figure 31.** Evaluation of the assistance provided at the recruitment stage to the project under Measure 8.5.

Source: CAWI with final recipients of Measure 8.5 of the ROP LS, n=244.

Representatives of the entities implementing the project were very helpful at the recruitment stage and answered any questions and doubts

Formal documents specifying the participation criteria for the project were excessively detailed and often ambiguous

The participation criteria were specified clearly and precisely

It was difficult to contact those responsible for the recruitment procedures

There was precise information available already at the recruitment stage, specifying the eligibility rules for the project and the range of available support instruments

It was difficult to obtain information about more detailed aspects of supporting the project

Definitely yes Rather yes Rather not Definitely not I do not know.

As results from the aforementioned data, as many as 93% of the respondents definitely or rather agree with the opinion that the representatives of the institutions implementing the project were very helpful at the recruitment stage and answered any questions and concerns, 92% of them confirm that the criteria for participation in the project were clearly and precisely defined, and 92% of them declare that precise information was available at the recruitment stage, regarding the project eligibility rules and the range of available support instruments. Similarly, a decisive minority of the respondents (usually 10%) agree with critical statements about the quality of the information provided. The only exception is that the formal documents describing the rules for participation in the project were very extensive and ambiguous in many parts. This opinion is supported 27% of the respondents, however with the majority (70%) being against.

The project participants appreciated the quality and usefulness of the obligatory forms of support within the project, i.e. advice provided by a professional counsellor and job placement services. A very good or good opinion was expressed by 84% of the respondents, while an average evaluation was supported by 10% of the respondents. There were only some individual opinions to the contrary (6 persons, i.e. 2.4% of the respondents).

Of the non-obligatory forms of support (Table 30 below), the most popular were the grants for taking up economic activity (used by 50% of the respondents), transitional support (33%), trainings carrying out economic activity (30%), and individual advisory services before starting economic activity (18%).

It is worth pointing out on the basis of the qualitative studies that with regard to the offer of the most popular grants for starting economic activity under the first project a serious challenge referred to the competition by the grants offered under Measure 8.3 of the ROP LS. They were much more attractive as the final recipient was not required to make own contribution (while the described project required 10% of own contribution); furthermore, the first edition of the project did not offer the so-called transitional support as under Measure 8.3 (it was added in the second edition).

**Table 29.**  Share of the final recipients under Measure 8.5, using different non-obligatory forms of the support.

|  |  |
| --- | --- |
| Form of support | Share of the participants using a form of support |
| Financial support for taking up own economic activity | 50.0% |
| Transitional support | 33.2% |
| Trainings in managing own economic activity | 30.3% |
| Tailored advisory services before starting economic activity | 18.4% |
| Post-graduate studies | 15.6% |
| Psychological counselling | 13.1% |
| Vocational apprenticeships (including scholarships for apprentices and other related costs) | 13.1% |
| Vocational trainings (including scholarships for the participants) | 11.5% |
| Tailored advisory services in the effective use of the grant | 11.1% |
| Relocation bonus | 4.1% |
| None of the above | 7.8% |
| I do not know./It is difficult to evaluate. | 4.5% |

Source: CAWI with final recipients of Measure 8.5 of the ROP LS, n=244.

The usefulness of the forms of support the final recipients benefited from receives very high scores in general. The highest score was granted to the financial support, which goes without saying: 100% of those using the financial support evaluated the usefulness of the relocation bonus well or very well (although this form of support was used by a relatively limited group), while 97.5% of the respondents appreciated the transitional support and the financial support for taking up own economic activity. Other non-financial forms of support were also evaluated favourably: the share of positive opinions ranged from 78% up to 90% - the highest score was granted to the trainings in managing own economic activity (90.5% of the scores were good or very good).

Very high scores are also granted to the effects of the project participation, which is depicted in the figure below (it should be born in mind that 36% of the respondents have not finished their project work so far).

The majority of respondents pointed out that the project participation had contributed to improving their professional situation (71% of the respondents), enabled them to gain new competences and skills (80%), to become more self-confident, and (slightly less respondents) to find a new job (60%). The share of respondents who expressed negative opinions about the effects of the project participation is marginal - approx. 5-9% of the respondents, while a higher share of respondents (approx. 19-23%) are more sceptical about the project impacts on their current and future professional situation. This is however understandable in the light of the underlying external factor (e.g. the family situation of a person, the possibility to relocate, the situation on the local labour market.

**Figure 32.** Evaluation of the effects of the project participation under Measure 8.5.

Source: CAWI with final recipients of Measure 8.5 of the ROP LS, n=244.

My professional situation significantly improved thanks to participating in the project

Participating in the project did not significantly change my professional situation and future perspectives

I acquired new competences and skills thanks to participating in the project

I do not find the support under the project useful, I did not learn anything new

I became more self-confident thanks to participating in the project

Participating in the project did not bring me any significant effects, it was a waste of time

I will be able to find a new job easier thanks to participating in the project

Definitely yes Rather yes Rather not Definitely not I do not know.

On the other hand, a total of approx. 90% of respondents evaluate their participation in the project well or very well, while only 2.4% of them have bad or very bad opinions (the remaining persons did not express any opinion or evaluate the project as average). The results should be deemed very favourable and to confirm the adequacy of the support and the proper implementation of the projects.

It is also worth pointing out that the ongoing projects have not only attained but even exceeded the assumed indicators - both output and result, as depicted by the table below.

**Table 30.**  Indicators attained by 30 April 2020 in both projects co-financed from Measure 8.5.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Unit | Value according to the latest payment request | Target value  (2023) | Advancement |
| Number of employees threatened by redundancy and those made redundant for reasons attributable to the work establishment, supported under the Programme (output) | persons | 1,024 | 937 | 109.28% |
| Number of persons who started a job or continued employment after leaving the Programme (result) | % | 59.08% | 35% | 168.81% |
| Number of persons who acquired qualifications or gained competences after leaving the Programme (result) | % | 85.06% | 20% | 425.29% |

Source: Marshall Office of the Lower Silesian Voivodeship, ROP LS 2014-2020, Output and direct result indicators.

It is alspo worth mentioning that Investment Priority 8iii (Measure 8.3) in the field of the labour market (TO 8) involved the implementation of the financial instrument called the ‘micro-loan’, being partly complementary to the support granted under Measure 8.5[[67]](#footnote-68).

The value of the contracts signed with two financial intermediaries (the Polish Foundation for Entrepreneurship and the Fund of the Wałbrzych Region) amounted to PLN 9.14 million, which accounts for 16.4% of the entire allocation available under Measure 8.3 for the repayable instruments. The financial intermediaries started granting loans in the middle of 2018, while the construction of the portfolio under both contracts was finished at the turn of 2019 and 2020. In overall, the financial intermediaries granted a total of 125 loans in the total amount of PLN 7.68 million (paid out).

In general, the micro-loan was implemented at a relatively slow pace. This is driven above all by the low interest among the final recipients. The situation was certainly influenced by a very significant improvement on the labour market, which, of course, ended with the outbreak of the COVID-19 pandemic. Targeting loans to vulnerable people o the labour market, who have relatively easy access to the subsidies of the Poviat Labour Offices, has not proved sufficient. Another problem was the relatively low value of the granted loans - approx. PLN 60 thousand on average. It may be attributed partly to the problems with setting out the target values of the indicators under Measure 8.3, which limited the value of the granted loans within the available allocation.

The results of the CATI-based questionnaire survey among the recipients of the micro-loan show that it actually went to the unemployed, including a large group of persons in a particular situation on the labour market, with a small majority being the unemployed registered with the labour office (55%) and the remaining share formed by the unemployed not registered with the Poviat Labour Office. Of different groups of persons being in a particular situation on the labour market, the majority were low-skilled people (64%) and women (43%). Much less support went to the long-term unemployed, people aged 50+ or persons with disabilities.

Nearly all the participants in the CATI-based questionnaire survey (97%) agreed that the micro-loan was well tailored to their needs (the opinion was definitely supported by as many as 80% of them). During the individual interviews, the recipients of the micro-loan found it to be a very good instrument, mainly due to the very low interest rate. Other advantages included, in particular, a higher amount than the grants, as well as the possibility to be granted a grace period while repaying the capital amount. A much softer assessment of the creditworthiness was also appreciated – loans were granted to those without current incomes (the unemployed and economically inactive), which was practically impossible in case of bank credits. The only challenge was to obtain adequate sureties – especially for those who did not have anybody to guarantee the loan.

### Increasing competitiveness

A following intervention instrument covered by the study was Measure 8.6 ‘Increasing the competitiveness of enterprises and entrepreneurs of the MSME sector’. Its aim was to increase the competitiveness of the Lower Silesian micro, small and medium-sized enterprises through services provided under the Development Services Database, facilitating the development of an enterprise and/or its employees, in particular by acquiring or validating qualifications, streamlining the processes or operational areas of the enterprise, changing the business profile completely or in part. Measure 8.6 of the ROP LS was implemented through two projects ‘Partnership for the development of the Lower Silesian MSMEs and their staff’ - edition 1 and edition 2. The first edition was implemented from November 2016 until July 2019, while the second one is being implemented starting from August 2019. Both projects were implemented by the same consortium composed of: Agencja Rozwoju Regionalnego ARLEG S.A. (Project Leader) in partnership with Dolnośląska Agencja Współpracy Gospodarczej Sp. z o.o., Karkonoska Agencja Rozwoju Regionalnego S.A., Wrocławska Agencja Rozwoju Regionalnego SA, Dolnośląski Park Innowacji i Nauki S.A., and Agencja Rozwoju Regionalnego AGROREG S.A.

The support consisted in financing the costs of the purchase of the so-called development services (mainly trainings, but also advisory services) from the companies registered in the so-called Development Services Database (DSD) kept by the Polish Agency for Enterprise Development[[68]](#footnote-69). A condition for obtaining the co-financing said that the service provider had to registered in the DSD first. The basic share of the co-financing amounted to 50% of the amount of expenditures for the purchase of the development service. However, it could be increased to up to 80% if, for example, used by the participants with certain characteristics (e.g. persons with disabilities or persons over 50 years of age) or firms with certain characteristics (e.g. those carrying out research and development activities, or activities contributing to the development of the voivodeship smart specialisations). A higher level of co-financing (70%) was also available to the entrepreneurs operating in medium-sized cities, as well as micro and small entrepreneurs.

An essential feature of such a system for supporting the access to trainings and advisory services was the statement that the system should not be a supply-based system (as previously under the European funds offered in the preceding programming periods, which sometimes resulted in a serious disparity between the needs of the enterprises and the scope of the support offered), but it should be a demand-based system, i.e. the enterprises should decide which support they want to use, while the service providers should adjust their offer to needs of the demand side (on this basis). Such support is offered throughout Poland, with the exception of the Pomeranian and Mazovian Voivodships. The launch of the system took quite a long time due to its high level of complexity and the need to agree on certain matters with the European Commission.

It was assumed for the Lower Silesian Voivodeship that the maximum amount of co-financing per one enterprise should not exceed PLN 25,000.00 (in exceptional cases PLN 50,000.00) during the implementation period. If compared to other regions, the amount was relatively low, while amount to PLN 100,000.00 in the Silesian and Greater Poland Voivodeships[[69]](#footnote-70).

As confirmed by the results of the qualitative studies, the beginnings of the implementation of the first project were relatively difficult. Above all, the enterprises and training and advisory firms were not familiar with the system and its underlying assumptions; it took quite a long time to promote the system and to explain its basic rules. Fortunately, the actions were supported by the representatives of the Polish Agency for Enterprise Development. Furthermore, a challenge was to help register in the database for entrepreneurs and employees - in this respect, extensive assistance by the representatives of the consortium implementing the project was necessary. It is also worth noting that the Internet website of the DSD itself is not very transparent and ‘friendly’ to a potential recipient, fortunately work is underway to modernize it.

The project encountered certain problems in the first implementation period, and they were partly removed in the second edition. The most important problems refer to the eligibility conditions to establish who could benefit from the development services. In the first edition, they could be applied for by those employed on the basis of an employment contract, which triggered critical comments by the representatives of the enterprises - many companies employee a high number of employees on a different basis, excluding the employment contract. Therefore, the second edition of the project was amended to extend the eligibility of final recipients by including those employed on the basis of civil-law contracts, owners, managers and shareholders. The second edition of the project involved a possibility to co-finance post-graduate studies.

A problem was also that there were very few service providers registered in the DSD in the first edition, so the training and advisory offer was quite poor, fortunately it started to grow significantly at a later time. A challenge was also that some enterprises had quite specific niche training needs and many of the enterprises registered in the DSD were unable to find a suitable offer. A solution to this unfortunately very serious problem was to encourage the firms delivering specific training or advisory services to register with the DSD, which sometimes worked - unfortunately not always.

An important feature of the implementation of the measure was a similar share of the allocation to different sub-regions of the Lower Silesian Voivodeship (Wrocław, Wałbrzych, Jelenia Góra and Legnica-Głogów). Therefore, the allocation was the fastest to run out in the Wrocław sub-region due to the very large number of enterprises in the Wrocław Agglomeration. An advantage of this solution was a slightly easier access to financing for the enterprises based in the remaining three sub-regions, a disadvantage referred to the very difficult access for the enterprises in Wrocław and its surrounding areas.

In general, we deem the adopted solutions relevant in principle and supporting the enterprises located outside of the capital of the voivodeship and its surrounding areas, although this solution may also be criticised. It should be pointed out that one of the sub-regions has its specifics, e.g. the Region of Legnica-Głogów has a relatively share of enterprises that fulfilled the classification conditions for SMEs in terms of employment, turnover and assets, but could not be classified to the SME sector due to their capital relations with KGHM Polska Miedź S.A., which prevented their staff from using the support under the project.

However, a very serious challenge resulted from the significant disparity between the demand for financing and the supply of funds for individual sub-regions. As a result, the competitions for the Wrocław sub-regions usually finished after ten minutes or so due to the exhausted allocation, while they too several days or a week in the remaining sub-regions. Furthermore, the applications were submitted in the traditional paper form, which created the so-called queueing committees at least Wrocław had not experienced for quite a long time.

The presented problem referring to the allocation of the co-financing amounts between the sub-regions and the unequal demand reported by the entities based therein seems highly complex to resolve. Perhaps the support measure should be made less attractive (by reducing its intensity), or the range of co-financed trainings should be limited. Such opinions were indeed expressed in the qualitative studies - there were ideas that the intensity of the support should be reduced massively for very popular trainings in soft skills, including the presentation or communication trainings, and be focused on the purely vocational trainings of a specialist nature. The application process under this Measure will anyway be discussed again in the chapter on the management system of the ROP LS.

The respondents also pointed out that from the point of view of the training firms and the very entrepreneurs that may have their branch office across Poland, it would be ideal if such systems for co-financing trainings and advisory services operated in a uniform mode irrespective of their location, which would certainly require to change the source of financing (to switch from the regional to national operational programmes).

The participants of the trainings and other forms of the development service highly appreciate the project in principle, the same being supported by the entrepreneurs nominating their employees and contractors for the trainings, as described on the following pages.

The employees were usually informed by their employer about the project (72% of the respondents), while the second important source of information was the Internet website of the project (10% of the respondents treated it as the main source of information).

As far as the employers are concerned, as many as 35% of them learned about the project from a representative of the consortium implementing the project, while 21% obtained the necessary information from the project's Internet website, and another 12% from the Internet websites of the Lower Silesian Voivodeship Labour Office or the Lower Silesian Intermediate Body. The qualitative studies however show that the information provided by other entrepreneurs and contacts between entrepreneurs and representatives of the institutions and members of the consortium implementing the project are a very important source of information about the project offer. Most of the institutions implementing the project are well-established entities that are very well known among the entrepreneurs.

Those benefiting from the development services rated their catalogue favourably (74% of them definitely or rather agreed with the statement that it was very transparent and exhaustive, and the support by the representatives of the project consortium was also appreciated (71% of the respondents agreed that they were very helpful in explaining the rules for using development services and for settling the granted co-financing). The very application process for individual services was not deemed particularly complicated (the opinion was expressed by 49% of the respondents), although 29% of the respondents had a contrary opinion.

**Figure 33.** Evaluation of selected elements of the offer of Measure 8.6 by those using the development services financed thereunder.

Source: CAWI with final recipients of Measure 8.6 of the ROP LS, n=402.

The catalogue of available development services was very transparent and exhaustive

It was a highly complex task to apply for different development services due to ambiguous procedures and/or a relatively unfriendly IT system

Representatives of the entities implementing the project were very helpful in explaining the rules for using the development services and settling the received support

Definitely yes Rather yes Rather not Definitely not I do not know.

The organization of the application process for measure 8.6 of the ROP LS was also appreciated by the entrepreneurs nominating their employees for trainings and other development services, as shown in Figure 36 below. As many as 92% of the entrepreneurs surveyed favourably rated the support by the representatives of the project consortium, 86% favoured the availability of precise information on the terms of participation in the project, 90% agreed that the participation criteria for the project were defined clearly and precisely. The only statement that caused slightly more differing opinions was the opinion about the excessively broad range and significant ambiguity of the formal documents describing the rules for participation in the project: this opinion was supported by 47% of the respondents, while 49% of them were against. By the way, it is worth bearing in mind that a significant part of the requirements did not depend in any way on the project's implementing entity - by definition, the rules on state aid, the detailed definition of the company's membership of the SME sector are complex; in addition, certain requirements and preferences proposed by MA of the ROP LS may also cause that the documents are deemed complex. For example, the possibility to use a higher intensity of the support, exceeding the standard value of 50%, is applicable to as many as ten different categories of enterprises, as described in detail.

**Figure 34.** Evaluation of Measure 8.6 by the entrepreneurs whose employees make use of the development services - stage of recruitment.

Source: CAWI with entrepreneurs benefiting from Measure 8.6 of the ROP LS, n=566.

Representatives of the entities implementing the project were very helpful at the recruitment stage and answered any questions and doubts

Formal documents specifying the participation criteria for the project were excessively detailed and often ambiguous

The participation criteria were specified clearly and precisely

It was difficult to contact those responsible for the recruitment procedures

There was precise information available already at the recruitment stage, specifying the eligibility rules for the project and the range of available support instruments

It was difficult to obtain information about more detailed aspects of supporting the project

Definitely yes Rather yes Rather not Definitely not I do not know.

The entrepreneurs express very good opinions about the implementation stage of Measure 8.6, as depicted in the figure below.

**Figure 35.** Evaluation of Measure 8.6 by the entrepreneurs whose employees make use of the development services - stage of project implementation.

Source: CAWI with entrepreneurs benefiting from Measure 8.6 of the ROP LS, n=566.

Representatives of the entities implementing the project were very helpful at the recruitment stage and answered any questions and doubts

It was a highly complex task to apply for different development services due to ambiguous procedures and/or a relatively unfriendly IT system

The catalogue of available development services was very transparent and exhaustive

The regulations on the maximum intensity of the support were not sufficiently, in particular the definitions on different categories of entrepreneurs

The costs of the development service used were refunded within a relatively short time, while the related procedures were not complicated

Definitely yes Rather yes Rather not Definitely not I do not know.

The support by representatives of the consortium implementing the project was appreciated by 94 of the entrepreneurs participating in the study, 78% of them find the catalogue of development services transparent and exhaustive, 88% of them support the statement that the cost of services were refunded within a relatively short period, while the related procedures were not complicated. Certain reservations to the enrolment procedures for trainings and the functioning of the IT system of the process are raised by 33% of the respondents.

As far as slightly more critical comments are concerned, 25% of the respondents (forming quite a big group, however still in the minority) could not fully understand the regulations on the maximum intensity of the support, if different categories of entrepreneurs are to be considered. It seems that this opinion should be considered in the subsequent programming period; the responsible managing authority may (or even should) set out preferences by referring to the priorities of the public policy. It should however be born in mind that they should be as clear and comprehensible as possible when they become operational.

The effects of the co-financed trainings and of other forms of support (Figure 36) are also highly appreciated. Indeed, 73% of the final beneficiaries taking part in the evaluation study are definitely of the opinion or rather think that the development services contributed to increasing their chances on the labour market in case they would need to find a new job, while 86% stated that they gained new competences. However, as little as 17% of the respondents states that they would prefer the commercial services due to their experiences with the development services. A relatively large, although still minority group of the respondents pointed out that the offer of the development services is not fully adjusted to the specifics of their companies.

In total (including the answers to another question), as many as 79.8% of those making use of the development services believe that they are of a very good or good quality.

**Figure 36.** Evaluation of the effects of the offer of Measure 8.6 by those using the development services financed thereunder.

Source: CAWI with final recipients of Measure 8.6 of the ROP LS, n=402.

By using the development services, I increased my chances on the labour market in case I would need to find a new job

Considering my experiences in using the development services, I would prefer to refer to a commercial offer in future

By using the development services, I improved my competences in selected areas

Our enterprise has relatively specific needs and the offer of development services addresses them only to a limited extent

Those delivering the development services (trainings, advisory services) were not highly skilled, e.g. they did not the newest solutions well

The offer of development services corresponded to the needs of our enterprise very well

Definitely yes Rather yes Rather not Definitely not I do not know.

The opinions of the employees using the development services are also supported by the entrepreneurs - 96% of the respondents definitely or rather believe that it was useful to make use of the support for development services.

In specific dimensions (Figure 37), the majority (82%) of the respondents favoured that the offer of the development services was adapted to the needs of their enterprises, and that - if there had been no offer of development services - they would not have been able to provide trainings and advisory services to such a large number of their employees (60%).

However, as many as 40% of the entrepreneurs report that due to the specifics of their enterprise the offer of development services corresponded to their need only to a limited extent. This matter remains a serious challenge for the future - whether and how the development services should be financed for the entrepreneurs having specific needs, and where the training offer is limited due to the niches in terms of their subject matter. It should however be emphasized that in answering a different question, as many as 84% of the respondent claimed that it should be possible to adjust the scope of the development services on offer to the individual needs of an enterprise.

**Figure 37.** Evaluation of the effects of the offer of Measure 8.6 of the ROP LS by the entrepreneurs whose employees used the development services financed thereunder.

Source: CAWI with entrepreneurs benefiting from Measure 8.6 of the ROP LS, n=566.

The offer of development services corresponded to the needs of our enterprise very well

Our enterprise has relatively specific needs and the offer of development services addresses them only to a limited extent

By using the development services, our staff significantly improved their competences in selected

The fact that our staff used the development services did not have a major impact on…

If the development services had not been available, we would not have been able to provide trainings or advisory to such a significant…

Considering our experiences in using the development services, we will rather refer to a commercial offer in future

Definitely yes Rather yes Rather not Definitely not I do not know.

It is worth adding that there were also opinions indicating that this type of support could be improved in the subsequent financial perspective. In this context, it was mainly pointed out that employees could be registered for trainings by their employer, and individual employees should not be required to set up individual accounts. This was particularly the case when low-skilled workers were nominated for trainings, for whom setting up accounts and completing the relevant documents was particularly time-consuming and complicated.

Some respondents also pointed out that (which is unfortunately a common side effect of the grant-based support) the trainings offered under the DSD were sometimes clearly more expensive than the identical trainings offered on commercial terms. Unfortunately, it seems that the only reasonable manner for eliminating such practices is to encourage additional firms to register with the DSD, and to increase competition between them. We are concerned that this problem might be difficult to resolve with the use of administrative methods.

However, the assumed and attained output and results indicators should be deemed very favourably, as illustrated by the table below. As results from the presented data, all the output indicators have already been attained or nearly attained, with the majority of them having been even exceeded. Additionally, the value of the result indicator is already equal to 224% of the target value of the crime.

**Table 31.**  Indicators attained by 30 April 2020 in both projects co-financed from Measure 8.6.

| Indicator | Unit | Value according to the latest payment request | Target value  (2023) | Advancement |
| --- | --- | --- | --- | --- |
| Number of micro, small and medium-sized enterprises covered by the development services under the Programme (output) | piece | 2,503 | 2,562 | 97.7% |
| Number of working persons, including those carrying out independent economic activity, supported under the Programme (C) (output) | persons | 8,385 | 6,856 | 122.3% |
| Number of working persons aged 50 and more years, including those carrying out independent economic activity, supported under the Programme (output) | persons | 1,129 | 972 | 116.1% |
| Number of working persons with low qualifications covered by the support under the Programme (output) | persons | 2,454 | 2,320 | 105.8% |
| Number of micro, small and medium-sized companies that implemented their development objective by participating in the Programme (result) | piece | 2,300 | 1,025 | 224.4% |

Source: Marshall Office of the Lower Silesian Voivodeship, ROP LS 2014-2020, Output and direct result indicators.

# Implementation system for the interventions of the ROP LS 2014-2020 - strengths and weaknesses

## Evaluation of the functioning of the institutional implementation system for the interventions

The ROP LS had a relatively complicated institutional system for the implementation of interventions, as mentioned above, due to the following reasons:

* The implementation mechanism of the Integrated Territorial Investments involved competent Intermediate Bodies in charge of their implementation; Furthermore, individual IB were assigned different tasks. For example, the IB of the ITIs WA seems to be the only Polish body that was responsible for the entire implementation process of projects in selected areas within its territory, including the support for enterprises, i.e. starting from announcing and conducting the call for applications, through all the project evaluation stages, to signing the grant contracts and the supervision over the implementation and settlement of projects;
* The fact that a number of support schemes were implemented by the operators of the grant projects, being usually the Business Environment Institutions based in the voivodeship;
* A relatively complex structure and naming of the measures and sub-measures to be implemented. Irrespective of the standard division into measures and sub-measures, there were also (within the framework of the aforementioned ones) the so-called schemes numerated in a relatively complex manner, e.g. Scheme 1.2 Ca. Such approach was evaluated in a relatively diversified manner, with some respondents emphasizing that the entrepreneurs did not encounter any problems in this respect - they could simply memorize the number and name of the scheme they were interested in. However, there were also dissenting opinions [that we deem absolutely justified] stating that even if such numbering and naming did not cause very big problems in fact, they were complicated and hardly transparent. In the subsequent programming period, this matter should be approached in a different manner.

In general, the institutional system for the implementation of interventions functioned correctly, although there were smaller and bigger problems at individual stages.

It was also reported that a serious problem referred to the excessively long time for settling the projects and waiting the funds to be refunded by the Lower Silesian Intermediate Body[[70]](#footnote-71). The problem seems to be related to the insufficient human resources of the LS IB, and the cyclical accumulation of different tasks (the organization of competition, the evaluation of applications, the settlement of projects). The entrepreneurs also pointed out the very long waiting time for the control by the LS IB, which was a precondition for settling the project. This was largely due to the solution adopted at the beginning of the implementation of the ROP LS, according to which all the completed projects should be subject to an on-site control, although this solution essentially minimised the risk of not detecting any serious irregularities, but on the other hand it was very labour-intensive and caused delays. Therefore, a decision was taken to abandon it and to control only a specific sample of projects.

The problem of the lengthy settlement process was also mentioned for the grant projects (in fact, it was also one of the reasons why the settlement of the entrepreneurs’ individual projects was delayed). The point is that the operators of the grant projects settled their projects according to the same path as the entrepreneurs did, which caused significant delays in the transfer of funds to the entrepreneurs. Additionally, as some operators of the grant projects were operators of a greater number of such projects (and some of them were implemented by consortia), a very difficult and time-consuming task was to settle the management costs of such projects (both for the operator of the grant project and for the employees of the competent intermediate body). Such complex settlements (e.g. dividing the fixed costs of an institution between several projects) were highly prone to errors and misunderstandings, which further delayed the whole process. As a slightly controversial solution, the respondents also considered that LS IB made the possibility of applying for another advance payment conditional on the settlement of the previous advance payment, which sometimes took a very long time. It was also unfortunate that the settlement of the grant element of the project (part of the project transferred in the form of grants to the entrepreneurs) was not separated (in terms of financial reporting) from the part related to the management costs of the grant project, so the delays in the settlement of the management costs ultimately delayed the transfer of funds to the entrepreneurs. As confirmed by the results of the interviews, some entrepreneurs had to wait even 4-5 months to get their expenditures refunded, which naturally caused widespread dissatisfaction. Therefore, as indicated by a significant group of the respondents, in the future (which is already slowly being introduced) it is necessary to seek to settle the management costs of the grant project operators on a lump-sum basis, without the need to deliver relevant accounting documents and accounts.

It should be pointed out in this context that the idea of grant projects, implemented mainly by the Business Environment Institutions based in the region, proved successful in general, excluding the aforementioned problems with cash flows. If possible under the formal requirements, it is worth continuing such form of support under the ROP LS 2021-2027 in the subsequent programming period.

What should be emphasized and was reported by the entrepreneurs surveyed is the fact that irrespective of serious and burdensome delays in the project settlement, the cooperation with the staff of the LS IB was evaluated well, as seeking to explain any doubts related to the project settlement as far as possible.

A highly important matter, for which there are no explicit recommendations, is the use of the ITI mechanism for supporting the entrepreneurs. Several important matters should be considered in this respect.

The solution that certain measures involved separate allocations for the entrepreneurs implementing a project in an area should be welcomed in principle (however, the ITI mechanism[[71]](#footnote-72) is not indispensable to do that). Such solution made it possible to avoid a situation in which the vast majority of the project accepted for co-financing would come from the Wrocław Agglomeration - it hosts the greatest number of swiftly developing enterprises. It seems that such solution should definitely be continued in the framework of the ROP LS, to be implemented in the subsequent financial perspective, certainly under the condition that such projects will be highly requested by all the sub-regions of the voivodeship. If the support refers, for example, only to the research and development projects, it does not rather seem to be justified to design independent sub-regional allocations, because the demand for such support mainly concentrates in the Wrocław Agglomeration.

Another matter refers to the role of the competent intermediate bodies that manage individual ITIs. In two case studies (the Agglomeration of Jelenia Góra and the Wrocław Functional Area), the role of the institutions as entities supporting the enterprises involved: the cooperation in announcing the call, formulating the evaluation criteria for the applications, the evaluation of the applications for their consistency of the strategy of the relevant ITI mechanism. In one of the aforementioned case studies (the Wałbrzych Agglomeration), the competent intermediate body was responsible for all the elements of the call for applications, the evaluation and supervision over the implementation of projects. In this context, it is worth considering what are the benefits and what are the limitations in using the ITI mechanism in the framework of the measures targeted at the entrepreneurs (the matter was raised during the interviews under the quantitative studies and was subject to expert analyses). This matter seems to be complex and it is difficult to evaluate it explicitly.

On one hand, it is certainly reasonable to delegate part of the duties delegate to other institutions, excluding the Lower Silesian Intermediate Body responsible for conducting the call for applications and evaluating the applications, because the duties may be shared. The formula of the ITIs also facilitates to conduct consultations with potential beneficiaries on the assumptions of a support scheme and on the evaluation criteria[[72]](#footnote-73). Delegating complete competence to announce calls, evaluate applications and supervise the implementation of projects may also be important for the activation, as confirmed by the results of the qualitative studies, as more enterprises may be willing to submit applications. Such arrangement (like for the ITIs of the Wałbrzych Agglomeration) may also affect the development of the sub-region, and make the residents, including the entrepreneurs[[73]](#footnote-74), identify with the region. The application selection and project evaluation system may also function more effectively (thanks to its smaller scale), although this is highly dependent on concrete solutions[[74]](#footnote-75).

On the other hand, the extension of the implementation structure faces certain limitations, as there may occur difficulties with employing appropriately experienced staff, accompanied by the limited budget (although it should be born in mind that the ITIs are mainly used in other areas of intervention, excluding the support for enterprises).

This Report is not to evaluate which of the solutions is more convenient. Therefore, one of our recommendation proposes to perform a more in-depth analysis of the use of the ITI for supporting the enterprises. In our opinion, the decentralisation of the implementation process is usually beneficial in general, although it may (although does not have to) be rather expensive. Irrespective of the final solutions, it is certainly worth strengthening the information and advisory infrastructure in individual sub-regions so that the entrepreneurs can obtain relevant information without the need to travel to the capital city of the voivodeship, as well as complete relevant formalities (e.g. during the implementation of the projects). It is additionally worth improving the forms of remote communication (in the light of the experiences during the COVID-19 pandemic).

It may additionally be considered to what extent the degree in which a project corresponds to the strategy of an ITI project[[75]](#footnote-76) is important for the projects implemented by individual entrepreneurs (it is worth pointing out that the strategies are usually relatively general in principle, although they reveal certain discrepancies). It is highly difficult to evaluate what extent the degree in which a project corresponds to the strategy of an ITI project is really important for targeting the support at specific projects. It seems that this question should be answered by the representatives of different ITIs on the basis of their current experience.

As for the management of the support measures for enterprises under the ROP LS, it was also reported that the Work Group of the Monitoring Committee of the ROP LS on enterprises and innovations and the very Committee were relatively active, as well as the cooperation with the institutions responsible for implementing the ROP LS, i.e. the representatives of the MA of the ROP LS and the relevant intermediate bodies, worked well.

## Evaluation of the functioning of the project selection system

The study was also to evaluate the project selection system under the analysed measures. Selected problems related to its functioning (the length evaluation process in some competitions) was discussed in the preceding parts of this Report. In addition, it is worth noting that the functioning of the evaluation system within the entire ROP LS 2014-2020 was subject to a separate evaluation[[76]](#footnote-77), a significant part of the conclusions and recommendations presented in the evaluation is justified to a great extent.

As far as the results of the quantitative studies are concerned, the overall evaluation of the project selection criteria applied for different measures is relatively positive, as illustrated in the figure below; it is worth noting that it presents the views of not only the beneficiaries but also of the ineffective applicants, being mostly more critical (for understandable reasons) of the evaluation criteria[[77]](#footnote-78).

**Figure 38.** Evaluation of the comprehensibility of the evaluation criteria at the stage of preparing the co-financing application (Question: Did you find the project evaluation criteria comprehensible while preparing the co-financing application?)

Source: CAWI/CATI (mix) with entrepreneurs - beneficiaries and ineffective applicants under the aforementioned measures of the ROP LS, n=706.

As results from the aforementioned data, a major part of the respondents (76% up to 90% depending on the measure) find the adopted evaluation criteria rather or definitely comprehensible. A slightly above-average percentage of those finding the evaluation criteria rather or definitely comprehensible was recorded under Measure 3.2 (19% of the respondents express critical opinions about the comprehensibility of the adopted criteria).

The evaluation of the evaluation process is presented below in selected dimensions, similarly to the preceding point, both by the beneficiaries and the ineffective applicants - for the measures of PA 1 and PA 3.

**Figure 39.** Evaluation of selected elements of the evaluation - applicants under PA 1 (Question: How do you generally assess the evaluation process of your application? Please respond to each of the following statements).

Source: CAWI/CATI (mix) with entrepreneurs - beneficiaries and ineffective applicants under PA 1 of the ROP LS, n=641.

**Figure 40.** Evaluation of selected elements of the evaluation - applicants under PA 3 (Measures 3.1 and 3.2) (question as above).

Source: CAWI/CATI (mix) with entrepreneurs - beneficiaries and ineffective applicants under PA 3 of the ROP LS, n=65.

As results from the aforementioned data, most of the beneficiaries evaluated that the evaluation process had been conducted correctly. Depending on the dimension of the evaluation, the percentage of those supporting the positive evaluations of its different dimensions ranged from 58% up to 86%. The timeliness of the evaluation process attracted much more critical opinions, in particular under PA 1 (32% of the respondents stated that the process was rather or definitely conducted on time), which will be discussed in the following parts of this Report, the same being applicable to the quality of its organization, in particular under PA 1 (23% of the opinions were critical), and the knowledge of the evaluators of the realities in which an entrepreneur-applicant operates (23% of the opinions were similarly critical).

The project evaluation system and the selection criteria were also mentioned by many respondents under the qualitative studies. As in the quantitative studies, the lengthy project evaluation process in selected competitions was deemed a very serious problem. For example, the call for applications under Scheme 1.2 CA ‘Enterprise Services - professional pro-innovation services provided by Business Environment Institutions - horizontal competition (340/19)’ ended on 30 April 2019, and the list of projects that were positively evaluated was published on 11 March 2020, i.e. after almost 11 months[[78]](#footnote-79). As reported by some respondents, part of the enterprises, in particular the larger one, applied for support under the national programmes due to the lengthy evaluation process, mainly under the OP SD, in the competitions organized by the Polish Agency for Enterprise Development and the National Centre for Research and Development, in which the evaluation process took much less time. Therefore, this matter should be analysed more in depth and improved for the ROP LS 2021-2027.

Some of the respondents also pointed out that the Monitoring Committee, in particular its Work Group, had played a beneficial role in modifying the draft evaluation criteria and adapting them to the specificities of the enterprises.

The very limited engagement of external experts to evaluate the applications was also deemed by the respondents to constitute a serious challenge. The main reason referred to the insufficient resources planned for this purpose in the budget for Technical Assistance (as a result of which the remuneration offered would be totally unattractive), the difficulties in identifying and examining the expertise of the candidates for experts, and the operation of the evaluation system as a whole. Therefore, in most cases, the evaluation system was largely based on the use of the staff of the relevant intermediate bodies. While the simpler and more standard measures could operate with such a system, the highly innovative R&D projects required higher competences of the staff of the IBs, as pointed out by them. Therefore, the quality and adequacy of the evaluation in this area could be relatively limited.

Due to the above, a decisive recommendation for the subsequent programming period is that such projects should be evaluated by external experts, who should receive a rewarding remuneration. Furthermore, for the most complex and innovative projects it is absolutely worth, as pointed out by many respondents, using the expert panel in which the experts-evaluators may submit additional questions to the applicants with regard to certain elements of the planned projects, which minimizes the risk that the evaluation will not be fair, as a result of an insufficiently precise description of the project or the impossibility to understand the essence of the project or its key elements.

On the other hand, the projects aimed at developing a strategy for expending into new markets (irrespective of whether the preparation of such documents should be co-financed at all, as mentioned above) were highly difficult to evaluate; and they were often prepared by advisory firms and were relatively similar to each other.

The respondents additionally pointed out that it would be advisable to intensify the exchange of experiences between different institutions of the implementation system of the Cohesion Policy 2014-2020, and it would be useful to organize more training for the evaluators of the applications (both the staff of the IBs and external experts).

A separate and highly complex matter was to evaluate the consistency of a project with a corresponding smart specialisation. The consistency of the project with at least one specialisation was a precondition for obtaining support from the ROP LS under Thematic Objective 1, additional scores could be obtained in the evaluation process for Thematic Objective 3. Unfortunately, the evaluators viewed the description of the fields and sub-areas of the Lower Silesian Smart Specialisations very laconic[[79]](#footnote-80) and containing only the names of the fields and sub-areas of the relevant specialisation. As the preparers of the applications, especially the advisory firms, were fully aware of the situation, they sought to prove in the application that their application perfectly fits into the relevant specialisation. If the evaluator was not a specialist in a particular area of specialisation, they were essentially lost, because in case they had rejected a project and their evaluation had been appealed against, they would have had to prove that the project did not actually correspond to the LSSSs, which was highly difficult to do without specialist knowledge. Therefore, a recommendation is to prepare a guide on the regional specialisations to make their individual categories more operational, and to facilitate the evaluation of whether a project correspondents to a LSSS.

These opinions on the LSSSs are well-founded and (most importantly) are in line with other indications in this respect (the revision of the fields and sub-areas in terms of their updating, clarification of the description, emphasis on the use of the entrepreneurial discovery mode for the regional specialisations), as mentioned in Section 3.1 (pages 47 and following). Therefore, we find it justified to formulate an appropriate recommendation. It seems furthermore to be recommendable to strengthen the role of the LSSS in the project selection process, which would naturally result from their role being emphasized.

With regard to the conducted competitions, one of the respondents pointed out that - for the measures allowing for implementing high-value projects - the schedule of the competitions should be announced much more in advance (ideally one year or even more time before they are launched). Otherwise, the enterprises are not able to prepare appropriate financing and organizational measures to implement such projects. This may naturally be difficult to implement, but this demand should be taken into consideration in future.

## Business Environment Institution as an element of the implementation system

As for supporting the entrepreneurship and innovativeness under the ROP LS 2014-2020, as important matters refers to the role of the Business Environment Institutions (BEIs)[[80]](#footnote-81), e.g. scientific and technological parks, regional development agencies or business incubators.

It is beyond any doubt that the fact that Lower Silesia hosts many entities of this kind, with many of them being well-established and possessing a certain potential, causes that they may assist in the implementation of different projects; the potential is fortunately used appropriately. To exemplify this, the role of the operators of grant projects, as describe in this Report, and the projects co-financed from the European Social Fund (Measures 8.5 and 8.6) may be referred to as examples. This situation should be deemed definitely advantageous, because the potential of regional BEIs is used well in this manner.

On the other hand, one of the representatives of the BEIs participating in the study report that their weakness involves the lack of specialisation, similarly to the rest of Poland, while the vast majority of the BEIs deal with ‘everything and nothing’ (although there are certain exceptions to this disgraceful rule). Therefore, there are hardly any institutions that are able to continue a highly specialist service of a very good quality - the BEI cannot simply afford hiring the best specialists.

This adverse situation is also attributable to the fact that a major part of the institutions have a relatively poor financial potential and must apply for participating in the projects co-financed by the EU to operated. However, the conditions of such projects are still less profitable, e.g. in terms of the limits for management costs or the catalogue of eligible expenditures, as well as due to the relocation of costs to indirect costs (being limited and showing a decreasing trend). Although it is possible to cover part of the operational costs of the EBIs from the project budget, this does not allow to build the potential and accumulate capital in the long term, all the more that the projects are limited in time, and it is usually uncertain whether they will be continued. During the study, the respondents also pointed out (although this may be arguable) that many enterprises were ‘damaged’ by the free or low-paid advisory services with the involvement of public funds, due to which the enterprises, in particular the smallest ones, are very reluctant to pay for the advisory services. Generally speaking, a major part of the institutions operate ‘from project to the other’, which is unfortunately an understandable strategy in the existing reality which cannot be different.

The respondents report that although the EBI certainly cooperate with each other (e.g. during the implementation of projects), a serious problem is that they often compete with each other, which is indeed not wrong, but makes their willingness to enter into an in-depth cooperation and their trust vanish over time. A certain limitation is also the fact that a significant number of the EBIs are co-owned by the voivodeship self-government - this solution has indeed its advantages, but it may also cause that ‘own’ entities will be preferred unconsciously (although, to be precise, this is rather an impression of the representatives of certain EBIS and not a concrete fact).

The respondents pointed out that there is no system - on the national or regional level - to standardize the activities of the Business Environment Institutions and to stimulate their cooperation, being similar to the National Services System for SMEs managed by the Polish Agency for Enterprise Development, which implements its objectives irrespective of certain drawbacks.

The respondents stated that a good solution might be to design and implement an accreditation system for the EBIs - such a system is operating in the Masovian Voivodeship, to give an example[[81]](#footnote-82).

The representatives of selected EBIs find that the future support should strengthen the specialisation of individual institutions and should contribute to creating a comprehensive offer of the entire network of Lower Silesian EBIs so that the customers are directed to the institution with the best specialists in a field[[82]](#footnote-83). Any networking actions along with those strengthening the specialisations would therefore be highly useful. This will however be difficult to attain without increasing the capital of the key BEIs, which does not seem to be highly feasible during the COVID-19 pandemic and in the light of the provisions on public aid.

# Summary - List of recommendations

**Table 32.**  Table of recommendations.

| Conclusion | Recommendation | Addressee | Implementation method | Implementation deadline | Category | Thematic area | Operational Programme |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Allowing to concentrate the support by subject matters according to their respective guidelines, the Lower Silesian Smart Specialisations have become a crucial component of the support distribution process. However, the smart specialisations were specified a relatively long time ago (in 2015), and it would therefore be advisable to subject them to a fundamental review by performing a separate project task according to the so-called entrepreneurial discovery formula. The verification should be complemented by specifying more in detail the terms describing the LSSSs - which is not the case today, which makes their application in practice more difficult.   [pages 47-50, 97, 136] | With the use of the entrepreneurial discovery process, performing a thorough review of the current fields of the LSSSs to correctly (potentially) reflect the socio-economic developments, forecasts and trends, and to consider/work out changes that would address the long-term socio-economic challenges to a greater extent.  Specifying more in detail the terms, definitions, scopes of individual fields of the LSSSs (and their sub-areas) to make the entire model an operational tool.  It is particularly advisable to design and implement a monitoring system for the functioning of the LSSSs, which would forecast cyclical reviews, performed according to the entrepreneurial discovery rule (improving the existing system).  [pages 49-50, 97, 136-137] | MO of the LSV, MA of the ROP LS 2021-2027 and work groups for LSSSs | Deciding on a project (and its launch) under which the catalogue of the LSSSs would be subject to a thorough review, eventually verifying/correcting the current fields and sub-areas.  Preparing descriptions of the fields the LSSSs, including the recommendations for their identification.  Drafting information materials for entrepreneurs on the eligibility of projects in the light of the catalogue of the LSSSs.  Publication (electronic) and promotional actions with regard to the developed concept.  Designing, operationalizing and launching a system for monitoring the LSSSs - as a separate task for the special ‘work sub-group’, to cooperate with external advisors (selecting an independent advisor). | 31 March 2022 | Out of the system | Innovativeness and research and development | - |
| 1. In the light of the significance of the LSSSs, it seems recommendable to strengthen their role in the selection process of projects to be co-financed from the ROP LS (in practice, the comment refers to the subsequent financial perspective of the ROP LS), so that the portfolio of the supported projects includes more projects that corresponds to the catalogue of specialisations (in the field of supporting R&D&I).   [pages 49-50, 97, 136] | For programming the public support at the regional level (the ROP LS), solutions may be adopted to increase the focus of the supported projects on the fields of the LSSSs.  [page 137] | MA of the ROP LS 2021-2027 | While agreeing on the details concerning the selection of projects for co-financing (the project selection criteria), the significance of the LSSSs should be strengthened - to be deemed obligatory in the area of the R&D projects, and - at least in some competitions where the co-financed projects do not have to include a research and development component (following the model of the current Measure 1.5 of the ROP LS), or the preference for the projects corresponding to the LSSSs should be strengthened. | 30 June 2022 | Programme operational | Implementation scheme of the Cohesion Policy, entrepreneurship, innovativeness and research and development | ROP LS 2021-2027 |
| 1. It is necessary to continue stimulating the cooperation between the enterprise sector with scientific and research institutions. As for the respective area, the situation is improving, however it is still from its optimum. Therefore, it is recommended to continue the support in the form of interventions by following the model of the existing Measures 1.2, 1.5.   Such measures like the ‘innovation voucher’ should be continued as a form of intervention, made more attractive and equally accessible.  It should simultaneously be considered whether the intervention instruments aimed at supporting the internationalisation of the Lower Silesian SMEs should be reconstructed.  It is also indispensable to amend the formula (approach to) of supporting the internationalisation - this direction of intervention remains desirable, but the related processes should be supported in a different way because the applicable support model seems dubious (to have limited effectiveness).  [pages 75-77, 79-80, 83-84, 89-90, 95-97] | The programming process of the measures supporting the new edition of the ROP LS should envisage interventions whose logic will be similar to the support offered under the current ROP LS - as for Measures 1.2 and 1.5; considering the ‘innovation voucher’ programmes with higher values of co-financing (eventually in tranches according to the project advancement) and being implemented (available) continuously.  On the other hand, it seems to be arguable whether the support for the internationalisation should continue as similar formula (supporting the internationalisation remains important, but requires a different support model to be worked out).  [pages 94-97] | MA of the ROP LS 2021-2027, LSIB | Specific tasks performed in the framework for the function of programming the new perspective of the ROP LS with regard to the interventions for research and development and innovativeness.  Working out a new concept for supporting the internationalisation of the Lower Silesian SMEs (e.g. in the form of a support complementing the actions in relation to the implementation of brand-new products or services, rather than limiting to the preparation of such planning documentation like ‘The export development plan’. To do that, it will be reasonable to commission a detailed expert opinion presenting good practices from Europe/the world for internationalising SMEs). | 30 June 2022 | Programme operational | Implementation scheme of the Cohesion Policy, entrepreneurship, innovativeness and research and development | ROP LS 2021-2027 |
| 1. Implementing certain support schemes through the operators of grant programmes (mainly Business Environment Institutions) proved to be a very successful solution. The only limitation that must be corrected in the subsequent programming period relates to the settlement of expenses and the transfer of funds, as these areas require specific adjustments.   [pages 129-130] | Within the framework of the ROP LS 2021-2027, if feasible for formal reasons, it will be necessary to maintain the possibility that the grant programmes are managed by external operators on behalf of companies, while the settlement of management costs should simultaneously be simplified (it would be ideal if they could be settled on a lump-sum basis) and a separate and swift path for settling the expenditures covered by the grants should be developed.  [page 130] | MA of the ROP LS 2021-2027, LSIB | Deciding on the implementation of selected support schemes by appointing an external operator, formulating the rules and selecting the operator.  Designing solutions that will enable to settle the management costs of grant projects on a lump-sum basis, designing a swift path for settling the expenditures covered by the grants, separated from the path for settling projects of individual entrepreneurs. | 31 March 2022 | Programme operational | Implementation scheme of the Cohesion Policy, entrepreneurship, innovativeness and research and development | ROP LS 2021-2027 |
| 1. The role of the Integrated Territorial Investments (ITIs) and intermediate bodies in individual areas of the ITIs for entrepreneurship should be analysed and discussed. While directing separate financial allocations for supporting entrepreneurs in individual sub-regions seems reasonable, the benefits resulting from the ITI mechanism should be analysed in depth, although the adopted ITI mechanism has several advantages.   [pages 131-132] | Therefore, the drawbacks and advantages of using the ITI mechanism for supporting individual entrepreneurs should be analysed carefully, by considering the impacts of such a solution on the development of individual sub-regions and on activating the SME sector in the sub-regions. In case such mode for implementing specific measures is abandoned, appropriate solutions should be designed to facilitate the application process and the implementation process by the entrepreneurs based at a big distance from Wrocław.  [pages 131-132] | MA of the ROP LS 2021-2027, LSIB | For the subsequent financial perspective, performing an analysis to identify the main advantages and limitations in using the ITI mechanism to support entrepreneurship (in both models applied under the ROP LS 2014-2020, i.e. delegating all the duties to a competent intermediate body <ITI WA> and the evaluation of the consistency of an ITI mechanism only <ITI AJ and ITI WFA>.  In case the ITI mechanism is abandoned as an instrument to support enterprises, it is recommended to design such solutions that would facilitate the application process and to complete appropriate formalities by the entrepreneurs based at a big distance from Wrocław.  Additionally/eventually, the mode of remote communication should be disseminated during the COVID-19 pandemic (however not only the electronic transmission of documents but also tele-conferences with the staff of the IBs), which would obviously require to provide appropriate infrastructure (applications, cameras, etc.). | 30 September 2021 | Programme operational | Implementation scheme of the Cohesion Policy | ROP LS 2021-2027 |
| 1. The substantive evaluation of the projects for entrepreneurs was mostly performed by the staff of the intermediate bodies rather than external experts[[83]](#footnote-84). As a result, the R&D projects were sometimes evaluated by persons who did not possess sufficient technical knowledge. Moreover, the formula of an expert panel holding meetings with applicants was hardly used, although being highly valuable, especially for evaluating complex, innovative projects.   [pages 135-136] | In the framework of the ROP LS 2021-2027, we recommend to involve external experts to a greater extent, above all to evaluate the most complex projects that require the most specialist knowledge, and the research and development projects.  Our proposal is also to make use of the expert panel (in particular for such projects).  [pages 135-136] | Relevant PAs under the ROP LS 2021-2027. | Designing appropriate procedural solutions in the evaluation system  Providing a sufficiently large budget under Technical Assistance, to finance the remuneration costs of experts and the costs of the expert panels.  Learning the experiences of the key national institutions (in particular the Polish Agency for Enterprise Development and the National Centre for Research and Development), with regard to the evaluation of the projects under the OP SD, if possible the organization of apprenticeships and trainings in the institutions to prepare the staff of the MA and of the responsible IBs. | 31 March 2022 | Programme operational | Implementation scheme of the Cohesion Policy, innovativeness and research and development | ROP LS 2021-2027 |
| 1. The support targeted at entrepreneurs under the measures financed from the European Social Fund (Measure 8.5 and 8.6) is viewed very positively and addresses needs of entrepreneurs and their staff.   [pages 112-118, 120-128] | It is worth considering in the subsequent programming period, if possible under the Partnership Agreement 2021-2027, whether the support should continue a similar form to the one applicable to both of the described measures. In working on the rules for the support measures, it is worth considering the serious developments on the labour market (for continuing Measure 8.5), and designing such solutions (e.g. by decreasing the intensity of the support, limiting the type of the co-financed trainings or the catalogue of beneficiaries) that will counteract – especially in the Wrocław sub-region - the significant disproportion between the demand for support and the financing capacities (for continuing Measure 8.6).  [pages 112-118, 120-128] | MA of the ROP LS 2021-2027 | Developing and negotiating with the representatives of the European Commission appropriate support schemes to be used under the ROP LS 2021-2027, including the aforementioned matters. | 30 June 2021 | Programme operational | Entrepreneurship, labour market | ROP LS 2021-2027 |

# Annexes (list)

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## Case studies

#### Case study No 1.

|  |  |
| --- | --- |
| Project title | Development of an innovative transport system with the use of autonomous vehicles |
| Beneficiary: | OCTANT Spółka z ograniczoną odpowiedzialnością |
| Objective of the support measure | Research and development activity |
| Internet website: | https://www.octant.pl/ |
| Number of the co-financing application | RPDS.01.02.02-02-0027/17 |

**Beneficiary - basic information**

OCTANT is a limited liability company founded in November 2016. The subject matter of the company involves ‘Activity in the field of engineering and related technical advisory services’ (PKD 71.12.Z). The company rents a laboratory in Wrocław.

The knowledge and experience of the President of the Management Board of the company laid foundations for starting the innovative and future-oriented company. In 2011, he graduated from the Faculty of Mechanical Engineering of the Wrocław University of Science and Technology, with two areas of specialisation: Automation of Machineries and Work Processes and Construction Materials Engineering. In the years 2012-2016, he co-owned and managed a company-integrator that specialized in developing and producing prototype machines and devices, and he designed, programmed and implemented several advanced systems for steering production devices. The owner has also gained experience as contractor of the European projects.

Before the company OCTANT was founded and launched, its owner had established extensive relations with Polish production plants, analysed their needs to gradually decrease production costs by ensuring their increasing capacities and quality. He also analysed the solutions offered on the market to assess the competitiveness of the planned project and the launch of an innovative system of internal transport in the production plants by using autonomous vehicles.

The economic and functional analyses of the two most similar systems of internal transport reveal potential competitive advantages of the planned product. Furthermore, the existing systems were diagnosed to have certain flaws and drawbacks, which were mentioned by its potential and factual users, and which the company OCTANT planned to remove.

The condition of the company is also supported by the commercial relationship with one of the main distributors and representatives, the leading European producers of industrial automatic systems (Balluff and Leuze), which expressed its willingness to cooperate the following areas by submitting a letter of intent already upon the launch of the company:

* promoting the innovative system of autonomous transport vehicles among the potential customers of the company OCTANT,
* providing technical support by the selection of system-based components and their use in the vehicles.

Apart from the owner and chief inventor, the company OCTANT employees two specialists with a university degree: a constructor and an IT specialist.

**Description of the project**

The major part of the information included in the preceding chapter refers to the origin of the project implemented under Measure 1.2 of the ROP LS for the years 2014-2020.

The objective and simultaneously final result of the project was to develop a product innovation - a prototype system of autonomous transport with the use of autonomous vehicles, to be equipped with an innovative transport chassis with multi-directional wheels and optimizing models that facilitate the design of systems according to different needs of the recipients, to address the current and future market demand. The system is designed for transporting components (semi-products), goods in the production and warehousing processes.

System autonomicznego transportu firmy OCTANT

*Autonomous transport system of the company OCTANT, source: https://www.octant.pl/*.

The project was planned to include a series of research and development activities to develop a prototype system of autonomous transport, fit to be used in any production facilities. The newly developed prototype system consists of: two autonomous vehicles, two transport platforms, an unloading station for cargo and an energy loading station and an advanced system for remote steering. The main assumption of the R&D work was to develop more efficient solutions for the internal logistics of the enterprises, compared to those being available on the market when the grant application was prepared, i.e. in 2017. The increased efficiency implies increased transport capacities (an increased pulling power), faster transport, an increased electricity consumption, decreased handling costs thanks to the advanced automation, an increased flexibility of the system and facilitations in adjusting the system to any potential changes in the production or warehousing, as well as increased capacities of the system to react to any unexpected situations by maintaining the automation of the solution. The system was equipped with tools that make it possible to optimize and flexibly adjust it to any type of production or warehousing activities. The aforementioned features distinguishing the transport system of the company OCTANT from the competitive products provide the customer with a set of benefits on which the promotion of the solution is based.

With the value of eligible costs of approx. PLN 500 thousand, the project was divided into three stages:

* Stage 1: Developing optimal technological and system-based components to flexibly adjust the system to the customer’s needs;
* Stage2: Developing a technology for the optimal management of the system;
* Stage 3: Developing a prototype system and its testing.

The total project value exceeded PLN 517 thousand, including the grant of PLN 367.5 thousand and the own contribution of PLN 150 thousand. The grant accounted for approx. 71% of the project value.

To implement the project, the applicant and owner of the company also used its own funds.

**Evaluation of the support instrument used by the company**

Both the project type and the subject matter of the economic activities of OCTANT were adjusted to the applied support instrument offered under Measure 1.2 of the ROP LS 2014-2020. The catalogue of eligible costs for this scheme made it possible to settle all the necessary project expenditures.

The implementation of the project encountered certain difficulties resulting from the relatively slow process of examining the payment requests and often from the requirement to correct and supplement them, with the 30-day examination period starting again afterwards. This caused certain delays in payments, but the project promoter managed to overcome them and to implement the project within the planned deadline.

**Effects of gaining the funds**

With the received co-financing, it was possible to implement the project within a relatively short time and within the planned scope. If there had been no co-financing, the research and implementation process would have required much more time, which could spoil the entire result in case of innovative products.

From the perspective of future customers of the company, placing a fully automated system of internal transport onto the market gives a change to address the increasing competitive challenges and to mitigate the effects of the following factors: increasing remuneration costs, increasing problems with hiring well-qualified employees and constant pressure on increasing productivity by decreasing costs. What is more, the electric system is more environmentally and human friendly, if compared with the traditional diesel forklifts.

The company OCTANT now owns the prototype system of transport trolleys, as described in section ‘Description of the project’, and is working on developing a system for the management of a higher number of transport trolleys and platforms.

**Development perspectives for the company**

The implementation of a prototype system of transport platforms for series production will generate savings in the company’s operational costs. OCTANT is currently finishing its work on the IT system for the management of a higher number of autonomous transport trolleys, and has not launched their sale yet.

The owner, who is simultaneously building the strategy of the company, possesses extensive contacts with the industry and highly appreciates the marketing perspectives of the newly developed system, mainly in view of the potential benefits the customer may derive from its implementation. The company has focused mainly on research and development activities so far, which resulted in the development of the prototype system. It is now forced to focus its efforts on refining its offer and marketing the newly developed product.

The company’s strategy envisages that its offer will include systems for individually tailored electric trolleys along with their installation and testing in the companies of the customers. The final stage of painting and placing individual signs of the customer, e.g. the customer’s logo, is not manageable in the formula of series production and will require an additional employee to be hired.

A small group of people that can understand each other well, supported by the research and development equipment gained in the project, favours the further potential development of the new product or the design of new solutions in the field of production automation, which is the core competence of the owner of the company OCTANT.

**Conclusions and evaluation**

The project was implemented fully in line with the co-financing application. The applicant however pointed out that such types of research and development projects hardly enable to predict any necessary items of equipment or materials to be included in the financial plan at the application stage and to be settled at a later time. During the implementation of a R&D project, it may turn out that certain assumptions are invalid and must be revised. Such changes require new arrangements and an annex to the co-financing contract, which significantly extends the implementation period. The time is a key factor in the projects aimed at developing an innovative product of solution, while determining its success or failure.

The applicant suggests that the support instruments for research and development projects should specify the results and other output indicators for the project by the planned budget in future, while living a greater place for manoeuvre in terms of using the budget for concrete activities.

To summarize:

* The implemented project contributed to developing an innovative system for the internal organisation of the transport of products and components on the domestic market, which allows to maintain the cost competitiveness compared to the existing solutions each of which is not fully functional contrary to the product of the company OCTANT;
* The company selected the optimal measure of those offered under the ROP LS for the years 2014-2020, which made it possible to settle all the incurred project costs;
* The project was feasible thanks to the thorough preparation and the planning of project activities and extensive competences of the research and development team;
* The future market success of the product developed under the research and development project will be determined by the marketing of the prototype; In the light of the business and scientific experience of the inventor and his extensive contacts with the industry, it may be expected that the company is quite probable to be successful on the market.

#### Case study No 2.

|  |  |
| --- | --- |
| Project name | Implementation of modern technologies in the field of advanced non-invasive diagnostics of eye diseases and ophthalmological procedures |
| Beneficiary: | APFEL BAUM Maciej Jabłoński |
| Objective of the support measure | Innovativeness |
| Internet website: | http://abmedical.com.pl/ |
| Number of the co-financing application | RPDS.01.05.01-02-0013/18 |

**Beneficiary - basic information**

The company APFEL BAUM Maciej Jabłoński has been operating as one-person economic activity since 19.01.2010. The main subject matter of the company has always been the treatment of eye diseases: glaucoma, age-related macula degeneration (AMD), cataract, conjunctivitis, dry eye syndrome, eye allergies.

The ophthalmological clinic is based in Świeradów-Zdroj, ul. Piłsudskiego 6, and occupies a building with a usable floor space of 180 m2. The activities of the company are determined by the education and business experience of its owner. Mr. Maciej Jabłoński holds a university degree in optometry and has operated on the pharmaceutical market for twenty years now. In parallel to the company AB, Maciej Jabłoński is also President of the Management Board of the company AB PHARM sp. z o.o.

Having implemented the product and process innovations (new innovative services with the use of the equipment fulfilling the highest market standards) under the project co-financed from Measure 1.5 of the ROP LS for the years 2014-2020, the ophthalmological clinic may now perform ophthalmological procedures in parralel to its non-invasive advanced diagnostics. The co-financed project contributed to extending the range of services on offer.

The clinic offers the following types of diagnostic examinations: HRT examination, OCT/SOCT examination, ultrasound examination, computer perimetry, pachymetry, measurement of internal eyeball pressure, autorefractometry and non-invasive an non-contract angiography that is a novelty (product/service innovation in the field of diagnostics).

A complete novelty of the ophthalmological clinic includes the procedures with the use of lasers (product/service innovation in the area of ophthalmological services):

* Micro-pulse laser EasyRet, fibre laser 577 nm, SingleSpot, MultiSpot and SubLiminal for the retina,
* YAG laser for capsulotomy and iridotomy,
* SLT/MLT laser,

|  |  |
| --- | --- |
| Angioraf bezkontrastowy nieinwazyjny | Laser mikropulsacyjny 577nm |
| *Angiograph for non-invasive and non-contrast examinations, source: http://abmedical.com.pl/,* | *Micro-pulse laser 577nm, source: http://abmedical.com.pl/*. |

The company targets most of its services at patients aged 50+ years. The clinic performs eye examinations and undertakes the treatment of eye diseases that accompany other diseases, including diabetes, hypertension or rheumatism. As not all the ophthalmological clinics accept patients with such concurrent conditions, APFEL BAUM gain a competitive advantage in this area.

**Description of the analysed project**

The objective of the project implemented under Measure 1.5 of the ROP LS was to stimulate the development of the company through investments in new technologies and the extension of the market offer by adding new services that have been known and used on the Polish market for less than 3 years.

In the tender procedures organized in the project, the company purchase a micro-pulse laser, an angiograph for non-invasive and non-contrast examinations and an ophthalmic ultrasound scanner.

The technology the company APFEL BAUM used before the implementation of the project made it possible to perform only standard eye examinations for the following diseases: glaucoma, age-related macula degeneration (AMD), cataract, conjunctivitis, dry eye syndrome, eye allergies with the use of the ultrasound apparatus and ophthalmological scanner with pachymetry. The project was motivated by the desire for increasing the quality of customer services by making the diagnoses more precise to detect certain diseases at an earlier stage, which also improves their prevention.

As many as 82% of people aged 50 years or more suffer from eye diseases. The number and percentage of people suffering with eye diseases are increasing every year, while many of the diseases may result in the loss of eyesight. The main reasons for the complete or gradual loss of eyesight are: cataract, glaucoma and age-related macula degeneration (AMD). The prevention and early detection of the diseases are the main means to stop the loss of eyesight, in particular among the seniors. The ophthalmological examinations and procedures are supported by a swift but quite costly technological development, while the market competition is driving the technological development of the ophthalmological services.

The total project value reached nearly PLN 538 thousand, including the grant of approx. PLN 208.5 thousand and the own contribution of PLN 329 thousand. The grant accounted for approx. 39% of the project value.

**Evaluation of the support instrument used by the company**

Both the project type and the subject matter of the economic activities of APFEL BAUM were adjusted to the applied support instrument offered under Measure 1.5 of the ROP LS. The catalogue of eligible costs for this scheme made it possible to settle the purchase of modern diagnostic equipment and ophthalmological procedure, which enabled the company to launch a brand-new and innovative service. At the application stage, such services had been known and used on the Polish market for less than 3 years, which implies that the services and processes implemented by the company may be deemed innovative according to the assumptions of the support instrument.

The project was completed within a relatively short time of several month, in line with the planned time schedule and material scope. The payment requests were settled so smoothly that there were no payment delays in the project.

**Effects of gaining the funds**

The EU co-financing accelerated the project implementation within its full scope. The owner was determined to move his company to a higher technological level, so even if there had been no co-financing, the project would have been implemented, however over a period of time, with the purchases of the equipment being made on a gradual basis or with the use of repayable financial instruments.

It should be pointed out that the implementation of the project has contributed not only to extending the diagnostics and procedures but also to reducing the electricity consumption and electricity bills. The applicant proved that by referring to the purchase of one of the modern devices - the laser generating savings of approx. 92% if compared with the traditional ion laser (the modern laser uses 72 kWh electricity a year, if compared with 900 kWh electricity used by the outdated lase, under the same parameters of the working time)

However, the effects of the project for the patients seem to be of greatest importance:

* pain reduction - the subliminal technology in the mode of micro-pulses makes the procedures 100% painless, if compared with the standard photocoagulation;
* a decreased risk of swelling of the retina after the procedure by approx. 80%, depending on the experience of the physician, if compared with the standard photocoagulation;
* reduced dazzle by light during the procedure - the LED lamps equipped with a blue light filter reduce the photo-toxicity of the light reaching the retina;
* shorter therapeutic sessions by 66-86% thanks to the application of stimulations of up to 25 points in the retina during one procedure with the laser;
* a decisively lower percentage of side effects during the recovery of the sight recovery.

The project was implemented just before the outbreak of the COVID-19 global pandemic and the introduction of the limited operating mode of specialist clinics, which implies that the company will still have to wait some time to fully benefit from the implementation of new technologies.

**Development perspectives for the company**

The development perspectives of the company are significantly determined by the new contract it will manage to negotiate with the National Health Fund, because patients find the commercial services quite expensive, which largely limits the respective demand irrespective of the increasing needs for the diagnosis and treatment of eye diseases. By investing in modern technologies, the company significantly increases its chances and strengthens its negotiation position towards the NHF, while the proximity of the German market may contribute to complementing the demand of commercial customers.

**Conclusions and evaluation**

The project was implemented fully in line with the co-financing application. The company implemented its development plans. The decision-making processed is supported by the fact that the owner is very familiar with the development needs of the sector the company operates in. The company selected the right financial instrument, while the received EU funds contributed to a smooth and full implementation of the investment and development process.

The company now offers specialist counselling services by telephone, although it has implemented appropriate procedures to accept patients under safe conditions.

To summarize:

* The implemented project contributed to the implementation of an innovative diagnostic service (modern devices enable to perform ophthalmological examinations more precisely and in a more comfortable way for the patients) and to the implementation of brand-new innovative services in the area of ophthalmological procedures;
* The company selected the optimal measure of those offered under the ROP LS for the years 2014-2020, which made it possible to settle the purchase of three modern devices used in ophthalmology;
* The project was feasible thanks to the thorough preparation and the awareness of the development needs, as represented by the owner of the company;
* The completion of the project coincided with the introduction of administrative restrictions in the operation of medical facilities after the outbreak of the COVID-19 pandemic;
* The future market success of the company and the benefits of the implemented projects will be determined by the lifting of the restrictions and, at a later time, by the decision of the NHF about extending the scope of the refunded services offered by the company APFEL BAUM;
* In case it is not possible to fully use the capacities in terms of the number of ophthalmological diagnoses and procedures (under the contract with the NHF), the company may still develop its commercial services thanks to their high quality and broad range (the company rarely welcomes such customers, mainly from Germany).

#### Case study No 3.

|  |  |
| --- | --- |
| Project name | Increasing the export potential of Boxmet Medical through the participation in exhibitions |
| Beneficiary: | BOXMET MEDICAL Sp. z o. o. |
| Objective of the support measure | Internationalization |
| Internet website: | https://www.boxmetmedical.pl/ |
| Number of the co-financing application | RPDS.01.04.01-02-0065/17 |

**Beneficiary - basic information**

BOXMET MEDICAL is a medium-sized company with limited liability, registered on 31 July 2007. The company is a production daughter company of Boxmet Ltd., operating on the Polish market since 1992, being a supplier of first-aid kits and an importer and distributer of medical rescue equipment.

The main products of the company include:

* medical rescue articles (handbags for ambulances, handbags for nurses, transport stretchers, rucksacks for paramedics),
* articles for the industry (portable first-aid kits, first-aid points and cabinets, vehicle first-aid kits),
* articles for the fire service (rucksacks for paramedics, equipment bags, rescue sets),
* sport and leisure articles (oxygen masks, portable first-aid kits, medical rescue kits for the Water Volunteer Rescue Service).



*Isolation chamber Bio-Bag EBV 30/40, source: https://www.boxmetmedical.pl/.*

Furthermore, the company produces a line of fire service clothing and other types of clothing certified by the Scientific and Research Centre for Fire Protection - National Research Institute. It is also one of the leading producers and suppliers of medical kits, evacuation system containers for the army. The products fulfil the NATO requirements.

BOXMET MEDICAL is a licensed distributor of the American global brands: North American Rescue and Iron Duck. For its import activities, the company holds inventory stocks to fulfil the warehousing conditions in Europe and to provide its recipients with swift access to its products.

While operating on the domestic market, the company co-designed the standards for medical rescue kits for the Polish Fire Service in terms of the organization and equipment. The standards are followed by such countries like Ukraine and Romania. All the products of the company are CE certified and fulfil the NATO requirements, and do not require any additional certification for quality requirement on foreign markets. This certainly offers great opportunities to develop the export activities.

In parallel to the described project, the company is implementing another project co-financed from Measure 1.4 of the ROP LS for the years 2014-2020: ‘The long-term development strategy of Boxmet Medical’. Both projects complement each other to some extent. In 2012, the company implemented 2 projects aimed at internationalising the company’s activities through the participation in two fairs: the SALMED 2012 Fair and the SAWO 2012 Fair. Both projects were granted co-financing under the ROP LS for the years 2007-2013.

The company is based in Piskorzów (in the Dzierżoniowski Poviat).

**Description of the analysed project**

Irrespective of the gradual increase in the enterprise’s turnover, the value of export sales was equal to approx. 1% before the launch of the project in 2017 (having exceed 2.5% once in 2015). In 2016, the company diagnosed that its further dynamic development is determined by increasing export sales. It was planned that the export sales should reach a share of 2% in the years 2018-2019 and of approx. 5% in the following 2 years. In parallel to increasing the export sales, the project was aimed at expanding into new countries.

Increasing the volume of export sales was also aimed at strengthening the market position of the company on the domestic market.

The specific objectives of the project were defined, as follows:

* process-based and organizational changes through the launch of a dedicated Internet website in English,
* marketing changes through the launch of an Internet shop with customer service in English,
* promoting the offer among potential business partners during international fairs in Poland.

In the framework of the project, the company took part in two international exhibition events in Poland during 2017. They include:

* the International Fair of Fire Service and Rescue Service Appliances and Equipment KIELCE IFRE-EXPO in Kielce. The IFRE Fair during the days   
  8-10.06.2017 was a successor of the former EDURA Fair the company had participated in. The fair is visited by representatives of the national fire services and of social rescue organizations. They are the direct target group. Therefore, the company was able to offer its products directly to both the national services and their counterparts from other countries.
* the International Salon of the Defence Industry MSPO in Kielce. The event took place on 5-8.09.2017 and was aimed at presenting the most advanced technologies and solutions for the defence sector. The exhibitions covered: weaponry, uniforms, rescue measures, life-saving personal equipment for soldiers. The fair is an important international event with a broad outreach on the European markets.

The total project value exceeded PLN 144 thousand, including the grant of approx. PLN 99.5 thousand and the own contribution of PLN 44.5 thousand. The grant accounted for approx. 69% of the project value.

**Evaluation of the support instrument used by the company**

Both the project type and the subject matter of the economic activities of BOXMET MEDICAL were adjusted to the applied support instrument offered under Measure 1.4 of the ROP LS. The catalogue of eligible costs for this scheme made it possible to settle all the necessary project expenditures, including: fair fees, costs of the modernization of the Internet website, the production of promotional materials in English, or the launch of an Internet shop. The company now finances such expenditures partly from its own budget.

**Effects of gaining the funds**

Having gained external co-financing, the company implemented all the objectives of the project. Thanks to participating in international fairs in Poland, preparing information materials in English and reconstructing its Internet website (launching its English version and an Internet shop), the company recorded a significant increase in its export sales, and the general increase in the company’s turnover was accompanied by an increase in the percentage share of the export sales up to approx. 3.5%, with a steady increasing trend. Before the project was implemented, the company had exported its products mainly to the Czech Republic and sometimes to Germany, Latvia or France. It now has customers in such countries like: Ukraine, Romania, Slovakia, Hungary, Greece, Belgium or the Netherlands. The international expansion is facilitated by the Internet sale channel. If there had been no co-financing, the project tasks would have taken much time, and some of them could have been abandoned.

**Development perspectives for the company**

By strengthening its impact through the participation in the international specialist sectoral fairs that attract a large number of visitors, BOXMET MEDICAL signed a number of commercial companies with foreign business partners and boosted its export sales through the Internet platform. The image of a company that is active on the foreign markets also improved its standing on the domestic market. The company is constantly increasing its turnover since the project implementation.

A highly important elements of the foreign sales is the fact that the products of the company are CE certified and fulfil the standards required by such organizations like NATO.

**Conclusions and evaluation**

The project was implemented fully in line with the co-financing application. The applicant did not have any reservations as to the settlement process of payment requests by the Managing Authority. Having submitted the co-financing application and having received the co-financing (Measure 1.4, Scheme 1.4.B ‘Strengthening the international expansion of SMEs by implementing new business models and strengthening expansion into external markets’), the applicant implemented all of its business objectives.

To summarize:

* The implemented project increased the internationalisation of the company; The export sales increased from approx. 1% in 2016 up to approx. 3.5% today, being accompanied by a gradual increase in the turnover;
* The company selected the optimal intervention instrument of those offered under the ROP LS for the years 2014-2020, which enabled it to smoothly and effectively settle its costs related to the participation in international sectoral fairs, the modernization of the Internet website (the production of the English version and the launch of the Internet shop);
* The implementation of the project is an element of the development company adopted by the company, which consists in increasing its export sales and attempting to participate in the tenders announced abroad (the company attempted to take part in the tender announced by a Danish institution, but it offer turned out to be more expensive than the successful one);
* The company expanded into new countries;
* The recent investments in tangible and human resources result in the increased interest in the company’s products in Poland and abroad.

## Literature

**Programme, strategic and supplementary documents:**

* The Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020;
* The Detailed Description of the Priority Axes of the ROP LS, including annexes;
* The Development Strategy of the Lower Silesian Voivodeship 2020 and the Development Strategy of the Lower Silesian Voivodeship 2030;
* The Regional Innovation Strategy for the Lower Silesian Voivodeship   
  2011-2020, including the Annex entitled ‘The Strategic Framework for the Smart Specialisations of Lower Silesia’;
* The Guide on Research and Innovation Strategies for Smart Specialisation [RIS3 Guide], European Commission, Smart Specialisation Platform of the Joint Research Centre (JRC).

**Regulations on the project selection mode, in particular the rules and regulations of the calls for applications under the analysed measures of the ROP LS, the project selection criteria and data on the evaluation results on the applications.**

**Selected EU and national regulations, in particular:**

* Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013,
* Regulation (EU) No 1300/2013 of the European Parliament and of the Council of 17 December 2013,
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* Act of 11 July 2014 on the principles for the implementation of programmes in the framework of the Cohesion Policy, financed in the financial perspective 2014-2020, and relevant
* guidelines of the European Commission, the Ministry of Investment and Economic Development and the Managing Authority of the ROP LS in relation to the subject matter of the evaluation study,

**The Annual Report on the implementation of the ROP LS and the minutes of the meetings of the Programme Monitoring Committee and the progress report on the implementation of the Partnership Agreement in 2018,**

**Report, expert opinions, publications on the ROP LS and other operational programmes:**

* ‘The ex-ante evaluation of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020’, Wrocławska Agencja Rozwoju Regionalnego S.A., Ecorys Polska Sp. z o.o., November 2014,
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* The evaluation ‘The impact of the Development Services Database on the quality and accessibility of the development services for enterprises and their staff, including the impacts of the Subject Financing System’ anae sp. z o.o. Realizacja sp. z o.o., Warsaw, December 2017,
* ‘The evaluation of the implementation mechanisms of the ITIs in the financial perspective of the EU for the years 2014-2020’, EGO s.c., Wolański, June 2018,
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  2018, Consortium: the Foundation of Development Idea, IMAPP Sp. z o.o.,   
  Policy & Action Group Uniconsult Sp. z o. o., Evaluation and Analysis Centre for Public Policies of the Jagiellonian University,
* ‘The actualisation to the ex ante analysis of the potential applicability of financial instruments in the Lower Silesian Voivodeship during the period 2014-2020’, PAG Uniconsult, Imapp Consulting, March 2020,
* ‘The Evaluation of the Regional Innovation Strategy for the Lower Silesian Voivodeship 2011-2020’, ECORYS, 2019 (The Evaluation of the RIS LS),
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* ‘The Manual for classifying tasks in R&D projects of a socio-economic nature (for the definition in the Act on the principles for financing science’, National Centre for Research and Development, Warsaw 2018.

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## List of respondents participating in the qualitative interviews

| No. | Perspective | Group | Authority | Respondent |
| --- | --- | --- | --- | --- |
|  | system-based and implementation | Managing Authority of the ROP LS | Department of European Funds - Management Unit of the ROP | Manager of the Unit for the Management of the ERDF, Department of the Management of the ROP |
|  | system-based and implementation | Managing Authority of the ROP LS | Department of European Funds, Unit for the Implementation of the ROP | Chief Specialist of the Unit for the Management of the ERDF, Department of the Management of the ROP |
|  | system-based and implementation | Managing Authority of the ROP LS | Department of the Economy - Unit for Economic Development | Director of the Unit for Economic Development, Department of the Economy, Unit for Economic Development |
|  | system-based and implementation | Managing Authority of the ROP LS | Department of the Economy - Unit for Regional  Development | Deputy Director of the unit for Regional Development, Department of the Economy |
|  | system-based and implementation | Lower Silesian Intermediate Body | Lower Silesian Intermediate Body | Manager of the Contracting Unit, Head of the Evaluation of Applications |
|  | system-based and implementation | Lower Silesian Intermediate Body | Lower Silesian Intermediate Body | Representative of the Unit for the Implementation of the ROP LS, expert evaluating the applications |
|  | system-based and implementation | Lower Silesian Voivodeship Labour Office | Lower Silesian Voivodeship Labour Office | Manager of the Branch Office, Unit for the Evaluation of Competition Applications |
|  | system-based and implementation | Lower Silesian Voivodeship Labour Office | Lower Silesian Voivodeship Labour Office | Representative of the Unit for the Evaluation of Competition Applications |
|  | system-based and implementation | Integrated Territorial Investments | Integrated Territorial Investments of the Wrocław Functional Area  (ITIs WFA) | Representative of the Team for Programming and Implementation of the ITIs WFA |
|  | system-based and implementation | Integrated Territorial Investments | Integrated Territorial Investments of the Wałbrzych Agglomeration (ITIs WA) | Manager of the Unit of Contracting Priority Axes of the ROP No 1, 6, 8, 9 ITIs WA |
|  | system-based and implementation | Integrated Territorial Investments | Integrated Territorial Investments of the Agglemeration of Jelenia Góra  (ITIs JG) | Representative of the ITI JG Management Unit |
|  | experts | Experts - evaluators of the applications | External expert | External expert |
|  | experts | Experts - evaluators of the applications/staff of the institutions | Lower Silesian Voivodeship Labour Office | Employee of the LS VLO, expert and evaluator of the applications |
|  | experts | Experts - evaluators of the applications/staff of the institutions | Intermediate Body of the Wałbrzych Agglomeration (IBWA) | Employee of the Unit of Contracting Priority Axes of the ROP LS, Intermediate Body of the Wałbrzych Agglomeration |
|  | experts | Experts - evaluators of the applications | External expert | External expert |
|  | experts | Experts - evaluators of the applications/staff of the institutions | Lower Silesian Intermediate Body | Employee of the LSIB, expert and evaluator of the applications |
|  | experts | Monitoring Committee of the ROP LS (socio-economic partners) | Polish Confederation Lewiatan | Representative of the Monitoring Committee of the ROP LS on behalf of the Polish Confederation Lewiatan |
|  | experts | Monitoring Committee of the ROP LS (socio-economic partners) | Sudetes Chamber of Industry and Commerce | Representative of the Monitoring Committee of the ROP LS on behalf of the Sudetes Chamber of Industry and Commerce |
|  | experts | Monitoring Committee of the ROP LS (socio-economic partners) | Polish Confederation Lewiatan | Representative of the Monitoring Committee of the ROP LS on behalf of the Polish Confederation Lewiatann |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.1 of the ROP LS 2014-2020 | Wrocław University of Science and Technology | Employee of the Project Monitoring Team |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.2 of the ROP LS 2014-2020 | Zakład Produkcji Automatyki Sieciowej S.A. | Manager of the R&D Department |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.4 of the ROP LS 2014-2020 | PIASMAR /…/ | Co-owner |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.5 of the ROP LS 2014-2020 | Przedsiębiorstwo Wdrażania Postępu Organizacyjno-Technicznego PROMONT Sp. z o.o. | Project Office Manager |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.3 of the ROP LS 2014-2020 | Municipality of Ścinawa | Manager of the Office of Non-Budget Funds and Civic Initiatives |
|  | beneficiaries | Representatives of the beneficiaries - Measure 1.3 of the ROP LS 2014-2020 | Snow Mountain Development Foundation | President of the Management Board |
|  | beneficiaries | Representatives of the beneficiaries - Measure 3.1 of the ROP LS 2014-2020 | TBFV Sp. z o.o. | President of the Management Board |
|  | beneficiaries | Representatives of the beneficiaries - Measure 3.2 of the ROP LS 2014-2020 | Polyclinic Panaceum /.../ | Representative of the enterprise responsible for the preparation and settlement of the application |
|  | beneficiaries | Representatives of the beneficiaries - Measure 8.5 | Laboratorium Projektów Innowacyjnych Sp. z o.o. | President of the Management Board |
|  | beneficiaries | Representatives of the beneficiaries - Measure 8.6 of the ROP LS 2014-2020 | PROFESTAL | Owner |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 1.3 of the ROP LS 2014-2020 | Sudetes Chamber of Industry and Commerce | Vice-President of the Sudetes Chamber of Industry and Commerce |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 1.3 of the ROP LS 2014-2020 | Dolnośląski Fundusz Gospodarczy Sp. z o.o. | Representative |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 1.3 of the ROP LS 2014-2020 | University of Economics | Finance specialist of the Office of the Project Management Centre |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 1.2 of the ROP LS 2014-2020 | Prometeia Capital Sp. z o. o. | Project coordinator |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 8.5 of the ROP LS 2014-2020 | Dolnośląska Agencja Współpracy Gospodarczej Sp. z o.o. | Manager of the Unit of European Projects |
|  | beneficiaries | Representatives of the project operators or beneficiaries - Measure 8.6 of the ROP LS 2014-2020 | Agencja Rozwoju Regionalnego "ARLEG" S.A. | Representative |

## Report on the quantitative studies

The methodology of the study assumes that a broad range of study technique should be involved - apart from the qualitative techniques, the evaluation also used the quantitative studies. The module of the quantitative studies consisted of three study components:

1. The CAWI/CATI-based study with the beneficiaries of the ROP LS that had completed their projects;
2. The CAWI/CATI-based study with the applicants of the ROP LS - the ineffective applicants and the beneficiaries of the support during the implementation of their projects.
3. CAWI/CATI with the representatives of the supported enterprises and the project participants (Measures 8.5 and 8.6) of the ROP LS

The third component including 3-sub-components was the first one to be performed in March 2020:

* the quantitative study with the employees threatened by redundancy and those made redundant for reasons not attributable to the work establishment, supported under Measure 8.5 of the ROP LS 2014-2020;
* the quantitative study with micro, small and medium-sized enterprises covered by the development services under Measure 8.6 of the ROP LS 2014-2020;
* the quantitative study with the staff of the enterprises and persons carrying out independent economic activity, supported under Measure 8.6 of the ROP LS 2014-2020.

The study envisaged that the respondents were sent an e-mail with a link to the CAWI questionnaire and with information about the objective and scope of the interview and the letter of the reference of the Contracting Party. The e-mail also included contact e-mail and telephone of the person who may be requested to provide information and to explain any doubts about how the questionnaire should be completed. The number of completed questionnaires was monitoring on an ongoing basis, there were also reminders sent to completed the questionnaire so that the full sample is performed during the study. A satisfactory rate was ultimately achieved, reaching 133%, 270% and 131% accordingly.

After the preparation of the draft questionnaire had been completed, it was planned that the remaining CAWI-based components would take place in the middle of March. Unfortunately, this coincided with the outbreak of the COVID-19 pandemic in Poland, with the subsequent recommendation to self-isolate, switching into remote work, and multiple restrictions or even the freezing of many enterprises, which strongly affected in a very low response rate to the questionnaires. Irrespective of the reminders being sent, the samples were performed in approx. 20% at the beginning of April, while before the pandemic (at the end of February/the first ten days of March) a different component of the study was performed in 100% (Table 2 presents the performance of the samples in April). The reluctance to participate in the studies during the pandemic is fully comprehensible - the entrepreneurs have other priorities and focus on the ongoing operation of their enterprise. As it was planned to summary the study and to compile the respective results in April, according to the deadline for preparing a draft final report, while the collected evidence did not allow to formulate reliable conclusions of the study, the Contracting Authority was requested to prolong the contract by referring to the regulations on individual measures, including the prevention, mitigation and combating of the pandemic.

Mitigating measures were implemented to ensure that the objectives of the study would be implemented - it was decided that the study would be conducted in 2 channels - with the use of the CAWI-based questionnaires and the CATI-based telephone interviews, with the database of the beneficiaries of the ROP LS 2014-2020 being complemented by adding the final beneficiaries of the support under the Programme *‘Innovation voucher’* and *‘Grants for advisory services’*.

The aforementioned actions and the slow process of lifting the restrictions on the functioning of enterprises drove the participation in the study. The sample was ultimately performed in 71% for components 1 and 2 and in 173% for component 3, while the percentage for the entire study reached **113%**, as shown in the table below.

**Table 33.** Performance of the samples in the study components and sub-components.

|  |  |  |  |
| --- | --- | --- | --- |
| Respondents | Sample assumed | Sample performed | % of performance |
| Beneficiaries of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 (completed projects) | 355 | 354 | 100% |
| Beneficiaries of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 (projects in progress) | 245 | 91 | 37% |
| Ineffective applicants of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 | 400 | 261 | 65% |
| Total Component 1 and 2 | **1,000** | **706** | **71%** |
| Natural persons supported under the Programme (employees threatened with redundancy or made redundant) - Measure 8.5 of the ROP LS 2014-2020 | 184 | 244 | 133% |
| Micro, small and medium-sized enterprises covered by the development services under the Programme - Measure 1.6 of the ROP LS 2014-2020 | 210 | 566 | 270% |
| Natural persons supported under the Programme (employees and persons carrying out independent economic activity) - Measure 8.6 of the ROP LS 2014-2020 | 306 | 402 | 131% |
| Total Component 3 | **700** | **1,212** | **173%** |
| Total Component 1, 2 and 3 | **1,700** | **1,918** | **113%** |

*Source: Own study for the progress report on the quantitative studies.*

**Table 34**. Performance of the samples in the study components and sub-components.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Respondents | Sample assumed | Sample performed as of | | | | | | | Performance level of the sample | | | | | | |
| 1.04 | 2.04 | 7.04 | 24.04 | 29.04 | 13.05 | **22.05** | 1.04 | 2.04 | 7.04 | 24.04 | 29.04 | 13.05 | **22.05** |
| 1.2 COMPLETED | **23** | 5 | 10 | 11 | 20 | 22 | 28 | **34** | 22% | 43% | 48% | 87% | 96% | 122% | **148%** |
| 1.3 COMPLETED | **4** | 2 | 4 | 7 | 8 | 8 | 8 | **17** | 50% | 100% | 175% | 200% | 200% | 200% | **425%** |
| 1.4 COMPLETED | **126** | 13 | 23 | 28 | 69 | 77 | 96 | **96** | 10% | 18% | 22% | 55% | 61% | 76% | **76%** |
| 1.5 COMPLETED | **166** | 18 | 40 | 47 | 135 | 147 | 166 | **166** | 11% | 24% | 28% | 81% | 89% | 100% | **100%** |
| 3.1 COMPLETED | **13** | 0 | 0 | 0 | 8 | 9 | 15 | **15** | 0% | 0% | 0% | 62% | 69% | 115% | **115%** |
| 3.2 COMPLETED | **23** | 0 | 0 | 0 | 12 | 18 | 26 | **26** | 0% | 0% | 0% | 52% | 78% | 113% | **113%** |
| Beneficiaries of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 (completed projects) | **355** | 38 | 77 | 93 | 252 | 281 | 339 | **354** | 11% | 22% | 26% | 71% | 79% | 95% | **100%** |
| 1.2 IN PROGRESS | **50** | 8 | 8 | 10 | **19** | 19 | 23 | **23** | 16% | 16% | 20% | 38% | 38% | 46% | **46%** |
| 1.3 IN PROGRESS | **12** | 0 | 6 | 8 | 11 | 11 | 12 | **12** | 0% | 50% | 67% | 92% | 92% | 100% | **100%** |
| 1.4 IN PROGRESS | **39** | 0 | 1 | 1 | 3 | 4 | 8 | **8** | 0% | 3% | 3% | 8% | 10% | 21% | **21%** |
| 1.5 IN PROGRESS | **118** | 5 | 15 | 17 | 38 | 38 | 47 | **46** | 4% | 13% | 14% | 32% | 32% | 40% | **39%** |
| 3.1 IN PROGRESS | **18** | 0 | 0 | 0 | 0 | 0 | - | **-** | 0% | 0% | 0% | 0% | 0% | 0% | **0%** |
| 3.2 IN PROGRESS | **8** | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0% | 0% | 0% | 0% | 0% | 25% | **25%** |
| Beneficiaries of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 (projects in progress) | **245** | 13 | 30 | 36 | 71 | 72 | 92 | **91** | 5% | 12% | 15% | 29% | 29% | 38% | **37%** |
| 1.2 REJECTED | **81** | 7 | 22 | 29 | 51 | 55 | 65 | **65** | 9% | 27% | 36% | 63% | 68% | 80% | **80%** |
| 1.3 REJECTED | **14** | 4 | 5 | 5 | 9 | 10 | 10 | **10** | 29% | 36% | 36% | 64% | 71% | 71% | **71%** |
| 1.4 REJECTED | **66** | 2 | 3 | 5 | 24 | 27 | 30 | **30** | 3% | 5% | 8% | 36% | 41% | 45% | **45%** |
| 1.5 REJECTED | **200** | 9 | 19 | 23 | 98 | 109 | 135 | **134** | 5% | 10% | 12% | 49% | 55% | 68% | **67%** |
| 3.1 REJECTED | **23** | 0 | 0 | 0 | 9 | 9 | 13 | **13** | 0% | 0% | 0% | 39% | 39% | 57% | **57%** |
| 3.2 REJECTED | **16** | 0 | 0 | 0 | 6 | 8 | 9 | **9** | 0% | 0% | 0% | 38% | 50% | 56% | **56%** |
| Ineffective applicants of the ROP LS 1.2, 1.3, 1.4, 1.5, 3.1, 3.2 | **400** | 22 | 49 | 62 | 197 | 218 | 262 | **261** | 6% | 12% | 16% | 49% | 55% | 66% | **65%** |
| **Component 1 and 2** | **1,000** | **73** | **156** | **191** | **520** | **571** | **693** | **706** | **7%** | **16%** | **19%** | **52%** | **57%** | **69%** | **71%** |

*Source: Own study for the progress report on the quantitative studies.*

**Control of the CAWI/CATI-based quantitative studies**

Before the launch of the CAWI/CATI-based interviews, the study tools and the sampling assumptions were analysed in depth, for the evaluation of any difficulties in their performance. Attention was paid to, inter alia, the statements that the respondents may find difficult, and the style of the questions the interviewers may trouble with. Slight changes were made to optimize the performance process - they made the questionnaires more friendly and comprehensible for the respondents. The electronic tools were prepared in several stages, including:

* the three-step control of the draft questionnaires for the correctness of the moving rules and filters,
* the control of the correctness of the test population,
* the control of the CAWI questionnaires in visual terms (if all the elements are visible and legible on the screen),
* the control of the CAWI questionnaires for the comprehensibility and simplicity for the respondents,
* the training of those supervising the performance of the quantitative studies (CAWI and CATI) and of the interviewers (CATI); for each of the component of the study, the objectives of the study, samples, the interviewing process, the manners for reaching to the respondents and any possible difficulties and the manners for overcoming them were discussed thoroughly.

The CAWI-based studies were performed in the CADAS system. The essence of the technique entails that the respondents completes the questionnaire independently, with the use of a computer, telephone, tablet. The reliability of the study was guaranteed above all through several actions that were aimed at reaching to correct persons, assisting the respondents in completing the questionnaires, and minimizing the number of mistakes they make. To do that, the following control activities were applied in the CAWI components:

* the interface of the questionnaire had a friendly and intuitive graphic layout;
* the respondents were sent e-mail to explain the objectives of the study and to provide them with the information authenticating the study - the letter of reference and the information about the processing of personal data;
* a helpline for respondents was launched;
* the consultants being responsible for substantive and technical matters answered any requests and doubts of the respondents by e-mail or telephone on an ongoing basis;
* the questionnaire links were individualized for each record of the databases, which implied than one questionnaire could be completed under one link;
* the content of the e-mail and the questionnaire clearly specified the entity the questionnaire was addressed to;
* the respondents could pause and restart the questionnaire (after opening the browser again) where they stopped completing it;
* the advancement of the study and the time of interviews were monitoring during the study on an ongoing basis.

In the CATI-based studies, those supervising the study in real time listed to how the interviewers interviewed the respondents and viewed which answers they marked in the questionnaire. The performance of the study was controlled on an ongoing basis. The control was performed by observing the correct performance of direct questionnaires by the interviewers’ stand and by listening to the recordings from the completed interviews. A standard control procedure covered the interviews that were shorter or longer than the average one. During the control, particular attention was paid to:

* the structure of the interview: following the procedure for organizing the interview, the effectiveness and the explanation of any doubts reported by the respondents;
* the recruitment process: the consistency of the answers given to the recruitment questions with the answers marked by the interviewer in the draft questionnaire;
* the performance of the interview: reading questions, marking answers, the quality of notes to open questions, not suggesting any answers, adjusting the pace of the interview to the pace at which the respondent answered the question, the ability to keep the interview going to close the interview in an effective manner, respecting the respondent’s will, kindness and professionalism.

At each stage, the advancement of the study was also monitored on the system-based level. The study was documented with the reports generated from the CADAS system, containing information about basic parameters of the study, including: the number of connections, the number of ineffective (terminated) connections, the number of refusals (the reasons for the refusals), the number of incorrect numbers in the database, the number of interviewers performing the study, the advancement in time, the times of interviews, the average time of an interview, etc.

**Statistics on the contacts in the framework of the CAWIs/CATIs**

**Table 35.** Statistics on the contacts (CAWI-based study) - Measures 8.5 and 8.6 of the ROP LS 2014-2020.

|  |  |  |  |
| --- | --- | --- | --- |
| Statistics | Measure 8.5 | Measure 8.6 (enterprises) | Measure 8.6 (natural persons) |
| Number of records | 814 | 2,151 | 4,643 |
| Number of conducted interviews (effective) | 244 | 566 | 402 |
| Number of reminders | 11 | 11 | 21 |
| Number of interrupted interviews | 28 | 78 | 160 |
| Number of ineffective interviews | 1 | - | 1 |
| Number of incorrect records (undelivered messages) | - | 169 | 837 |

*Source: Own study for the progress report on the quantitative studies.*

**Table 36.** Statistics on the performance of the CATIs with the beneficiaries and applicants of the ROP LS 2014-2020 (Measures 1.2, 1.3, 1.4, 1.5, 3.1, 3.2).

|  |  |  |  |
| --- | --- | --- | --- |
| Final status | Number of records in the database | Number of contacts | Average number of contacts per status |
| Total | 1,478 | 8,097 | 5.48 |
| Effective | 692 | 2,354 | 3.4 |
| Interview arranged | 108 | 1,009 | 9.34 |
| Refusal | 208 | 894 | 4.30 |
| Busy | 31 | 339 | 10.94 |
| Does not answer | 228 | 2,321 | 10.18 |
| Incorrect/no number | 130 | 335 | 2.58 |
| Ineffective | 1 | 7 | 7.00 |
| Voice mail | 18 | 225 | 12.50 |
| Answering machine | 49 | 492 | 10.04 |
| Connection failed | 12 | 115 | 9.58 |
| Fax | 1 | 6 | 6.00 |

*Source: Own study for the progress report on the quantitative studies.*

1. However, the Intermediate Body for the Wałbrzych Agglomeration engaged external experts to perform a technical evaluation of all the projects submitted by the entrepreneurs. [↑](#footnote-ref-2)
2. However, the Intermediate Body for the Wałbrzych Agglomeration engaged external experts to perform a technical evaluation of all the projects submitted by the entrepreneurs. [↑](#footnote-ref-3)
3. Comp. the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020, version valid from 19 November 2019,

   http://rpo.dolnyslask.pl/regionalny-program-operacyjny-wojewodztwa-dolnoslaskiego-2014-2020/. [↑](#footnote-ref-4)
4. Op. cit., pp. 70-71. [↑](#footnote-ref-5)
5. http://www.umwd.dolnyslask.pl/rozwoj/aktualnosci-rozwoj-regionalny/; That encompasses both the Development Strategy of the Lower Silesian Voivodeship 2020 (which is a basis for programming the ROP LS 2014-2020) and the (new) Development Strategy of the Lower Silesian Voivodeship 2030 in the version adopted in October 2018. [↑](#footnote-ref-6)
6. The Regional Innovation Strategy for the Lower Silesian Voivodeship 2011-2020 and the Action Plan for Lower Silesia, http://www.umwd. dolnyslask.pl/gospodarka/innowacje/regionalna-strategia-innowacji-wd-2011-2020-i-plan-wykonawczy-dla-dolnego-slaska/. [↑](#footnote-ref-7)
7. For the purposes of the study, the term ‘Measure (e.g. ‘Measure 1.2 of the ROP LS’) means the measures described in the Detailed Description of the Priority Axes of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020’ (DDPA ROP LS). The ‘Measures’ mean intervention instruments according to the nomenclature defined in the DDPA. In addition, any references to the DDPA concern version No 54 of the document of April 2020:

   http://rpo.dolnyslask.pl/szczegolowy-opis-osi-priorytetowych-regionalnego-programu-operacyjnego-wojewodztwa-dolnoslaskiego-2014-2020-2/. [↑](#footnote-ref-8)
8. This Measure also covers to a certain extent the support measures for projects (the development and investment projects of SMEs, strengthening their competitiveness) with the use of financial instruments, implemented in the formula of a fund of funds using a mechanism based on the selection of financial intermediaries distributing financial instruments to final recipients (SMEs). This element of the support architecture is taken into account in the study on a supplementary basis. [↑](#footnote-ref-9)
9. Both of the measures under PA 3, covered by the evaluation (3.1 and 3.2) envisage the use of financial instruments. They are implemented in the fund of funds formula (as in Measure 1.5) – this support mechanism is considered in the evaluation on a supplementary basis. [↑](#footnote-ref-10)
10. PA 8 also envisages the use of financial instruments, whereby the financial instruments were implemented under a different measure than the instruments analysed herein (i.e. Measure 8.3 ‘Self-employment, entrepreneurship and job creation’). Following the model of PA 1 (Measure 1.5 Scheme C) and PA 3 (Measure 3.1 Scheme D and Measure 3.2 Scheme D), the implementation mechanism was based on the fund of funds formula, and on the selection of financial intermediaries distributing support to the level of final recipients. Although this instrument covers different types of projects than those analysed in the evaluation for the activities of this Priority Axis, it is nevertheless worth noting, all the more that it overlaps with the interventions supported in one of the measures analysed therein in certain areas (in theory) (e.g. Measure 8.5 for undertaking economic activity in the area of outplacement actions). [↑](#footnote-ref-11)
11. Detailed information about the study concept and approach and the draft study tools (the scenarios of qualitative interviews, CAWI/CATI quantitative survey questionnaires and the guidelines for applying other techniques) are included in the Methodological Report agreed with the Contracting Authority on 14 February 2020. [↑](#footnote-ref-12)
12. An additional study technique exceeding the minimum methodology. [↑](#footnote-ref-13)
13. As above. Due to the spread of the COVID-19 virus, it was agreed with the Contracting Authority during the study that the initially planned FGIs would be replaced with individual telephone interviews. A similar situation occurred for some individual in-depth interviews (IDIs). [↑](#footnote-ref-14)
14. Having completed prior consultations, the Contractor requested changes to the application forms of study techniques and to postpone the deadline, i.e. to set a new date for preparing the preliminary version of the Final Report on 15 April 2020 (the date of 25 May 2020 was set). [↑](#footnote-ref-15)
15. This does not apply to the CAWI/CATI quantitative studies with beneficiaries and project participants under Measures 8.5 and 8.6 and to a part of the individual interviews (these study components were carried out in the 2. half of February and early March 2020, i.e. before the pandemic). [↑](#footnote-ref-16)
16. The Development Strategy of the Lower Silesian Voivodeship 2020,

    http://www.umwd.dolnyslask.pl/fileadmin/user\_upload/Rozwoj\_regionalny/SRWD/SRWD\_2020-final.pdf. [↑](#footnote-ref-17)
17. The Development Strategy of the Lower Silesian Voivodeship 2030, Wrocław 2018,

    http://www.umwd.dolnyslask.pl/fileadmin/user\_upload/Rozwoj\_regionalny/SRWD/STRATEGIE%20-%20ZESTAWIENIE/1.DOLNY%20SLASK/SRWD\_2030\_calosc\_druk.pdf. [↑](#footnote-ref-18)
18. The overriding objective of the DS LS 2020 was defined as ‘A modern economy and a high quality of life in an attractive environment, op. cit., page 24. [↑](#footnote-ref-19)
19. DS LS 2020, op. cit. page 41 and following (Macro-spheres), page 24 (Specific objectives). [↑](#footnote-ref-20)
20. The overriding objective of the DS LS 2030 envisages: ‘A harmonious development of the region and a high quality of life of the Lower Silesian community’, op. cit., page 49. [↑](#footnote-ref-21)
21. On the basis of the DS LS 2030, op. cit., pages 50-53. [↑](#footnote-ref-22)
22. ‘The Regional Innovation Strategy for the Lower Silesian Voivodeship 2011-2020’ (RIS LS), Wrocław, 2011.

    http://www.umwd.dolnyslask.pl/gospodarka/innowacje/regionalna-strategia-innowacji-wd-2011-2020-i-plan-wykonawczy-dla-dolnego-slaska/. [↑](#footnote-ref-23)
23. The Executive Summary of the RIS LS, pages 6-11. [↑](#footnote-ref-24)
24. ‘The Evaluation of the Regional Innovation Strategy for the Lower Silesian Voivodeship 2011-2020’, ECORYS, 2019 (The Evaluation of the RIS LS),

    http://www.umwd.dolnyslask.pl/fileadmin/user\_upload/Gospodarka/Aktualnosci/Dzial\_Innowacji/Raport\_Ewaluacja\_RSI\_WD\_2011-2020.pdf [↑](#footnote-ref-25)
25. In the evaluation, the intervention in the form of financial instruments (applicable to all the aforementioned Priority Axes), is analysed only on a supplementary basis. In this respect, we refer to the findings of the recent ‘Actualisation to the ex-ante analysis of the potential applicability of financial instruments in the Lower Silesian Voivodeship during the period 2014-2020’, PAG Uniconsult, Imapp Consulting, March 2020 (the ex-ante analysis covered the financial instruments in the areas of: competitiveness, energy and labour market). [↑](#footnote-ref-26)
26. On a greater mass scale, in terms of the number of research and innovation projects, this is triggered by the ‘innovation voucher’ programmes, while cooperation is simultaneously established between the business sector and the scientific and research one). Concerning the innovation and general development measures (increasing competitiveness, e.g. through the development/implementation of new business models or new management methods for enterprises), advisory grant programmes play a similar role. Both of these instruments fall within the support architecture of Measures 1.2 and 1.3 of the ROP LS. [↑](#footnote-ref-27)
27. BGK also manages the support in the form of financial instruments from the funds for Measures 3.1, 3.2, 3.3 and 8.3 of the ROP LS 2014-2020. [↑](#footnote-ref-28)
28. The draft ‘Annual Report on the implementation of the Regional Operational Programme of the Lower Silesian Voivodeship 2014-2020 for the year 2019’, Wrocław, April 2020, page 8. [↑](#footnote-ref-29)
29. As pointed out by M. Gajewski, J. Szczucki et al. [in:] ‘The diagnosis of innovation centres in Poland’, PAG Uniconsult, Taylor Economics, Warsaw 2020 (pages 9-10), the concept of smart specialisation emerged as a response to the deficiencies of the mechanisms for distributing support from the EU funds, in particular the dispersion of limited public resources of the EU among several technologically advances research fields and areas and, in consequence, to the very poor progress achieved. The smart specialisations are now a form of the EU industrial policy that focuses public intervention on selected local, regional, national priorities. Contrary to the traditional industrial policy, these priorities are not identical to the branch (sector), but they imply a selection of fields, subsystems within the sectors or bundles of cross-sectoral activities corresponding to specific market niches, clusters, technologies or areas of application for a technology in relation to the existing social, health, environmental challenges or those related to the safety of citizens (to learn more about the definition of smart specialisations, comp. the ‘Frequently Asked Questions on RSS’, https://s3platform.jrc.ec.europa.eu/faqs-on-ris3,, and M. Piątkowski at al., *Towards an innovative Poland: the process of entrepreneurial discovery and the analysis of business needs in Poland*, World Bank Group, Warsaw 2015, page 10). The concept of smart specialisations is therefore based on two assumptions: (1) the reference point for designing the development priorities does not include the branches, but the fields, areas between branches or the cross-cutting application areas for technologies (in multiple branches) existing within their structures, as well as the areas of activity within the value chains where the location (region, country) brings real advantages. This differing understanding of the subject matter of intervention (‘not branches’) highlights the complexity of modern economic structures, which implies that many areas of activity do not match the traditional industrial structure; moreover, the understanding of the smart specialisations also indicates that they not have to cover areas of high technologies; (2) for the identification of specialisations, it is assumed that the priorities should be selected in the process of entrepreneurial discovery, i.e. the regular identification, selection and verification with the use of different analytical approaches and, above all, different stakeholders - entrepreneurs, scientists, socio-economic organizations and public administration. It is worth noting that the smart specialisations have now become not only a recommended alternative to the traditional sectoral industrial policy, but also an element of the European legislation that underpins the access to the Structural Funds. The concept also attracted greater interest. It was recognised by non-EU countries, comp. ‘Innovation driven growth in regions. The role of smart specialisation’, OECD 2013. [↑](#footnote-ref-30)
30. Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006, O.J. of the EU L347/320, 20.12.2013. [↑](#footnote-ref-31)
31. Article 2 point 3 of the General Regulation. [↑](#footnote-ref-32)
32. Annex XI, Part I: Thematic ex ante conditionalities, General Regulation, page 438. [↑](#footnote-ref-33)
33. http://www.umwd.dolnyslask.pl/gospodarka/dolnoslaskie-inteligentne-specjalizacje/ramy-strategiczne-na-rzecz-inteligentnych-specjalizacji-dolnego-slaska/ [↑](#footnote-ref-34)
34. According to the guidelines drawn up by the European Commission and its Agenda - the Smart Specialisation Platform of the Joint Research Centre (JRC) - ‘The Guide on Research and Innovation Strategies for Smart Specialisation’ [RIS3 Guide], https://s3platform.jrc.ec.europa.eu/s3-guide. [↑](#footnote-ref-35)
35. ‘The Evaluation of the Regional Innovation Strategy /…/’, op. cit. 74. At the same time, it was pointed out that some areas need to be complemented in the strategic documents, including: the concept Industry 4.0, the circular economy and the reindustrialisation of the economy. These are the matters to be considered in the upcoming review of the catalogue of smart specialisations, although the current structure of the LSSSs does not seem to be a specific barrier to targeting the support at these thematic areas (i.e. within the framework of the existing LSSSs), which results - as a rule - from the cross-sector structure of Lower Silesian Smart Specialisations. [↑](#footnote-ref-36)
36. ‘The Evaluation of the Regional Innovation Strategy /…/’, op. cit. 112. [↑](#footnote-ref-37)
37. The available data certainly make it possible to analyse the targeting of the projects by disregarding the status of the co-financing contract. Such an analysis would rather reflect the strength of the focus on the LSSSs, irrespective of the factual impacts of the support from the ROP LS from the point of view of the catalogue of regional specialisations. The following part of this Reports compares the targeting of the projects at the LSSSs for both categories (statuses) of the contracts, i.e. by considering the terminated contracts as well. [↑](#footnote-ref-38)
38. The projects co-financed under Measure 1.2 reveal a complete alignment with the LSSSs - this is natural because gaining support under this instrument was conditioned by the consistency of the project with the Lower Silesian Smart Specialisation. [↑](#footnote-ref-39)
39. Certain values of the individual elements of the figure may not add up to 100% - the differences are small and result from rounding - the figures becomes more transparent. Similar trends may result (although rarely) from other figures. [↑](#footnote-ref-40)
40. To a large extent, this results from the non-existence of the support instruments which would require the projects to be implemented by a consortium. [↑](#footnote-ref-41)
41. As for defining the types of research work, it was assumed for the purposes of the classification that industrial research is to gain new knowledge. Such research work implies the creation of different components of complex systems (in essence, this stage involves the formulation of hypotheses, the development of methods for their verification, the formulation of concepts and the verification of the feasibility of the idea). On the other hand, the stage of development work is to use the newly gained knowledge for creating new or improving the existing products, services or processes. Cited after: https://innpoland.pl/blogi/beatatylman/117781,badania-przemyslowe-a-prace-rozwojowe-praktyczny-przewodnik-o-tym-jak-je-rozroznic, and ‘The Manual for classifying tasks in R&D projects of a socio-economic nature (for the definition in the Act on the principles for financing science’, National Centre for Research and Development, Warsaw 2018,

    https://www.ncbr.gov.pl/fileadmin/user\_upload/poradnik\_kwalifikowania\_zadan.pdf. [↑](#footnote-ref-42)
42. This is particularly important given that such projects are often of a ‘mass’ scale, i.e. their support is transferred to a large number of final recipients and the individual values of the support provided are small (e.g. the value of the voucher or the advisory grant granted). [↑](#footnote-ref-43)
43. **The contract concluded with the Manager of the Fund of Funds in the Lower Silesian Voivodeship, i.e. Bank Gospodarstwa Krajowego, being responsible for the further transfer of funds to the level of financial intermediaries.** [↑](#footnote-ref-44)
44. A positive example of the proper management of the study process, including the planning of the study, the use of an appropriate support instrument and the appropriate adjustment of the project costs, is illustrated by one of the case studies prepared for this evaluation - comp. section7.1, page 178 - Case study No 1 (Summary of the case study). [↑](#footnote-ref-45)
45. As mentioned in section 2.3 ‘General description of the interventions of the Programme’, the advancement of the projects under PA 1 is still moderate. This means that as projects are implemented and finalized, these effects will change. We assume that the advancement level will be increasing. [↑](#footnote-ref-46)
46. A triple scale of innovation was used for the purposes of the study. Individual degrees were defined, as follows:

    ground-breaking innovation (i.e. innovations turning the current assumptions and solutions around according to the principle ‘Let’s do something nobody has done so far’),

    evolutionary innovation (i.e. innovations aimed at improving the current solutions according to the principle ‘Let’s improve what we have done so far’),

    imitative innovation (i.e. innovations aimed at implementing the solutions applied by other market entities according to the principle ‘Let’s do something as good as others do’). [↑](#footnote-ref-47)
47. Similar comments may be formulated for the other two consequences. Moreover, the shares of the opinions about the significance of the aforementioned consequences are similar for the ineffective applicants, both in Measure 1.2 and 1.5. [↑](#footnote-ref-48)
48. Bearing in mind that Measure 1.5 sets out a separate support scheme (Measure 1.5, Scheme C), which provides support in the form of financial instruments (repayable instruments), however not focused on R&D&I, but generally on the investments improving the competitiveness of SMEs, we continue our comments on the experiences from the implementation of the scheme. [↑](#footnote-ref-49)
49. The experiences in the implementation of the instruments were described in ‘The evaluation study on public aid granted on the basis of the Regulation of the Minister of Science and Higher Education on the conditions and mode for granting public aid and *de minimis* aid through the National Research and Development Centre, the Foundation of Development Idea, IMAPP, PAG Uniconsult, Evaluation and Analysis Centre for Public Policies of the Jagiellonian University, Final report on the mid-term evaluation, Warsaw 2018, page 121. [↑](#footnote-ref-50)
50. https://www.rpo.pomorskie.eu/pozyczka-na-innowacje [↑](#footnote-ref-51)
51. The data presented herein (including the remaining parts on the financial instruments) are based in part on the results of the recent study, commissioned by the Marshall Office of the Lower Silesian Voivodeship: ‘The actualisation of the ex-ante analysis /…/’, op. cit. [↑](#footnote-ref-52)
52. It seems that such requirement was requested by the European Commission during the negotiations on the ROP LS 2014-2020. [↑](#footnote-ref-53)
53. The objective of the project is to strengthen the export activity of the Pomeranian SMEs. It consists of several components which together constitute an advisory and financial ‘path’ for potential exporters from the Pomeranian Voivodship (including for the entities that already have export experiences). The components cover both advisory services, events with the use of specialist information, as well as grants for export projects of SMEs. The direct support for enterprises is accompanied by the activities

    aimed at strengthening their exports and at promoting the economic potential of the entire region on selected foreign markets. It is worth emphasizing the well-designed and complex nature of the project that brings together any matters in relation to the promotions of the exports of the Pomeranian SMEs. This is a partnership project implemented by several highly-regarded Business Environment Institutions based in the Pomeranian Voivodeship, comp.

    http://www.brokereksportowy.pl/pl/. [↑](#footnote-ref-54)
54. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). [↑](#footnote-ref-55)
55. Above all, Polfund and the Lower Silesian Economic Fund. [↑](#footnote-ref-56)
56. Scheme 1.5.B ‘Support for investments in implementing the R&D results of in enterprises’ (e.g. launching mass production in enterprises), resulting from Measure 1.2. [↑](#footnote-ref-57)
57. In fact, this is unfortunately very difficult and problems have also arisen at national level, e.g. OP SE (Measures 1.4-4.1) and under the OP SD, Sub-measure 1.1.1, and instruments supporting the implementation processes - Sub-measures 3.2.1 and 3.2.2 of the OP SD. [↑](#footnote-ref-58)
58. http://www.dip.dolnyslask.pl/skorzystaj/zobacz-ogloszenia-i-wyniki-naborow-wnioskow/745-1-5-1-a-wsparcie-innowacyjnosci-produktowej-i-procesowej-msp-konkurs-horyzontalny-msp-rzemieslnicy.html [↑](#footnote-ref-59)
59. However, this would require to collect the financial statements from the enterprises or to order the Voivodeship Statistical Office to prepare an aggregate report. [↑](#footnote-ref-60)
60. It should however be noted that the sample performed for the measures of PA 3 was relatively small. Therefore, most of the results of the study are presented in aggregate for both of the analysed measures. By interpreting the results of the study, attention should be paid to the limited population of the sample [↑](#footnote-ref-61)
61. The occurrence of such effects was successfully verified through the quantitative interviews with the representatives of the beneficiaries of Measure 3.1 (a photovoltaic power plant), and Measure 3.2 (a non-public health-care facility - specialist medical services). One of the respondents also emphasized that the main effect of its project was absolutely the favourable impact on the environment (the respondent views it as an obvious direct effect), while the entire project also has indirect effects, while being an exceptional local case making the residents of the municipality aware that their closest environment must be cared for, and making them aware of the challenges resulting from climate change, and suggesting possible solutions in this respect. [↑](#footnote-ref-62)
62. The qualitative studies involving a representative of one of the beneficiaries of Measure 3.1 show that the beneficiary has already prepared a plan to extend the ‘original’ project that was (initially) implemented with the co-financing from the ROP LS. The plan is to increase the capacity of the photovoltaic power plant that is already in operation. [↑](#footnote-ref-63)
63. Only two representatives of the ineffective applicants reported that the project was being implemented, with the use of both own and external (debt) funding. [↑](#footnote-ref-64)
64. ‘The actualisation of the ex-ante analysis /…/’, op. cit. [↑](#footnote-ref-65)
65. All the more that Measure 8.3 offered the so-called transitional support that had not been available in the first edition of the project under Measure 8.5 and was added in the second edition. [↑](#footnote-ref-66)
66. This opinion was shared by the representatives of the LS VLO. [↑](#footnote-ref-67)
67. The intervention in the form of instruments on the labour market is provided by referring to the results of the report entitled ‘The actualisation to the ex-ante analysis /.../’, op. cit., pages 86 and following. [↑](#footnote-ref-68)
68. Comp. https://uslugirozwojowe.parp.gov.pl/. [↑](#footnote-ref-69)
69. The evaluation ‘The impact of the Development Services Database on the quality and accessibility of the development services for enterprises and their staff, including the impacts of the Subject Financing System’, Warsaw, December 2017, prepared by the consortium of Danae Sp. z o.o. and Realizacja sp. z o.o. on the order of the Polish Agency for Enterprise Development. [↑](#footnote-ref-70)
70. For example, this matter was raised at the meetings of the Work Group of the MC of the ROP LS on entrepreneurs and innovations, held on 23.11.2018 and 20.02.2019. Nevertheless, it is worth pointing out - as results from the qualitative studies - that such problems were also characteristic for the national programmes. [↑](#footnote-ref-71)
71. This was proved by Measure 8.6 of the ROP LS, to give an example. [↑](#footnote-ref-72)
72. It is natural that the key role is played by the Monitoring Committee and the Work Group operating within its structure. [↑](#footnote-ref-73)
73. The example of the ITIs of the Wałbrzych Agglomeration was described and commented in detail as a good practice in the comprehensive evaluation process of the ITI mechanism, comp. ‘The evaluation of the implementation mechanisms of the ITIs in the financial perspective of the EU for the years 2014-2020’, EGO s.c., Wolański, June 2018, pages 43-45. [↑](#footnote-ref-74)
74. The entrepreneurs taking part in the quantitative studies, who submitted applications for the ITIs of the Wałbrzych Agglomeration, evaluate the system very favourably, whereby their evaluations do not significantly differ from the evaluations formulated by the entrepreneurs participating in the horizontal competitions. They are similar in general. [↑](#footnote-ref-75)
75. This does not apply to network or infrastructural projects for stimulating entrepreneurship. It is beyond any doubt that such projects must be examined for their consistency with the ITI strategy. [↑](#footnote-ref-76)
76. The ongoing evaluation of the project selection criteria and system under the ROP LS 2014-2020, Association for the Development of the Labour Market ‘S-to-S’, October 2017. [↑](#footnote-ref-77)
77. The results presented below were formulated on the basis of the answers of 445 beneficiaries and 261 ineffective applicants. [↑](#footnote-ref-78)
78. http://www.dip.dolnyslask.pl/skorzystaj/zobacz-ogloszenia-i-wyniki-naborow-wnioskow/1206-1-2-ca-uslugi-dla-przedsiebiorstw-profesjonalne-uslugi-proinnowacyjne-swiadczone-przez-instytucje-otoczenia-biznesu-konkurs-horyzontalny-340-19.html, date of access: 23.05.2020. [↑](#footnote-ref-79)
79. Following the document entitled ‘The Strategic Framework for the Smart Specialisations of Lower Silesia’, Wrocław 2015. [↑](#footnote-ref-80)
80. It is worth pointing out that there is no generally accepted definition of such institutions; in the broad sense, these are any institutions providing services to entrepreneurs, but we indirectly adopt a narrower definition, emphasising the provision of specialist services with the use of public funding. [↑](#footnote-ref-81)
81. https://innowacyjni.mazovia.pl/dzialania/instytucje-otoczenia-biznesu/akredytacja-iob-2.html [↑](#footnote-ref-82)
82. In particular, it seems that the BEIs delivering technological advisory services, targeted at the specialist support for the industrial processing sector in the region, are in deficit. [↑](#footnote-ref-83)
83. **Although this did not obviously refer to all the institutions. For example, the Intermediate Body of the Wałbrzych Agglomeration appointed external experts in the organized competitions.** [↑](#footnote-ref-84)