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# JRC SCIENTIFIC INFORMATION SYSTEMS AND DATABASES REPORT

## Dataset of projects co-funded by the ERDF during the multi-annual financial framework 2014-2020

*Technical specifications  
Version 1 (as of June 2019)*

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## Contents

Foreword.....	1
Acknowledgements .....	2
Abstract.....	3
1 Introduction.....	4
2 Requirements by EU regulation and current state of play.....	5
3 Data collection and processing.....	7
3.1 Data collection .....	7
3.2 Data cleaning and standardization.....	7
3.3 Enrichment of the dataset: Translation, keywords, Horizon-2020, AMADEUS.....	10
4 Final ERDF dataset: Important hints for its usage.....	11
4.1 ESIF R&I related dataset used for the R&I viewer of the Smart specialisation platform.....	11
4.2 General data coverage and possible limitations.....	13
5 Information by country.....	16
Austria.....	16
Belgium.....	17
Bulgaria.....	18
Cyprus.....	19
Czech Republic.....	20
Germany.....	21
Denmark.....	23
Estonia.....	24
Greece.....	25
Spain.....	26
Finland.....	27
France.....	28
Croatia.....	29
Hungary.....	30
Ireland.....	31
Italy.....	32
Lithuania.....	33
Luxembourg.....	34
Latvia.....	35
Malta.....	36
The Netherlands.....	37
Poland.....	38
Portugal.....	40
Romania.....	41
Sweden.....	42
Slovenia.....	43
Slovakia.....	44
United Kingdom.....	45
INTERREG: KEEP database.....	46

## **Foreword**

The design of the dataset of projects co-funded by the ERDF during the multi-annual financial framework 2014-2020 has been implemented in the context of the Stairway to Excellence project (S2E). Since 2014, the European Parliament has mandated the European Commission (the JRC territorial development unit in collaboration with DG REGIO) to implement the Stairway to Excellence project (S2E) aiming at developing and exploiting the synergies between European Structural and Investment Funds (ESIF), Horizon 2020 (H2020) and other EU funding programmes. The design of the dataset has been implemented thanks to the S2E project, and has benefitted from the external expertise of the Austrian Institute of Economic Research (WIFO).

## **Acknowledgements**

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## **Abstract**

Over the 2014–2020 financial period, 451 €bn of ESIF are invested in Cohesion policies, of which more than 40 €bn are dedicated directly to the thematic objective related to research and innovation. Among ESIF funds, ERDF is the main source of funding of innovation through the implementation of Smart specialisation strategies with a management shared between the Commission and the Regional or national authorities.

The monitoring and the evaluation of ESIF are largely implemented at regional or national level. At European Commission level, the monitoring of Cohesion policy is carried out mainly at operational programme (OP) level, meaning that only very limited information is available at project and beneficiaries' level, also with limited accuracy in terms of geographical information (an OP can be national or in some cases multiregional). Reporting at project and beneficiary level is carried out through national or regional databases gathering information on beneficiaries (type of organisation, localisation etc.) and also details on funded projects (e.g. titles and abstracts and possibly other additional info depending the territory).

Conversely to Horizon 2020 and due to the shared management, an integrated database of ESIF projects does not exist. While information on ESIF beneficiaries and projects is recorded, this is held by individual regional or national managing authorities. Bringing together this information on projects and beneficiaries in a single structured database would greatly benefit policy monitoring and evaluation, and the identification and creation of synergies with Horizon 2020 funding. This database would also feed ex-ante impact assessment analysis for the future multi-annual financial period (2021–2027), for the future cohesion policies and Horizon-Europe programme.

To fill this gap, an initiative was launched under the Stairway to Excellence project, to design a structured and comprehensive database of projects funded by ERDF for the programming period 2014–2020 (as of June 2019), building on the systematic collection of all information available at national and regional levels. The whole content of the database is translated into English (including project titles and abstracts) using the European Commission Machine translation tool. The database offers also additional information such as keywords associated with each project in order to be able to bridge easily information contained in the ERDF projects database with, among others, Eye@RIS3 and the Horizon 2020 database. This report explains the origins of the information, the processing of collected information and the proxies used to obtain the most complete and comprehensive picture possible of ERDF funding support since 2014.

# 1 Introduction

This document explains the main features of a novel dataset of projects co-funded by the European Regional Development Fund (ERDF) in the 27 EU member states (and the United Kingdom) in the multi-annual financial framework (MFF) 2014-2020. In particular, the collection, processing and cleaning of the data is presented in detail in this report. The information and issues documented herein should be considered when analysing this data.

The dataset includes information on all projects co-funded by the ERDF in the MFF 2014-2020 as reported up to a certain cut-off date (in general June 2019). It compiles data from lists of operations published online or provided bilaterally (after a data request) by managing authorities or S3 contact persons and incorporates INTERREG projects reported in the KEEP database. Information on the projects' location is used to assign the operations to NUTS-2 and NUTS-3 regions. Project names and descriptions are translated into English, and the characteristics of each project (and its beneficiary) in the 27 EU member states (and UK) enter the resulting dataset in a standardised form.

There is a special focus on research and innovation (R&I) projects co-funded by EU regional policy, with the aim of contributing to build a comprehensive dataset of R&I-project financed by the EU. For this purpose, ERDF beneficiaries were linked with Horizon-2020 beneficiaries and, by using text mining techniques and different taxonomies such as the one from the Horizon 2020 funded digital infrastructure RISIS-Knowmak<sup>1</sup>, projects were assigned to thematically related key enabling technologies (KET) and societal grand challenges (SGC).

Section 2 of this report gives an overview on the regulations that govern the content and the format of lists of operations to be published by managing authorities of operational programmes. These lists form the basis of the dataset. Moreover, an overview on the size of the resulting dataset is provided, along with an indication of the completeness of required information in lists of operations by EU member state.

Section 3 indicates the steps that were necessary to clean and standardise the source data, and states possible limitations of the dataset that should be kept in mind. Furthermore, Section 3 lists the steps undertaken to enrich the dataset. Next to recording the linkage of ERDF beneficiaries with Horizon 2020 beneficiaries and the assignation of keywords, a further enrichment exercise was to link beneficiaries with the AMADEUS business database to gather information on their respective industry and to fill information gaps regarding the location of beneficiaries.

Section 4 describes the coverage of individual variables in the final dataset and lists possible limitations and issues to keep in mind for data analysis. Finally, Section 5 provides a detailed description of the source and content provided, cleaning steps and possible limitations by EU member state.

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<sup>1</sup> <https://www.knowmak.eu>

## 2 Requirements by EU regulation and current state of play

Article 115(2) of Regulation (EU) No 1303/2013 (common provisions regulation) states that EU member states and managing authorities shall provide a list of operations co-funded by the ERDF as well as the other European Structural and Investment funds. This list should be structured by type of fund and operational programme and should be prepared in spreadsheet data format (e.g. CSV or XML), which could be “sorted, searched, extracted, compared and easily published on the internet”. Moreover, according to the same Article 115(2), “the list of operations shall be accessible through the single website or the single website portal providing a list and summary of all operational programmes in that Member State”. Finally, it should be updated every six months.

According to Annex XII of the Common Provisions Regulation (EU) No 1303/2013, the following information should be included in the lists of operations provided:

- Beneficiary name
- Operation name
- Operation summary
- Operation start date
- Operation end date (expected)
- Total eligible expenditure allocated to the operation
- Union co-financing rate, as per priority axis
- Operation postcode, or other appropriate location indicator
- Country
- Name of category of intervention for the operation
- Date of last update of the list of operations.

Table 1 gives an overview on the extent and quality of lists of operations incorporated in the database for each member state: i) the number of projects (entries in lists of operations); ii) total eligible expenditure multiplied by the EU co-financing rate (which is the maximum ERDF funding amount committed to an operation, the final funding amount could be less) or – if available – the actual ERDF co-funding amount committed to an operation; as well as iii) an indication of the completeness (coverage) of the required information provided or derived from the information in lists of operations (e.g. geo-localization).

The data quality is indicated according to the following scheme:

\*\*\*: All information requested by the common provisions regulation (CPR) is provided by national or regional authorities. In most cases, the NUTS-3 region of the project can be derived from location information reported in the lists of operations (postcodes or city names). In addition, the actual ERDF co-funding amount is reported in the lists (which is not required by regulation).

\*\* : All information requested by the CPR is provided by national or regional authorities. In most cases, the NUTS-3 region of the operation can be derived from location information reported in lists of operations (postcodes or city names).

\*: All information requested by the CPR is provided by national or regional authorities. However, there is one (or more) severe issues that may hamper the comprehensive analysis of operations, such as the coverage of location information or category of intervention (Col). Refer to Section 5 for a detailed description of data issues by EU member state.

0: The information requested by the CPR is not reported (adequately) in lists of operations.

Table 1: Overview of data provided in lists of operations

Country	No. of unique projects (entries) <sup>2</sup>	Share of R&I (unique) projects	Maximum (1) or committed co-funding amount (2) in EUR	Share of R&I (maximum) co-funding amounts	Data quality
AT	913	20.0%	384,568,953.0 (1)	38.6%	**
BE	907	43.9%	928,984,127.0 (1)	27.1%	**
BG	3228	17.8%	5,677,541,805.0 (1)	7.6%	*
CY	646	13.3%	320,411,591.0 (1)	26.1%	**
CZ	13,131	27.3%	6,239,819,535.0 (2)	28.3%	***
DE	25,474	35.2%	6,463,104,288.0 (1) 734,957,721.0 (2)	42.5%	**
DK	118	80.5%	139,135,669.0 (2)	83.1%	**
EE	2731 (2732 entries)	53.8%	1,473,502,330.0 (2)	43.6%	***
EL	11,258 (14,065 entries)	8.1%	7,081,394,936.0 (2)	7.6%	**
ES	37,359	52.5%	9,563,806,663.0(1)	36.1%	**
FI	3109	92.0%	273,286,295.0 (2)	93.2%	**
FR	9041	33.7%	178,194,170.0 (1) 3,142,175,204.0 (2)	26.2%	***
HR	4894	3.3%	5,117,390,719.0 (1)	6.4%	**
HU	5163 (only R&I)	91.4%	1,849,007,267.0 (1)	93.3%	**
IE	349	56.2%	48,589,796.0 (2)	55.6%	**/0
IT	48,659 (52,244 entries)	22.4%	14,721,336,481.0 (1)	28.9%	**
LT	8916	68.2%	2,484,244,413.0 (2)	28.0%	***
LU	21	61.9%	17,808,894.0 (1)	53.2%	***
LV	561	38.5%	939,308,997.0 (2)	51.8%	***
MT	100	3.0%	307,897,095.0 (1)	18.7%	**
NL	670	87.6%	323,354,493.0 (2)	74.6%	***
PL	26,858	38.6%	30,743,373,823.0 (2)	28.9%	***
PT	18,431 (23,529 entries)	31.4%	9,120,654,939.0 (2)	25.7%	**
RO	4265	5.3%	13,095,575,210.0 (2)	4.4%	***
SE	941	53.8%	6,120,032.0 (1) 823,688,122.0 (2)	65.4%	*
SI	2224	51.2%	1,052,961,929.0 (1)	45.7%	**
SK	4009	6.2%	2,939,827,288.0 (2)	10.0%	***
UK	1347	50.4%	3,686,146,744.0 (2)	45.2%	*
Subtotal	235,323 (246,814 entries)	35.5%	46,619,914,915 (1) 83,258,254,657.0 (2)	26.4%	
INTERREG (KEEP) (lead in EU-28)	3232 (17,475 entries)	31.0%	3,938,985,625.0 (2)	28.1%	***
<b>Total</b>	<b>238,555 (264,289 entries)</b>	<b>35.5%</b>	<b>133,817,155,152.0</b>	<b>26.4%</b>	

<sup>2</sup> If the project number (prj\_nr) is reported, it is possible to check for cooperative operations with multiple beneficiaries. For Greece, Italy and Portugal, the number of entries does not correspond to the number of unique projects according to their project number but there are more entries (rows) for one single project. Possible duplicates are included. Refer to Section 5 for details regarding data of each member state.

## 3 Data collection and processing

### 3.1 Data collection

The main data sources are lists of operations provided online by managing authorities of operational programmes (OP), national or regional authorities. These lists were searched for and collected, considering operational programmes as units of observation to check for the completeness of operations reported as required by EU regulation.

If the variables requested by EU regulation were not part of the lists provided online or if the lists have not been updated at least in the second half of 2018, managing authorities and/or those responsible for S3 in the region or member state were contacted. The JRC has provided an introduction letter to support the request for data to managing authorities and to legitimate the information collection. In the very large majority of cases, the requested information was provided in due time.

The data collection process was closed in June 2019 (for France information on previously missing OPs was added in November 2019), updates of lists of operations after this data have not been considered. Concerning data requests to managing authorities, the last information delivery was received end of August 2019.

### 3.2 Data cleaning and standardization

Various steps were taken to clean and standardize the data (see Figure 1). First, the names of variables in lists of operations were not the same, thus, the variables need to be assigned to standardized columns (based on the requirements in the EU regulation). Second, the content of all columns was brought into the same format (e.g. EU co-financing rates, multiple entries in one cell, etc.), and respective codes were assigned to categories of intervention (according to Commission Implementing Regulation (EU) No 215/2014), operational programmes (common code for identification, CCI) and region names (*Nomenclature des unités territoriales statistiques*, NUTS, 2016 version).

#### *Categories of intervention & definition of R&I relatedness*

The category of intervention, more specifically, the intervention field (according to Commission Implementing Regulation (EU) No 215/2014) is a crucial variable, as it is the basis for classifying operations as related to R&I or not.<sup>3</sup> In the following, there will be a special focus on R&I-related projects regarding enrichments of the dataset. Several lists of operations report more than one category of intervention (intervention field) per project. In this case, all categories of intervention are included in the dataset (separated by "|"), and a project is defined as R&I-related if at least one category of intervention is classified as such.<sup>4</sup>

A project is classified as R&I-related if it corresponds to (at least) one of the following categories of intervention (as reported in lists of operations):

- R&I processes in large enterprises (002)
- Investment in infrastructure, capacities and equipment in SMEs (056) and large enterprises (057) directly linked to R&I activities
- Public R&I infrastructure (058)
- Private R&I infrastructure (including science parks) (059)
- R&I activities in public (060) and private (061) research centres (and centres of competence) including networking
- Technology transfer and university-enterprise cooperation primarily benefiting SMEs (062)
- Cluster support and business networks primarily benefiting SMEs (063)
- R&I processes in SMEs (064)

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<sup>3</sup> A project is R&I-related if it corresponds to (at least) one of the following categories of intervention (as reported in lists of operations): 002, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, 067. Note that Hungary provided Excel documents with detailed project information for R&I-related projects only.

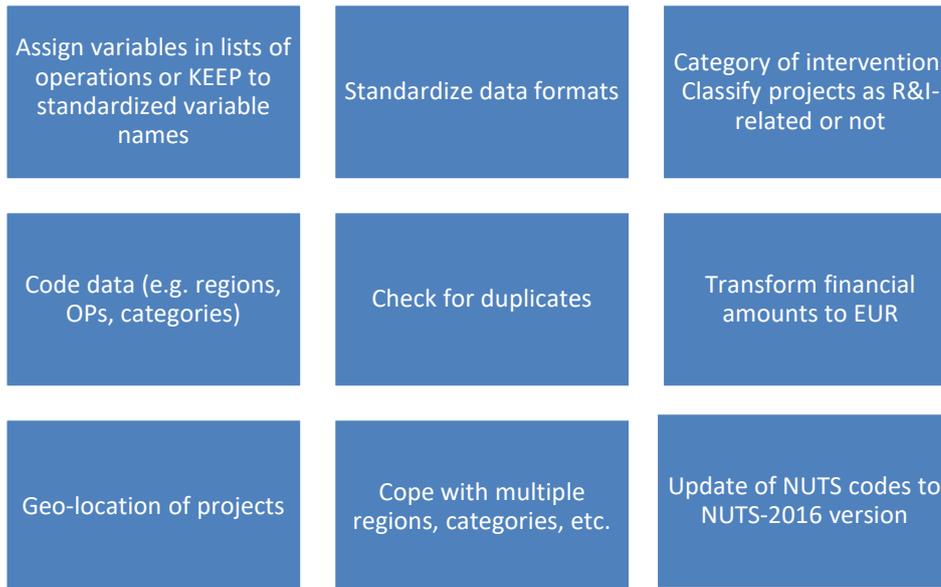
<sup>4</sup> According to several contact persons at managing authorities, e.g. in Malta, there is no logic in the order in which the categories of intervention are reported, so the project amounts cannot be split properly to the separate categories reported.

- R&I infrastructure, processes, technology transfer and cooperation in enterprises focusing on the low carbon economy and on resilience to climate change (065)
- SME business development, support to entrepreneurship and incubation (067)

#### *Financial amounts*

Financial amounts in the final database are in EUR. In case financial amounts are reported in another currency in the list of operations, the respective exchange rate on 31 December 2013 and, for Bulgaria the one stated in the list of operations, respectively, is applied.

*Figure 1: Tasks related to the cleaning and standardization of data.*



#### *Geo-location of operations and beneficiaries*

Locating projects in NUTS regions requires several steps, which vary depending on the information reported in lists of operations. According to Annex XII of the Common Provisions Regulation (EU) No 1303/2013, managing authorities are required to report the “operation postcode; or other appropriate location indicator”. Indeed, instead of postcodes also city names, counties or districts, or NUTS-2 (or NUTS-3) region names (or codes) are given as location information. If NUTS-2 and NUTS-3 information is stated explicitly, it directly enters the dataset by mapping region names with NUTS (2016) codes. If not (which is mostly the case), it is derived from matching project postcodes with corresponding NUTS-3 regions by using correspondence tables provided by Eurostat, and thereafter filling gaps by manually assigning it to a NUTS region. If a city name instead of a postcode is reported, we use <https://www.geonames.org/> as main source to identify the corresponding NUTS-3 region. However, city names within a country are sometimes not unique and cities of the same name are possibly located in different NUTS-3 regions. If the latter is the case, it is not possible to unequivocally identify the NUTS-3 region of the project. If there are multiple cities of the same name only within one NUTS-3 (NUTS-2) region, the NUTS-3 (NUTS-2) information can be inserted. In case there is additional location information in the lists of operations, such as the NUTS-2 or NUTS-1 region which could be directly reported or attributed to regional OPs, unique cities within a specific NUTS-2 or NUTS-1 region are considered to assign corresponding NUTS-3 region.<sup>5</sup> Still, there are cases (e.g. in the UK or Germany) in which only the NUTS-1 region can be identified, given the location information provided in lists of operations.

<sup>5</sup> Note that the NUTS-1 or NUTS-2 regional information derived from the regional operational programme is overwritten in case the postcode of a project does refer to a NUTS-3 region that is part of another NUTS-2 region.

In case the NUTS-3 information is available or has been derived via the postcode or city name as explained above, it is transferred to the NUTS-2 and NUTS-1 level. If not, NUTS-2 information reported in lists of operations is considered (if available) or – which is often the case – the NUTS-2 region is derived from the respective – regional – operational programme. There are two exceptions here: France and Poland. In one French list of operations covering most OPs, both the NUTS-2 region (by design of regional OPs), the postcode of the operation as well as the postcode of the beneficiary is reported. As the coverage for the latter is higher (the postcode of the operation is only filled for 25% of operations while the one of the beneficiaries for almost every operation), the postcode of the beneficiary is used to assign a NUTS-3 region. This implies a potential contradiction between the location of the operation (NUTS-2 region of the respective OP) and the beneficiary's location (NUTS-3 region). To avoid a loss of information, the NUTS-2 information is not overwritten by the NUTS-3 region, and in the final dataset, the NUTS-3 region does not correspond to the NUTS-2 region in 6.5% of French projects. In the case of Poland, NUTS-2 information is not overwritten by (contradictory) NUTS-3 information as well. The reason for this is that not all names of counties (*powiats*) reported in the list of operations can be unequivocally matched with a unique NUTS-3 code, and this could entail inconsistency of NUTS-2 information (which is reported separately and directly in the Polish list of operations). If the NUTS-2 region is given, the NUTS-1 region is derived from it.

In several member states, lists of operations register more than one city name or postcode, or more than one region for a single project. Therefore, such projects are reported in one single row with multiple NUTS-code entries in the corresponding cell (separated by "|"). In modified versions of the dataset, these operations are reported in more than one row each, with the respective NUTS-2 (and NUTS-1 or NUTS-3, respectively) region in separate rows and the financial amounts divided by the number of NUTS-2 (and NUTS-1 or NUTS-3, respectively) regions involved. The modified versions of the dataset can be used without further need of modifying the locational information to analyze the dataset at the NUTS-1, NUTS-2 or NUTS-3 regional level.

Given information in lists of operations, no NUTS-2 (NUTS-3) region could be assigned to 0.9% (9.7%) of projects. Therefore, NUTS information provided in AMADEUS is used to fill up missing location information of operations, but only if it fits the upper NUTS level that is available in the ERDF dataset<sup>6</sup> or the dataset contains no location information apart from the member state. Of course, this can only be done in cases when the operation beneficiary could be identified in the AMADEUS database by Bureau van Dijk. Finally, using the list of changes between different NUTS versions provided by Eurostat, NUTS codes are recoded to the NUTS-2016 version.<sup>7</sup>

The dataset includes all partners involved in INTERREG projects as reported in the KEEP database. The ERDF co-funding amount (as well as the total project value) are divided by the number of partners (beneficiaries) involved, including those not located within one of the EU-28 member states.

#### *The case of Greece and potential multiple reporting of projects*

The original list of operations provided for Greece contained multiple entries (in separate rows) of one single operation, with the full operation amount reported for each of these. Therefore, the project amount per beneficiary region is calculated by dividing the total amount by the number of regions involved in a project.

Due to this observation, a comprehensive check for duplicates was initiated for all operational programmes. In the dataset, projects are flagged as "probable duplicates" if the project name and total eligible expenditure reported are the same. In a next step, those flagged operations have been assessed regarding their probability of being a true duplicate, by checking corresponding project numbers, beneficiary names, start and end dates as well as project descriptions. Entries for which the information provided is the same are flagged as

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<sup>6</sup> Location information based on the lists of operations are not overwritten with AMADEUS data because one limitation of the AMADEUS database is that it often registers only the address of the headquarters and not that of individual branches of the company.

<sup>7</sup> Note that several regions were recoded although there was a boundary shift (F11D4 -> F11D8, F11D6 -> F11D9, FR91 -> FRA1, IE011 -> IE041, IE024 -> IE052, IE023 -> IE051, IE022 -> IE062, UKN01 -> UKN06, UKN02 -> UKN05).

“duplicate\_sure”. Nevertheless, this is just an indication because managing authorities may report operations that way due to administrative or other reasons.

All cleaning steps and the source of the data of the lists of operations of each EU member state are described in detail in Section 5.

### **3.3 Enrichment of the dataset: Translation, keywords, Horizon-2020, AMADEUS**

#### *Translation of project names and descriptions*

Project names and descriptions are translated into English and enter the dataset both in national language and in English. The JRC’s internal translation tool was used to translate project titles and descriptions from national languages to English. In the case of Bulgaria, project data on all ERDF operations was provided directly in English.

#### *Dataset of R&I-related projects co-funded by EU programmes*

This dataset should serve as a basis for a comprehensive compilation of projects funded by the EU in the sphere of research and innovation (R&I). That is why it includes links to the dataset of (beneficiaries of) the Horizon 2020 programme. First, the ERDF beneficiaries are linked with Horizon 2020 beneficiaries (by beneficiary names) to learn whether some firms or institutions applied for and profited from both policy instruments. Second, in order to bridge the thematic focus of Horizon 2020 with ERDF operations, key enabling technologies (KET) and societal grand challenges (SGC) that stem from the reporting logic of Horizon 2020 are assigned as keywords to ERDF operations. Thus, it is possible to search for R&I-related operations in a specific thematic sphere funded by both the ERDF and Horizon-2020.

#### *Taxonomies used to assign KET and SGC as keywords to ERDF projects*

Key enabling technologies (KET) together with information & communication technologies (ICT) and space technologies are technologies with a large potential to enhance growth in EU member states due to their applications.<sup>8</sup> Horizon 2020 is funding these technologies which are also present in specialisation areas of more than 60% of smart specialisation strategies designed by European regions. The Horizon 2020 societal grand challenges (SGC) constitute a transversal policy dimension completing the technological one. In order to create a thematic link between Horizon 2020 projects and R&I projects co-funded by the ERDF, KET and SGC are assigned to ERDF operations as keywords.

This is done by applying text mining techniques to (translated) project descriptions based on different taxonomies. First, one taxonomy provided by JRC is used that is derived from keywords of Horizon-2020 projects related to different KET or SGC. Second, this taxonomy is modified in a way that KET and SGC are assigned to project descriptions based on less specific terms (e.g. also manufacturing is considered as one term related to “advanced manufacturing technologies”). Third, the knowmak taxonomy (<https://www.knowmak.eu/>) serves as basis for the assignation of KETs and SGCs to ERDF operations. There can be one or more than one KET or SGC (separated by “|”) or none assigned to one single operation.

#### *Link with AMADEUS business database*

Finally, in order to gather additional beneficiary-level information, such as the industry in which the beneficiary operates, which will enhance the analysis of micro-level data, the beneficiary (name) is matched with the AMADEUS business database by Bureau van Dijk. In addition, AMADEUS data is used to fill in missing location information (see Section 3.2).

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<sup>8</sup> [https://ec.europa.eu/growth/industry/policy/key-enabling-technologies/description\\_en](https://ec.europa.eu/growth/industry/policy/key-enabling-technologies/description_en).

## 4 Final ERDF dataset: Important hints for its usage

### 4.1 ESIF R&I related dataset used for the R&I viewer of the Smart specialisation platform

The final dataset includes projects run under OPs co-funded by the ERDF (possibly together with ESF and CF). INTERREG projects reported in national or regional lists of operations have been deleted in order to avoid double reporting with the KEEP database which is fully included. From KEEP, not only the leading partner(s) of INTERREG projects is (are) included in the dataset but also further INTERREG project partners (in the EU-28). Financial amounts are divided by the number of (all) partners involved.

The data have been provided to JRC in a basic dataset and modified versions:

1. The *basic dataset* lists multiple NUTS-1, NUTS-2 and/or NUTS-3 regions in the corresponding cells if reported, such as project location in the list of operations.
2. *NUTS-3*: Dataset with repeated entries (rows) per operation if multiple NUTS-3 (NUTS-2) regions are reported. Financial amounts (total eligible expenditure and ERDF commitment if reported) are divided by the number of NUTS-3 regions involved. Due to potential inconsistencies in NUTS-3 information, the Polish data enter the NUTS-3 dataset in the same way as the basic dataset.

The columns (variables) in the final dataset are listed in Table 2.

Table 2: Variables included in the dataset (columns)

Variable	Description
id	Project ID
op	Operational programme (code)
prj_nr	Project number as reported in list of operations
type_f	Type of co-financing fund (ERDF or ERDF_CF if OP is co-funded by both funds and the specific co-financing fund is not explicitly reported)
country	EU member state in which the project is carried out
nuts1	NUTS-1 region(s) in which the project is carried out (or filled up with AMADEUS information)
nuts2	NUTS-2 region(s) in which the project is carried out (or filled up with AMADEUS information)
nuts3	NUTS-3 region(s) in which the project is carried out (or filled up with AMADEUS information; France: location of beneficiary)
nuts2<>3	Filled if nuts3 is not part of nuts2 (France, Poland, INTERREG)
benef	Name of beneficiary
Code_Col	Code of the category of intervention
R_I	Dummy indicating whether a project is R&I-related or not (1 = R&I-related, 0 = not R&I-related); classification based on Code_Col
prj_postcode	Postcode of the project
prj_city	City (cities) in which the project is carried out
prj_name	Project title (original)
prj_descr	Project description (original)
prj_name_EN	Project title (translated to English)
prj_descr_EN	Project description (translated to English)
prj_start	Project start date
prj_end	Project end date
tot_elig_exp	Total eligible expenditure
EU_cofin_rate	EU co-financing rate (multiple entries in Italy of which the highest enters the dataset).
com_eu	Actual ERDF co-funding amount granted to a project/beneficiary.
data_stat	Declaration date of the list of operations (source file).

bvdid	Bureau van Dijk ID. Filled if beneficiary could be matched with the AMADEUS database.
benef_nuts1_amadeus	AMADEUS data: NUTS-1 region of beneficiary
benef_nuts2_amadeus	AMADEUS data: NUTS-2 region of beneficiary
benef_nuts3_amadeus	AMADEUS data: NUTS-3 region of beneficiary
benef_nace	AMADEUS data: NACE industry (main category) of beneficiary
h2020	Dummy variable: 1 = ERDF beneficiary was identified as Horizon 2020 beneficiary using name matching; 0 = not matched
h2020_proj	ID of corresponding Horizon 2020 project
jrc_KET_taxonomy	KET(s) assigned to project based on JRC taxonomy
jrc_SGC_taxonomy	SGC(s) assigned to project based on JRC taxonomy
jrcAdjusted_KET_taxonomy	KET(s) assigned to project based on adjusted JRC taxonomy
jrcAdjusted_SGC_taxonomy	SGC(s) assigned to project based on adjusted JRC taxonomy
knowmak_KET_taxonomy	KET(s) assigned to project based on knowmak taxonomy
knowmak_SGC_taxonomy	SGC(s) assigned to project based on knowmak taxonomy
duplicates_sure	Flag if assessment resulted in high probability of true duplicate entry.
duplicates_prob	Flag for probable duplicate entry (filled with ID for possible duplicates) if total eligible expenditure and prj_name of entries are the same.
nuts1_multiple	Lists NUTS-1 regions reported per project if more than one, including repeated count of the same NUTS-1 region (e.g. if two NUTS-2 regions correspond to the same NUTS-1 region)
nuts2_multiple	Lists NUTS-2 regions reported per project if more than one, including repeated count of the same NUTS-2 region (see above)
nuts3_multiple	Lists NUTS-3 regions reported per project if more than one, including repeated count of the same NUTS-3 region (e.g. if there are two postcodes or cities corresponding to the same NUTS-3 region)
nuts1_changed	Dummy: TRUE = nuts1 has been filled up with AMADEUS data (benef_nuts1_amadeus)
nuts2_changed	Dummy: TRUE = nuts2 has been filled up with AMADEUS data (benef_nuts2_amadeus)
nuts3_changed	Dummy: TRUE = nuts3 has been filled up with AMADEUS data (benef_nuts3_amadeus)
nuts1_org	Relevant if nuts1_changed = TRUE: NUTS-1 region before being filled with AMADEUS data (benef_nuts1_amadeus)
nuts2_org	Relevant if nuts2_changed = TRUE: NUTS-2 region before being filled with AMADEUS data (benef_nuts2_amadeus)
nuts3_org	Relevant if nuts3_changed = TRUE: NUTS-3 region before being filled with AMADEUS data (benef_nuts3_amadeus)

Note: Refer to Section 3 and Section 5 for details on individual variables.

The data have been provided to JRC in a basic dataset (with multiple NUTS-1, NUTS-2 and/or NUTS-3 regions in the corresponding cells if reported as such as project location in lists of operations) and modified versions. The dataset presented in the dashboard is based on the following:

1. *NUTS-3*: Dataset with repeated entries (rows) per operation if multiple NUTS-3 (NUTS-2) regions are reported. Financial amounts (total eligible expenditure and ERDF commitment if reported) are divided by the number of NUTS-3 regions involved.
  - If no regional information on the location of a project is available (see Table 4), financial amounts are split in equal parts to all NUTS-3 regions that are part of the smallest regional (or national) entity available.

The individual columns (variables) are listed in Table 3.

Table 3: Variables included in the ESIF R&I dataset (columns)

Variable	Description
id	Project ID
op	Operational programme (code)
prj_nr	Project number as reported in list of operations
type_f	Type of co-financing fund (ERDF or ERDF_CF if OP is co-funded by both funds and the specific co-financing fund is not explicitly reported)
interreg	1 = INTERREG project, 0 = no INTERREG project.
country	EU member state in which the project is carried out
countrygroup	EU-15 or EU-13
NUTSv2016	NUTS-3 region(s) in which the project is carried out; if NUTS-3 not available, NUTS-2 region, or NUTS-1 region, or country
beneficiary	Name of beneficiary
ERDF_H2020	1 = ERDF beneficiary was identified as Horizon 2020 beneficiary using name matching; 0 = otherwise
PIC	PIC of corresponding Horizon 2020 beneficiary
PIClink	PIC link (URL) of corresponding Horizon 2020 beneficiary
ERDF category	Code of the category of intervention
prj_postcode	Postcode of the project
project city	City (cities) in which the project is carried out
project name	Project title (translated to English)
total eligible expenditure	Total eligible expenditure
EU cofinancing rate	EU co-financing rate (multiple entries in Italy of which the highest enters the dataset)
ERDF EU contribution	Actual ERDF co-funding amount granted to a project/beneficiary or, if not reported, result of multiplying EU co-financing rate with total eligible expenditure (maximum ERDF co-funding amount)
data_stat	Declaration date of the list of operations (source file).
NACE code	NACE industry code (main category) of beneficiary
NACE name	NACE industry (main category) of beneficiary
KET name ERDF	(first) KET assigned to project based on knowmak taxonomy
KET code	Corresponding KET code
SGC name ERDF	(first) SGC assigned to project based on knowmak taxonomy
SGC code	Corresponding SGC code

Note: Refer to Section 3 and Section 5 for details on individual variables.

## 4.2 General data coverage and possible limitations

Table 4 gives an overview of the coverage of specific variables in the dataset (in its basic version). Next to data coverage as one possible limitation of the dataset, further issues that were already referred to in Section 3 - and their importance- are listed in Table 5. When using the dataset for publication or analyses, this should be kept in mind.

Table 4: Coverage of important variables among 250,046 entries (basic dataset with unique INTERREG projects) and among 88,654 R&I-related entries ( $R_I = 1$ )

Variable	Coverage (in %)		Variable	Coverage (in %)	
		$R_I = 1$			$R_I = 1$
op	100.0	100.0	EU_cofin_rate	90.5	86.7
type_f	100.0	100.0	com_eu	47.0	45.5
country	100.0	100.0	bvdid	32.9	62.0
nuts1	99.2	99.6	benef_nace	32.3	61.6
nuts2	99.1	99.4	nuts1_changed = TRUE	0.2	0.6
nuts3	89.8	94.0	nuts2_changed = TRUE	0.3	0.6

benef	100.0	100.0	nuts3_changed = TRUE	1.7	3.6
Code_Col	94.8	98.9	h2020 = 1	7.1	14.9
prj_postcode	51.6	55.1	jrc_KET_taxonomy	46.6	48.4
prj_name	99.8	99.9	jrc_SGC_taxonomy	54.8	56.8
prj_descr	96.9	94.1	jrcAdjusted_KET_taxonomy	70.5	77.8
prj_start	94.5	91.9	jrcAdjusted_SGC_taxonomy	89.4	90.5
prj_end	93.3	91.2	knowmak_KET_taxonomy	33.6	44.7
tot_elig_exp	94.5	90.9	knowmak_SGC_taxonomy	75.6	72.8

Table 4 shows that the coverage of variables that are required by regulation (apart from the postcode of the project) lies above 89% of all projects in the dataset. What Table 4 also presents is the share of observations that could be enriched by assigning KETs and SGCs as keywords, by linking ERDF beneficiaries with Horizon 2020 beneficiaries as well as with AMADEUS information. Based on project descriptions and different taxonomies, KETs are assigned to one third to more than half of all projects (71% in the adjusted, i.e. more generalized, taxonomy provided by JRC), and SGCs are assigned to 55% to 76% of projects (89% using the adjusted JRC taxonomy). Comparing ERDF beneficiaries with Horizon 2020 beneficiaries by name matching results in an overlap in 7% of all projects. Considering only R&I-related projects, however this share increases to 15%.

Linking beneficiary names per country with the AMADEUS business database made it possible to get information on the industry of beneficiaries for 32% of the whole set of projects and for almost two thirds of R&I-related projects. In addition, AMADEUS data was used to fill up the NUTS-3 locational information of projects in 1.7% of all cases.

Finally, Table 4 lists limitations of the ERDF project-level dataset that should be considered when analyzing the data. The frequency of entries for which the respective issue is found (measured as share of 250,046 observations) does not point to insurmountable data problems, however, especially missing regional (NUTS) information may hamper regional analysis in a few of the member states.

Importantly, one general issue is that not all lists of operations include the actual ERDF funding amount committed to a certain project. In most cases, total eligible expenditure is reported together with the EU co-financing rate (which is set for each priority axis in the OPs), as requested by Regulation (EU) No. 1303/2013 (Annex XII). Multiplying these two values, however, in general provides a maximum EU co-financing amount for a project, which could be higher than the actual co-funding amount. Therefore, actual ERDF amounts (*com\_eu*) are considered if available, if not the result of this multiplication is considered as a proxy (which will equal the actual co-funding amount in some cases). Actual paid-out amounts or commitments would be necessary to ensure the consistency of the financial data.

Table 5: Possible limitations of the dataset and frequency among 250,046 entries (basic dataset without INTERREG partners)

Issue and description of issue	Frequency (in %)
<b>Multiple reporting of operations:</b>	
<i>See Section 3.2 – The case of Greece and potential multiple entries. If summing up financial amounts this should be kept in mind, however, the frequency of possible duplicates is low.</i>	
duplicates_sure	(193 entries) 0.0%
duplicates_prob	3.0%
<b>Classification of R&amp;I-relatedness not possible as category of intervention not reported:</b>	
<i>The category of intervention (Col) was not reported in Swedish lists and is not fully covered for some further regions. In order to increase coverage in Sweden, for one list of operations (OP) in Sweden, we assigned Col to investment priorities and therefore were able to fill up R_I.</i>	
Code_Col not reported	5.2% (excl. INTERREG 3.9%)
<b>Multiple categories of intervention:</b>	
<i>A project is classified as R&amp;I-related if at least one of the Col reported are categorized as such.</i>	
Multiple Code_Col	0.3%

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**Multiple NUTS regions:**

If regions report more than one NUTS-2 (or NUTS-3) region or more than one NUTS-2 (NUTS-3) region is derived from postcodes or city names, we split financial amounts by regions involved in modified versions of the dataset.

Multiple nuts2	0.7%
Multiple nuts3	1.1%

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**Inconsistency between nuts2 and nuts3:**

This issue arises for France and Poland. For France, the NUTS-3 region is in all OPs except one derived from the postcode of the beneficiary, but the NUTS-2 region represents the location of the operation. For Poland, NUTS-3 and NUTS-2 information do not always correspond to each other. In order to ensure consistency between modified versions of the dataset, for Poland (for France there are no multiple entries) the financial amounts are not split by NUTS-3 regions. When filling up location information with AMADEUS data, NUTS-3 or NUTS-2 codes were only applied in case they matched the upper NUTS level (if reported).

nuts2<>3	0.8%
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**No regional (NUTS) information:**

Missing information on the NUTS-2 regional level may hamper regional data analysis. Although in total, NUTS-2 regional information is available for 99% of projects, they account for an ERDF co-funding amount of more than 8 billion EUR (around 6% of total funding recorded in the dataset), and are highly concentrated: The share of ERDF (maximum) co-funding amounts that cannot be assigned to different NUTS-2 regions amounts to 52% in Bulgaria, 11% in Italy, 10% in Sweden, 8% in Spain, Finland, Ireland, Poland, 3% in Romania, and less than 3% in the remaining member states. The main reason therefore most likely is that all operational programmes in Bulgaria are prepared at the national level. Also, in the other named countries, a lot of the non-regionalized projects are implemented under national OPs (e.g. SME initiative in Spain and Finland) or OPs managed at the NUTS-1 level (e.g. Ireland or Germany). Regarding projects for which the NUTS-2 location but not the NUTS-3 region is reported, more than half of them corresponds to Greek operational programmes.

No NUTS-1 region	(2116 entries) 0.8%
No NUTS-2 region	(2339 entries) 0.9%
No NUTS-3 region	(25,622 entries) 10.2%

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**Operations and amounts not fully attributable to ERDF:**

In Bulgaria, Croatia and Romania, lists of operations for OPs co-financed by the ERDF together with the ESF or CF do not include information on the co-financing fund (as it is done e.g. in Cyprus). Therefore, as also the sum of the (maximum) ERDF co-financing amount indicates, financial amounts are not fully attributable to the ERDF. This is important to keep in mind. Section 5 states the ERDF share of total EU funding per country if relevant.

ERDF_CF or ERDF_ESF	2.2%
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**Multiple EU co-financing rate:**

In the Italian lists, for 108 operations two EU co-financing rates are reported. For calculating the maximum ERDF co-funding amount (com\_eu is not available), one should consider the higher rate.

Multiple EU_cofin_rate	(109 entries) 0.0%
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**EU co-financing rate = 0 or not reported:**

For 359 projects, the EU co-financing rate reported is 0. 138 of those are Estonian operations and 14 French ones, for which both tot\_elig\_exp and com\_eu are reported, therefore it is not an issue. However, for one German project and 206 Spanish ones, only tot\_elig\_exp is reported.

Moreover, for 420 non-INTERREG projects – of which 408 are carried out in Germany – neither the actual ERDF amount nor the EU co-financing rate is reported.

EU_cofin_rate = 0	0.1%
EU_cofin_rate and com_eu not reported (excl. INTERREG)	0.2%

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**No financial information:**

For 1,668 projects, the actual ERDF co-funding amount (com\_eu) as well as the (maximum) co-funding amount calculated by multiplying total eligible expenditure with the EU co-financing rate are either not reported or smaller or equal to one. Out of those, 587 are INTERREG projects; the remaining ones correspond to 13 EU member states, whereby the number of projects is by far highest in Germany (427 observations that lack financial information), Lithuania (283 observations) and Spain (234 observations).

(Tot_elig_exp*EU_cofin_rate) & com_eu <= 1 EUR or not reported	0.7%
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## 5 Information by country

### Austria

<b>Source:</b>	<a href="https://www.efre.gv.at/projekte">https://www.efre.gv.at/projekte</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	913
Share of R&I-related projects:	20.0%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 384,568,953.0
Share of R&I-related funds:	38.6%
<b>Share of total committed ERDF amount<sup>9</sup>:</b>	71.7%
<b>Data status:</b>	28.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Bezeichnung der Interventionskategorie für das Vorhaben/name of category of intervention for the operation		100.0%
EU_cofin_rate	Unions-Kofinanzierungssatz pro Prioritätsachse/Union co-financing rate, as per priority axis	Format: pp/100.	100.0%
benef	Name des Begünstigten/name of beneficiary		100.0%
com_eu			0.0%
nuts2		Derived from nuts3.	99.9%
nuts3		Derived from municipality ID.	98.4%
op	2014AT16RFOP001		100.0%
prj_descr	Zusammenfassung des Vorhabens/operation summary		100.0%
prj_name	Bezeichnung des Vorhabens/operation name		100.0%
prj_postcode	Regionalcode des Vorhabens/ location indicator (= national municipality ID)		0.0%
prj_start	Datum des Beginns des Vorhabens/operation start date		100.0%
prj_end	Datum des Endes des Vorhabens/operation end date		100.0%
tot_elig_exp	Gesamtbetrag der förderfähigen Ausgaben des Vorhabens/total eligible expenditure allocated to the operation*		100.0%
type_f	ERDF		100.0%

<sup>9</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Belgium

<b>Source:</b>	<a href="http://www.europeinbelgium.be/en/brussels-capitalregion-erdf">http://www.europeinbelgium.be/en/brussels-capitalregion-erdf</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	3
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	907
Share of R&I-related projects:	43.9%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 928,984,127.0
Share of R&I-related funds:	27.1%
<b>Share of total committed ERDF amount<sup>10</sup>:</b>	97.5%
<b>Data status:</b>	17.10.2018

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Code of category of intervention of the operation		100.0%
EU_cofin_rate	Union co-financing rate, as per priority axes (%)	Format: pp/100.	100.0%
benef	Beneficiary name		100.0%
com_eu			0.0%
nuts2		Derived from nuts3.	100.0%
nuts3		Derived from project postcode using correspondence tables.	100.0%
op	Operational program		100.0%
prj_descr	Operation summary		100.0%
prj_name	Operation name		100.0%
prj_postcode	Operation postcode		100.0%
prj_start	Operation start date		100.0%
prj_end	Operation end date		100.0%
tot_elig_exp	Total eligible expenditure allocated to the operation		100.0%
type_f	Funds		100.0%

<sup>10</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Bulgaria

<b>Source:</b>	<a href="http://2020.efunds.bg/en/0/0/Operations?ShowRes=True">http://2020.efunds.bg/en/0/0/Operations?ShowRes=True</a>
<b>Number of lists of operations:</b>	6
<b>Number of operational programmes (excl. INTERREG):</b>	6
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	3228 (partly also ESF/CF)
Share of R&I-related projects:	17.8%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 5,677,541,805.0
Share of R&I-related funds:	7.6%
<b>Share of total committed ERDF amount<sup>11</sup>:</b>	159.1% <sup>12</sup>
<b>Data status:</b>	14.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Name of Categories of Interventions for the Operation	Derived from name; multiple (up to 3 codes): 9.9% of all projects	100.0%
EU_cofin_rate	% of EC co-financing	Format: pp/100.	100.0%
benef	Beneficiary Name		100.0%
com_eu			0.0%
nuts2		If not reported in list of operations (Location), derived from nuts3. For 159 entries, the NUTS-2 code was filled up with AMADEUS information.	60.6%
nuts3		If not reported in list of operations (Location), derived from project city (via postcode; first city if multiple). For 159 entries, the NUTS-3 code was filled up with AMADEUS information.	60.3%
op		Derived from name of list of operations.	100.0%
prj_descr	Summary of the Operation		100.0%
prj_name	Operation Name		100.0%
prj_postcode		Derived from operation city (first city if multiple <sup>13</sup> ).	29.6%
prj_start	Operation Start Date		100.0%
prj_end	Date of Completion		100.0%
tot_elig_exp	Total Eligible Costs Granted for the Operation	Exchange rate EUR-BGN: 1.95583 (reported in list).	100.0%
type_f	ERDF, ERDF_ESF, ERDF_CF	Derived from operational programme.	100.0%

<sup>11</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>12</sup> The list of operations contains projects run under six operational programmes. Three of them are co-financed by the ERDF together with ESF or CF. If one applies the relation between ERDF and e.g. CF funding within 2014BG16M1OP001 to get an estimate of the ERDF funding share of projects, the resulting sum (sum of total eligible expenditure x ERDF share x EU co-financing rate; 3,528,518,691.7 EUR; R&I-share: 15,6%) amounts to 98,9% of the total ERDF amount committed to Bulgaria for 2014-2020.

<sup>13</sup> Multiple cities are reported in 10% of projects (i.e. 14 projects) in OP Environment, in 5% of cases in OP Innovation and competitiveness (111 projects), in 2% of projects in OP Science and education for smart growth (5 projects) and in OP Transport and transport infrastructure (1 project).

## Cyprus

<b>Source:</b>	<a href="http://www.structuralfunds.org.cy/List-Of-Projects">http://www.structuralfunds.org.cy/List-Of-Projects</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	646 (6 duplicates <sup>14</sup> )
Share of R&I-related projects:	13.3%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 320,411,591.0
Share of R&I-related funds:	26.1%
<b>Share of total committed ERDF amount<sup>15</sup>:</b>	106.8% <sup>16</sup>
<b>Data status:</b>	13.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Κατηγορία Παρέμβαση-Category of Intervention	Derived from name.	100.0%
EU_cofin_rate	% Χρηματοδότησης Έργου-% of Project Funded	Format: pp/100.	100.0%
benef	Δικαιούχος-Beneficiary		100.0%
com_eu			0.0%
nuts2	CY00		100.0%
nuts3	CY000		100.0%
op	2014CY16M10P001		100.0%
prj_descr	Συνοπτική Περιγραφή Έργου-Project Summary		100.0%
prj_name	Ονομασία Έργου-Project Name		100.0%
prj_postcode			0.0%
prj_start	Ημερ. Έναρξης-Start Date		100.0%
prj_end	Ημερ. Ολοκλήρωσης-End Date		100.0%
tot_elig_exp	Επιλέξιμο Κόστος Έργου(€)-Eligible Project Cost(€)		100.0%
type_f	Ταμείο Συ χρηματοδότησης-Co-financing Fund		100.0%

<sup>14</sup> There are six projects (not R&I-related) that seem to be reported twice (two lines each contain exactly the same information). The double counting accounts for EUR 20,064,035.7 of total eligible expenditure and could thus be one reason for the relatively high sum of the (maximum) EU co-financing amount as compared to the ERDF commitment.

<sup>15</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>16</sup> The operational programme is co-financed by the ERDF and the CF. In contrast to Bulgaria and Croatia, however, the co-financing fund is explicitly reported in the list of operations (type\_f).

## Czech Republic

<b>Source:</b>	<a href="https://www.dotaceeu.cz/en/Statistiky-a-analyzy/Seznamy-prijemcu">https://www.dotaceeu.cz/en/Statistiky-a-analyzy/Seznamy-prijemcu</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	6
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	13,131 (2 duplicates <sup>17</sup> )
Share of R&I-related projects:	27.3%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 6,239,819,535.0
Share of R&I-related funds:	28.3%
<b>Share of total committed ERDF amount<sup>18</sup>:</b>	51.4%
<b>Data status:</b>	01.12.2018

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Intervention field - code		100.0%
EU_cofin_rate	Union co-financing rate	Format: pp/100.	100.0%
benef	Beneficiary name		100.0%
com_eu			100.0%
nuts2		Derived from nuts3; multiple (up to all 8 regions): 2.4% of projects.	100.0%
nuts3	NUTS 3 code	Multiple (up to 14 regions): 2.7% of projects.	100.0%
op	Programme	Derived from OP name.	100.0%
prj_descr	Operation summary		100.0%
prj_name	Operation name		100.0%
prj_postcode	Postcode		100.0%
prj_start	Operation start date		58.6%
prj_end	Operation end date		38.5%
tot_elig_exp	Total eligible expenditure allocated to the selected operation	Exchange rate EUR-CZK: 27.363.	100.0%
type_f	Fund		100.0%

<sup>17</sup> There are two projects (R&I-related) that seem to be reported twice (two lines each contain exactly the same information). The double reporting accounts for EUR 26,276.4 of total eligible expenditure.

<sup>18</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Germany

### Source:

- <https://www.efre-bayern.de/investitionen-in-wachstum-und-beschaeftigung/information-und-kommunikation/liste-der-vorhaben/>
- <https://efre-bw.de/datenbank-beguenstigte-vorhaben>
- <http://www.strukturfonds.sachsen.de/geoerderte-projekte-in-sachsen.html>
- <https://www.efre.nrw.de/daten-fakten/liste-der-vorhaben/>
- [https://www.efre-bremen.de/programm/liste\\_der\\_vorhaben-15110](https://www.efre-bremen.de/programm/liste_der_vorhaben-15110)
- [https://www.schleswig-holstein.de/DE/Fachinhalte/F/foerderprogramme/M/WAVT/EFRE/efre\\_inSH\\_2014\\_2020.html](https://www.schleswig-holstein.de/DE/Fachinhalte/F/foerderprogramme/M/WAVT/EFRE/efre_inSH_2014_2020.html)
- [https://www.europa-mv.de/foerderinstrumente/fonds\\_mv/efre/](https://www.europa-mv.de/foerderinstrumente/fonds_mv/efre/), additional information requested by e-mail
- <https://efre.brandenburg.de/cms/detail.php/bb1.c.152602.de>
- <https://daten.berlin.de/datensaetze/efre-gef%C3%B6rderte-vorhaben-des-landes-berlin-2014-2020>
- [https://www.europa-fuer-niedersachsen.niedersachsen.de/startseite/regionen\\_und\\_foerderung/efre\\_und\\_esf/liste-der-vorhaben-152610.html](https://www.europa-fuer-niedersachsen.niedersachsen.de/startseite/regionen_und_foerderung/efre_und_esf/liste-der-vorhaben-152610.html)
- <https://wirtschaft.hessen.de/landesentwicklung/efre/efre-2014-bis-2020/transparenz-bei-foerderungen>
- <https://www.efre-thueringen.de/>
- <https://efre.rlp.de/information-und-kommunikation/liste-der-vorhaben/>
- <https://www.saarland.de/132351.htm>
- <https://www.hamburg.de/efre/dokumente-fp-2014-2020/8038058/liste-der-vorhaben/>
- <https://europa.sachsen-anhalt.de/esi-fonds-in-sachsen-anhalt/informationen-fuer-interessierte/liste-der-vorhaben/>

<b>Number of lists of operations:</b>	16
<b>Number of operational programmes (excl. INTERREG):</b>	16
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	25,474 (15 duplicates/triple entries <sup>19</sup> )
Share of R&I-related projects:	35.2%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing):</b>	EUR 6,463,104,292.2
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 734,957,721.0
Share of R&I-related funds:	42.5%
<b>Share of total committed ERDF amount<sup>20</sup>:</b>	66.8%
<b>Data status:</b>	28.11.2018 – 23.04.2019

<sup>19</sup> There are 15 projects (partly R&I-related) that seem to be reported twice or thrice (two or three lines each contain exactly the same information). The double reporting accounts for EUR 1,154,319.1 of total eligible expenditure.

<sup>20</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Germany (contd.)

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Name of category of intervention for the operation in accordance with point (b) (vi) of the first subparagraph of Article 96(2)	Partly derived from name.	98.3%
EU_cofin_rate	Union co-financing rate (as per priority axis)/EU-/Unions-Kofinanzierungssatz pro Prioritätsachse	Format: pp/100.	89.9%
benef	Beneficiary name (only of legal entities, no natural persons shall be named)/Name des Begünstigten		100.0%
com_eu	(one OP) bewilligte EU-Mittel		8.5%
nuts2		Derived from nuts3 or OP. For 29 entries, the NUTS-2 code was filled up with AMADEUS information (if it fits the NUTS-1 region reported in the list of operations).	99.4%
nuts3		Derived from name if reported in list of operations, if not from project city (via postcode) or postcode. For 102 entries, the NUTS-3 code was filled up with AMADEUS information (if it fits the NUTS-2 region reported in the list of operations).	98.5%
op		Derived from OP name.	100.0%
prj_descr	Operation summary/Zusammenfassung des Vorhabens	(missing: Brandenburg)	94.7%
prj_name	Operation name/Bezeichnung des Vorhabens		100.0%
prj_postcode	Operation postcode/Postleitzahl des Vorhabens	Reported in list of operations, if not derived from project city.	34.9%
prj_start	Operation start date/Datum des Beginns des Vorhabens		95.7%
prj_end	Operation end date (expected)/Datum des (voraussichtl.) Endes des Vorhabens		97.9%
tot_elig_exp	Total eligible expenditure allocated to the operation/Gesamtbetrag der förderfähigen Ausgaben des Vorhabens		100.0%
type_f	ERDF		100.0%

## Denmark

<b>Source:</b>	<a href="https://regionalt.erhvervsstyrelsen.dk/projektliste">https://regionalt.erhvervsstyrelsen.dk/projektliste</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	118
Share of R&I-related projects:	80.5% (100% if Code_Col reported)
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 139,135,669.0
Share of R&I-related funds:	83.1% (100% if Code_Col reported)
<b>Share of total committed ERDF amount<sup>21</sup>:</b>	67.3%
<b>Data status:</b>	14.02.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Interventionskategori1 / intervention1-4	Category of Derived from name.	80.5%
EU_cofin_rate	EU-medfinansieringssats / Union co-financing rate	Format: pp/100.	100.0%
benef	Kontraktansvarlig partner / Beneficiary name		100.0%
com_eu	EU-medfinansiering / Union co-financing		100.0%
nuts2	Region / Region	Derived from name.	100.0%
nuts3		Derived from postcode.	100.0%
op			100.0%
prj_descr	Projektbeskrivelse		100.0%
prj_name	Projektitel / Operation name		100.0%
prj_postcode	Postnr / Operation postcode		100.0%
prj_start	Startdato / Operation start date		100.0%
prj_end	Slutdato / Operation end date		100.0%
tot_elig_exp	Total eligible expenditure allocated to the operation	Exchange rate EUR-DKK: 7.4593.	0.0%
type_f	Fond / Fund		100.0%

<sup>21</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Estonia

<b>Source:</b>	<a href="https://www.struktuurifondid.ee/eng/projects-supported/projects-supported?marksona=&amp;valdkond=All&amp;period%5Bvalue%5D%5Bdate%5D=&amp;period2%5Bvalue%5D%5Bdate%5D=&amp;rakendusüksus=All&amp;rakendusasutus=All&amp;toetuse_saaja_vorm=All&amp;rakendusperiood=All&amp;display=grid&amp;sort_by=title&amp;sort_order=ASC">https://www.struktuurifondid.ee/eng/projects-supported/projects-supported?marksona=&amp;valdkond=All&amp;period%5Bvalue%5D%5Bdate%5D=&amp;period2%5Bvalue%5D%5Bdate%5D=&amp;rakendusüksus=All&amp;rakendusasutus=All&amp;toetuse_saaja_vorm=All&amp;rakendusperiood=All&amp;display=grid&amp;sort_by=title&amp;sort_order=ASC</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	2732 (1 duplicate <sup>22</sup> )
Share of R&I-related projects:	53.8%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 1,473,502,330.0
Share of R&I-related funds:	43.6%
<b>Share of total committed ERDF amount<sup>23</sup>:</b>	79.2%
<b>Data status:</b>	16.05.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Prioriteetne valdkond	Derived from name.	100.0%
EU_cofin_rate	Projekti maksumus - taotletud toetuse määr (%)	Format: pp/100.	100.0%
benef	Toetuse saaja		100.0%
com_eu	Projekti maksumus - taotletav toetuse summa		100.0%
nuts2	EE00		100.0%
nuts3		Derived from postcode.	100.0%
op			100.0%
prj_descr	Projekti lühikokkuvõte avalikkusele		100.0%
prj_name	Projekti nimetus		100.0%
prj_postcode	Toetuse saaja aadress - indeks		100.0%
prj_start	Projekti algus		100.0%
prj_end	Projekti lõpp		100.0%
tot_elig_exp	Projekti maksumus - abikõlbliku kulu summa		100.0%
type_f	Meetme/meetme tegevuse EL fond		100.0%

<sup>22</sup> There is one project (R&I-related) that seems to be reported twice (two lines contain exactly the same information). The double reporting accounts for EUR 29,162,371.3 of total eligible expenditure (or 26,284,108.84 of ERDF funding).

<sup>23</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Greece

<b>Source:</b>	<a href="https://www.espa.gr/el/Pages/ProgramsList.aspx">https://www.espa.gr/el/Pages/ProgramsList.aspx</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	17
<b>Number of ERDF co-funded projects/entries (excl. INTERREG):</b>	11,258 unique operations (according to prj_nr)/14,065 entries (rows)
Share of R&I-related projects:	8.1% of unique projects/11.1% of entries
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 7,081,394,936.0
Share of R&I-related funds:	7.6%
<b>Share of total committed ERDF amount<sup>24</sup>:</b>	82.3%
<b>Data status:</b>	28.02.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	INTERVENTION CATEGORY OF A CONSORTIUMNAME OF CATEGORY OF INTERVENTION		100.0%
EU_cofin_rate	UNION CO-FINANCING RATE PER PRIORITY AXIS	Union Format: pp/100.	100.0%
benef	Co-financing RATIO AS PER Priority AXIS BENEFICIARY NAMEBENEFICIARY NAME		100.0%
com_eu	xEU CONTRIBUTION	Basic dataset: ERDF contribution divided by number of NUTS-2 regions reported and reported in different (14,065) rows.	100.0%
nuts2	POSTCODE OR OTHER APPROPRIATE ALLOCATION INDICATOR		100.0%
nuts3			0.0%
op	OPERATIONAL PROGRAMME/OPERATIONAL PROGRAMME		100.0%
prj_descr	EXECUTIVE SUMMARY OF A CONSORTIUMOPERATION SUMMARY		91.1%
prj_name	NAME/OPERATION NAME		100.0%
prj_postcode			0.0%
prj_start	DATE OF COMMENCEMENT OF A CONSORTIUMOPERATION START DATE		100.0%
prj_end	CLOSING DATE: OPERATION END DATE		100.0%
tot_elig_exp	TOTAL ELIGIBLE EXPENDITURE DEDUCTED IN THE OPERATION (BUDGET)/TOTAL ELIGIBLE EXPENDITURE CHARGED TO THE OPERATION	Basic dataset: tot_elig_exp divided by number of NUTS-2 regions reported and reported in different (14,065) rows.	100.0%
type_f	TAMEIO/FUND		100.0%

<sup>24</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Spain

<b>Source:</b>	<a href="http://www.dgfc.sepg.hacienda.gob.es/sitios/dgfc/es-ES/loFEDER1420/Paginas/inicio.aspx">http://www.dgfc.sepg.hacienda.gob.es/sitios/dgfc/es-ES/loFEDER1420/Paginas/inicio.aspx</a>
<b>Number of lists of operations:</b>	21
<b>Number of operational programmes (excl. INTERREG):</b>	21
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	37,359
Share of R&I-related projects:	52.5%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 9,563,806,663.0
Share of R&I-related funds:	36.1%
<b>Share of total committed ERDF amount<sup>25</sup>:</b>	46.2%
<b>Data status:</b>	12.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	CAMPO DE INTERVENCIÓN [23]		100.0%
EU_cofin_rate	COFINANCIACIÓN UE	Format: pp/100.	100.0%
benef	BENEFICIARIO[1]		100.0%
com_eu			0.0%
nuts2			100.0%
nuts3		For 2698 entries, the NUTS-3 code was filled up with AMADEUS information (if it fits the NUTS-2 region reported in the list of operations).	86.7%
op	LOCALIZACIÓN [30]		100.0%
prj_descr	CCI		100.0%
prj_name	RESUMEN [6]		100.0%
prj_postcode	OPERACIÓN [5]		100.0%
prj_start	MUNICIPIO		99.5%
prj_end	FECHA INICIO [8]		100.0%
tot_elig_exp	FECHA FIN [10] o [9]		100.0%
type_f	COSTE GASTO TOTAL SUBVENCIONABLE [41]		100.0%
	ERDF		100.0%

<sup>25</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Finland

<b>Source:</b>	<a href="https://www.eura2014.fi/rctiepa/?lang=en">https://www.eura2014.fi/rctiepa/?lang=en</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	3
<b>Number of operational programmes (excl. INTERREG):</b>	3
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	3109 (2 duplicates <sup>26</sup> )
Share of R&I-related projects:	92.0%
<b>Sum of committed ERDF co-funding amount (50% of actual EU and state funding granted, as reported):</b>	EUR 273,286,295.0
Share of R&I-related funds:	93.2%
<b>Share of total committed ERDF amount<sup>27</sup>:</b>	34.5%
<b>Data status:</b>	19.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Category of intervention		100.0%
EU_cofin_rate	0.5		100.0%
benef	Beneficiary		100.0%
com_eu	EU and State funding granted	Reported value cut in half (maximum ERDF co-financing rate in OP 2014FI116M20P001 is 50%; confirmation by managing authority of 2014FI05M20P001).	100.0%
nuts2		Derived from nuts3.	99.6%
nuts3	Location/NUTS3	For 43 entries, the NUTS-3 code was filled up with AMADEUS information (if it fits the NUTS-2 region reported in the list of operations).	98.6%
op	OP code		100.0%
prj_descr	Abstract		100.0%
prj_name	Project name		100.0%
prj_postcode			0.0%
prj_start	Start date		100.0%
prj_end	End date		100.0%
tot_elig_exp	Planned public funding (total)	Reported value cut in half (maximum ERDF co-financing rate in OP 2014FI116M20P001 is 50%; confirmation by managing authority of 2014FI05M20P001).	100.0%
type_f	Fund		100.0%

<sup>26</sup> There are two projects (R&I-related) that seem to be reported twice (two lines contain the same information but prj\_nr). The double reporting accounts for EUR 566,277.0 of total eligible expenditure (but EUR 0 of ERDF funding, as com\_eu is only filled in one of the rows).

<sup>27</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## France

<b>Source:</b>	<a href="http://www.europe-en-france.gouv.fr/Rendez-vous-compte/Tous-les-projets-FEDER-FSE-IEJ-2014-2020">http://www.europe-en-france.gouv.fr/Rendez-vous-compte/Tous-les-projets-FEDER-FSE-IEJ-2014-2020:</a> <a href="https://www.europe.bzh/jcms/preprod_237324/fr/les-projets-soutenus-en-bretagne">https://www.europe.bzh/jcms/preprod_237324/fr/les-projets-soutenus-en-bretagne</a>
<b>Number of lists of operations:</b>	4
<b>Number of operational programmes (excl. INTERREG):</b>	26: List of operations covers 25 <sup>28</sup>
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	9041 (2 duplicates <sup>29</sup> )
Share of R&I-related projects:	33.7%
<b>Sum of committed ERDF co-funding amount (actual, as reported and maximum for 2014FR16M20P003):</b>	EUR 3,320,369,374.0
Share of R&I-related funds:	26.2%
<b>Share of total committed ERDF amount<sup>30</sup>:</b>	39.4%
<b>Data status:</b>	10.12.2018

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Catégorie d'intervention - category of intervention		90.4%
EU_cofin_rate	Union co-financing rate (as per priority axis)	(2014FR16M20P003, 2014FR16M00P001, 2014FR16M00P005)	22.6%
benef	Nom du bénéficiaire - beneficiary name		100.0%
com_eu	Montant UE programmé - Union co-financing	(not reported in 2014FR16M20P003)	95.2%
nuts2	Territoire, NUTS-2 (in 2 OPs)	Derived from op.	100.0%
nuts3	Departement (in one OP)	Derived from postcode of beneficiary. <sup>31</sup> For 60 entries, the nuts3 was filled up with AMADEUS information.	92.5%
<b>nuts 2&lt;&gt;3</b>	<b>Is filled if nuts3 is not located within nuts2 (and nuts3 is filled).</b>		6.5%
op	Programme		100.0%
prj_descr	Résumé de l'opération - operation summary		82.3%
prj_name	Intitulé du projet - operation name		100.0%
prj_postcode	Code postal de l'opération		30.9%
prj_start	Date de début de l'opération		88.8%
prj_end	Date de fin de l'opération		88.6%
tot_elig_exp	Total dépenses éligibles - Total eligible expenditure		100.0%
type_f	Fonds		100.0%

<sup>28</sup> OP that is not covered: National technical assistance (2014FR16M2TA001).

<sup>29</sup> There are two projects (R&I-related) that seem to be reported twice (two lines contain exactly the same information). The double reporting accounts for EUR 5,760,591.5 of total eligible expenditure (EUR 2,898,070.7 com\_eu).

<sup>30</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>31</sup> The postcode of operation is reported with a much lower coverage (see prj\_postcode), for 101 projects the postcode of operation is different from the postcode of beneficiary.

## Croatia

<b>Source:</b>	<a href="http://www.europe-en-france.gouv.fr/Rendez-vous-compte/Tous-les-projets-FEDER-FSE-IEJ-2014-2020">http://www.europe-en-france.gouv.fr/Rendez-vous-compte/Tous-les-projets-FEDER-FSE-IEJ-2014-2020</a> additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	4894 (also CF)
Share of R&I-related projects:	3.3%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 5,117,390,719.0
Share of R&I-related funds:	6.4%
<b>Share of total committed ERDF amount<sup>32</sup>:</b>	118.4% <sup>33</sup>
<b>Data status:</b>	30.11.2018

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Naziv kategorije intervencije za operaciju u skladu s člankom 96. prvim podstavkom točkom (b) podtočkom vi.		100.0%
EU_cofin_rate	Stopa sufinanciranja Unije (po prioritetnoj osi)	Format: pp/100.	100.0%
benef	Naziv korisnika		100.0%
com_eu			0.0%
nuts2			100.0%
nuts3	Županija	Derived from NUTS-3 name; multiple (up to 2 regions): 4 projects.	100.0%
op	2014HR16M10P001		100.0%
prj_descr	Sažetak operacije		94.9%
prj_name	Naziv operacije		100.0%
prj_postcode			0.0%
prj_start	Datum početka operacije		100.0%
prj_end	Datum završetka operacije (očekivani datum fizičkog dovršetka ili pune provedenosti operacije)		100.0%
tot_elig_exp	Ukupni prihvatljivi izdaci dodijeljeni operaciji	Exchange rate EUR-HRK: 7.6204.	100.0%
type_f	ERDF_CF		100.0%

<sup>32</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>33</sup> The operational programme is co-financed by ERDF and the CF. If one applies the relation between ERDF and CF funding to get an estimate of the ERDF funding share of operations (i.e. 63.3%), the resulting sum (sum of total eligible expenditure x ERDF share x EU co-financing rate; 3,254,660,513.0 EUR) amounts to 75.3% of the total ERDF amount committed to Croatia for 2014-2020.

## Hungary

<b>Source:</b>	Information requested by e-mail, <a href="https://www.palyazat.gov.hu/tamogatott_projekt_kereso">https://www.palyazat.gov.hu/tamogatott_projekt_kereso</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	7: List of operations covers 2 <sup>34</sup>
<b>Number of ERDF co-funded projects (excl. INTERREG), all of them are R&amp;I related according to managing authority:</b>	5163 - only R&I-related operations
Share of R&I-related projects:	91.4%
<b>Sum of total eligible expenditure x EU co-financing rate per (R&amp;I) project (i.e. maximum EU co-financing amount):</b>	EUR 1,849,007,267.0
Share of R&I-related funds:	93.3%
<b>Share of total committed ERDF amount<sup>35</sup>:</b>	17.1% <sup>36</sup>
<b>Data status:</b>	31.05.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Beavatkozási kategória / name of category of intervention	Note that the managing authority only sent info on R&I-related projects.	100.0%
EU_cofin_rate	Uniós társfinanszírozási ráta / Union co-financing rate	Format: pp/100.	100.0%
benef	Pályázó neve / Beneficiary name		100.0%
com_eu			0.0%
nuts2		Derived from nuts3.	100.0%
nuts3		Derived from postcode. For 2 entries, the NUTS-3 code was filled up with AMADEUS information.	99.9%
op	Operatív program / Operational Programme		99.9%
prj_descr		Webscrap from website (coordinated with managing authority).	36.8%
prj_name	Projekt megnevezése / Operation name		100.0%
prj_postcode	Irányítószám / postcode		99.9%
prj_start	Megvalósítás kezdete / operation start date		0.0%
prj_end	Megvalósítás befejezése / operation end date		0.0%
tot_elig_exp	Projekt összköltség / total eligible expenditure	Exchange rate EUR-HUF: 297.22.	100.0%
type_f			100.0%

<sup>34</sup> OPs that are not covered in list of R&I-related projects provided by SZÉCHENYI 2020: Environmental and Energy Efficiency (2014HU16M10P001), Human Resources Development (2014HU05M20P001), Integrated Transport (2014HU16M10P003), Public Administration and Civil Service Development (2014HU05M30P001), Territorial and settlement development (2014HU16M20P001).

<sup>35</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>36</sup> All operational programmes are co-financed by ERDF together with the ESF or CF. In contrast to Bulgaria and Croatia, however, the co-financing fund is explicitly reported in the list of operations (type\_f).

## Ireland

<b>Source:</b>	Information requested by e-mail <a href="https://www.southernassembly.ie/regional-programme-beneficiaries">https://www.southernassembly.ie/regional-programme-beneficiaries</a>
<b>Number of lists of operations:</b>	2
<b>Number of operational programmes (excl. INTERREG):</b>	2: List of operations covers 1 <sup>37</sup>
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	349
Share of R&I-related projects:	56.2%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 48,589,796.0
Share of R&I-related funds:	55.6%
<b>Share of total committed ERDF amount<sup>38</sup>:</b>	11.8%
<b>Data status:</b>	08.04.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Category of Intervention	Derived from name.	100.0%
EU_cofin_rate	ERDF Co-financing Rate	Format: pp/100.	100.0%
benef	Beneficiary Name		100.0%
com_eu			0.0%
nuts2		Derived from nuts3.	97.4%
nuts3	Postcode/ County	Derived from postcode or county.	97.4%
op	2014IE16RFOP002		100.0%
prj_descr	Project Summary		100.0%
prj_name	Project name		100.0%
prj_postcode	Postcode/ County		69.6%
prj_start	Project Start Date		100.0%
prj_end	Project End Date		98.9%
tot_elig_exp	Total Public Eligible Expenditure		100.0%
type_f	ERDF		100.0%

<sup>37</sup> OP that is not covered: Border, Midland and Western Regional OP (2014IE16RFOP001). The contact persons did not respond to a data request (by e-mail) and a reminder. According to the website in August 2019 – when the process of data collection (update) was already closed - the managing authority uploaded the list of operations (however the category of intervention is missing): <https://www.nwra.ie/beneficiaries-of-eu-funding/>. Before, very limited data (partly project name, paid-out project amount, year of allocation) for the years 2014, 2015 and 2016 was provided.

<sup>38</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Italy

<b>Source:</b>	<a href="https://opencoesione.gov.it/it/beneficiari_operazioni_2014_2020/">https://opencoesione.gov.it/it/beneficiari_operazioni_2014_2020/</a> , information request by e-mail
<b>Number of lists of operations:</b>	30 (1)
<b>Number of operational programmes (excl. INTERREG):</b>	30
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	48,659 unique projects (according to prj_nr)/ 52,244 entries (rows) 51 duplicates/multiple entries <sup>39</sup> )
Share of R&I-related projects:	22.4% of unique projects/25.3% of entries
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 14,721,336,481.0
Share of R&I-related funds:	28.9%
<b>Share of total committed ERDF amount<sup>40</sup>:</b>	68.0%
<b>Data status:</b>	31.12.2018/31.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	CategoriaOperazione_CategoryIntervention		100.0%
EU_cofin_rate	TassoCofinanziamentoUE_EUCofinancingRate	Format: pp/100; multiple (up to 2 rates): 0.2% of entries.	100.0%
benef	NomeBeneficiario_BeneficiaryName		100.0%
com_eu			0.0%
nuts2		Derived from nuts3 and OP; multiple (up to 8 regions): 0.4% of all entries. For 25 entries, the nuts2 was filled up with AMADEUS information.	99.8%
nuts3	CodiceNUTS3_NUTS3Code	Mapping of postcode to nuts3 did not work satisfactorily, OpenCoesione provided nuts3; multiple (up to 12 regions): 0.7% of all entries. For 304 entries, nuts3 was filled up with AMADEUS information.	97.0%
op	CodiceProgramma_ProgrammeID		100.0%
prj_descr	SintesiProgetto_OperationSummary		100.0%
prj_name	TitoloProgetto_OperationName		100.0%
prj_postcode	CodicePostale_Postcode		100.0%
prj_start	DataInizioProgetto		100.0%
prj_end	DataFineProgetto		100.0%
tot_elig_exp	CostoAmmesso_TotalEligibleExpenditure		100.0%
type_f	Fondo_Fund		100.0%

<sup>39</sup> There are 51 projects (partly R&I-related) that seem to be reported twice and more times, respectively (two to four lines each contain exactly the same information). The double reporting accounts for EUR 26,684,759.9 of total eligible expenditure.

<sup>40</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Lithuania

<b>Source:</b>	<a href="http://www.esinvesticijos.lt/lt/paraiskos_ir_p_rojektai">http://www.esinvesticijos.lt/lt/paraiskos_ir_p_rojektai</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	8916
Share of R&I-related projects:	68.2%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 2,484,244,413.0
Share of R&I-related funds:	28.0%
<b>Share of total committed ERDF amount<sup>41</sup>:</b>	70.9%
<b>Data status:</b>	23.04.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Prioritetinės srities kodas		100.0%
EU_cofin_rate			0.0%
benef	Projekto vykdytojo pavadinimas		100.0%
com_eu	Skirto finansavimo ES fondų lėšos		100.0%
			(0 in 3,2% of all operations)
nuts2			100.0%
nuts3	(apskritis) kodas		100.0%
op	2014LT16MAOP001		100.0%
prj_descr	Projekto aprašymas		100.0%
prj_name	Projekto pavadinimas		100.0%
prj_postcode			0.0%
prj_start	įgyvendinimo pradžios data		100.0%
prj_end	įgyvendinimo pabaigos data		100.0%
tot_elig_exp			0.0%
type_f	Fondas		100.0%

<sup>41</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Luxembourg

Source:

<http://www.fonds-europeens.public.lu/fr/projets-cofinances/index.php>

<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	21
Share of R&I-related projects:	61.9%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 17,808,894.0
Share of R&I-related funds:	53.2%
<b>Share of total committed ERDF amount<sup>42</sup>:</b>	91.3%
<b>Data status:</b>	01.01.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Category of intervention		100.0%
EU_cofin_rate	0.4		100.0%
benef	Beneficiary name		100.0%
com_eu	ERDF cofinancing (40%)		100.0%
nuts2	LU00		100.0%
nuts3	LU000		100.0%
op	2014LU16RFOP001		100.0%
prj_descr	Operation summary		100.0%
prj_name	Operation name		100.0%
prj_postcode	Operation postcode		0.0%
prj_start	Operation start date		100.0%
prj_end	Operation end date		100.0%
tot_elig_exp	Total eligible expenditure		100.0%
type_f	ERDF		100.0%

<sup>42</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Latvia

<b>Source:</b>	<a href="https://www.esfondi.lv/es-fondu-projektu-mekletajs">https://www.esfondi.lv/es-fondu-projektu-mekletajs</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	561
Share of R&I-related projects:	38.5%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 939,308,997.0
Share of R&I-related funds:	51.8%
<b>Share of total committed ERDF amount<sup>43</sup>:</b>	39.1%
<b>Data status:</b>	28.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Nozare/Category of intervention	Derive from name; multiple (up to 6 codes): 36.0% of projects.	99.8%
EU_cofin_rate	0.4		100.0%
benef	Finansējuma saņēmējs / Beneficiary name		100.0%
com_eu	ES finansējums / EU co-financing		99.8%
nuts2	LV00		100.0%
nuts3		Derived from postcode. For 11 entries, the NUTS-3 code was filled up with AMADEUS information.	75.2%
op	2014LV16MAOP001		100.0%
prj_descr	Projekta kopsavilkums / Operation summary		100.0%
prj_name	Projekta nosaukums / Operation name		100.0%
prj_postcode	Projekta īstenošanas vieta / Location		73.3%
prj_start	Projekta sākuma datums / Operation start date		99.6%
prj_end	Projekta beigu datums / Operation end date		99.8%
tot_elig_exp	Kopējais finansējums / Total eligible expenditure		99.8%
type_f	ERDF		100.0%

<sup>43</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Malta

<b>Source:</b>	<a href="http://www.fonds-europeens.public.lu/fr/projets-cofinances/index.php">http://www.fonds-europeens.public.lu/fr/projets-cofinances/index.php</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	2
<b>Number of operational programmes (excl. INTERREG):</b>	2
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	100
Share of R&I-related projects:	3.0%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 307,897,095.0
Share of R&I-related funds:	18.7%
<b>Share of total committed ERDF amount<sup>44</sup>:</b>	80.1%
<b>Data status:</b>	22.05.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Category of Intervention Kategorija tal-Intervenzjoni		100.0%
EU_cofin_rate	Co-financing Rate [European Regional Development Fund] ** Rata ta' Ko-finanzjament [Fond Ewropew għall-Iżvilupp Reġjonali] **		100.0%
benef	Name of Beneficiaries Isem il-Benefiċjarji		98.0%
com_eu			0.0%
nuts2	LU00		100.0%
nuts3		Derived from postcode.	99.0%
op			100.0%
prj_descr	Project Description Deskrizzjoni tal-Proġett		100.0%
prj_name	Name of Operation Isem tal-Operazzjoni		99.0%
prj_postcode	Postcode Kodiċi Postali		99.0%
prj_start	Operation Start Date Data tal-Bidu tal-Operazzjoni		99.0%
prj_end	Operation End Date Data tat-Tmiem tal-Operazzjoni		100.0%
tot_elig_exp	Amounts Committed Ammonti impenjati		100.0%
type_f	ERDF		100.0%

<sup>44</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## The Netherlands

<b>Source:</b>	<a href="https://www.europaomdehoek.nl/en/about-europa-om-de-hoek/">https://www.europaomdehoek.nl/en/about-europa-om-de-hoek/</a> ; <a href="https://www.kansenvoorwest2.nl/nl/projecten/">https://www.kansenvoorwest2.nl/nl/projecten/</a> ; <a href="https://www.stimulus.nl/opzuid/projecten-2/">https://www.stimulus.nl/opzuid/projecten-2/</a> ; <a href="http://www.op-oost.eu/Over-OP-Oost/Overzicht-beschikte-projecten.html">http://www.op-oost.eu/Over-OP-Oost/Overzicht-beschikte-projecten.html</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	4
<b>Number of operational programmes (excl. INTERREG):</b>	4
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	670
Share of R&I-related projects:	87.6%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 323,354,493.0
Share of R&I-related funds:	74.6%
<b>Share of total committed ERDF amount<sup>45</sup>:</b>	63.4%
<b>Data status:</b>	26.07.2018 – 04.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Steunverlening/Categorie omschrijving	steunverlening	98.1%
EU_cofin_rate	Medefinancieringspercentage van de Unie/EFRO-bijdrage %		99.4%
benef	Begunstigde		100.0%
com_eu	EU-subsidie/EFRO		99.9%
nuts2	Provincie / Province (2014NL16RFOP003)	Derived from nuts3.	99.1%
nuts3		Derived from postcode, or city (2014NL16RFOP003). For 1 entry, nuts3 was filled up with AMADEUS information.	99.1%
op	2014NL16RFOP001, 2014NL16RFOP002, 2014NL16RFOP003, 2014NL16RFOP004		100.0%
prj_descr	Samenvatting/Projectbeschrijving		99.1%
prj_name	Titel van het project/Projectnaam/ Projecttitel		100.0%
prj_postcode	Postcode		85.7%
prj_start	Begindatum/Startdatum		99.1%
prj_end	Einddatum		99.1%
tot_elig_exp			0.0%
type_f	Fonds		100.0%

<sup>45</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Poland

<b>Source:</b>	<a href="https://www.funduszeuropejskie.gov.pl/strony/o-funduszach/projekty/lista-projektow/lista-projektow-realizowanych-z-funduszy-europejskich-w-polsce-w-latach-2014-2020/">https://www.funduszeuropejskie.gov.pl/strony/o-funduszach/projekty/lista-projektow/lista-projektow-realizowanych-z-funduszy-europejskich-w-polsce-w-latach-2014-2020/</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	20
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	26,858
Share of R&I-related projects:	38.6%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 30,743,373,823.0
Share of R&I-related funds:	28.9%
<b>Share of total committed ERDF amount<sup>46</sup>:</b>	76.4%
<b>Data status:</b>	02.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Obszar wsparcia projektu/ Area of project intervention		100.0%
EU_cofin_rate	Poziom unijnego dofinansowania w procentach (w %)/ Union co-financing rate (%)		100.0%
benef	Nazwa beneficjenta/ Beneficiary name		100.0%
com_eu	Wartość unijnego dofinansowania (w zł, dla projektów EWT w euro)/Amount of EU co-financing (PLN, for ETC projects EUR)		100.0%
nuts2	Miejsce realizacji projektu/ Project location	Derived from region name ( <i>voivodeship</i> ); multiple (up to 21 regions): 0.9% of all projects. For 400 entries, nuts2 was filled up with AMADEUS information.	98.4%
nuts3	Miejsce realizacji projektu/ Project location	Derived from region name ( <i>powiat</i> ) <sup>47</sup> ; multiple (up to 45 regions): 3.1% of all projects. For 585 entries, nuts3 was filled up with AMADEUS information.	97.4%
<b>nuts 2&lt;&gt;3</b>	<b><i>Is filled if nuts3 is not located within nuts2 (and nuts3 is filled).</i></b> <b><i>NOTE: Operation amounts are not split to multiple NUTS-3 regions in order to ensure consistency between data files.</i></b>		5.5%
op	Program/ Programme		100.0%

<sup>46</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>47</sup> Reported counties (*powiats*) match NUTS-3 names in around a third of cases, otherwise it represents the LAU1 level which can be matched with NUTS-3 regions in most cases (<https://ec.europa.eu/eurostat/web/nuts/local-administrative-units>). However, on the one hand, there are several *powiats* with the same name in different NUTS-3 (and NUTS-2) regions and, on the other hand, also in other cases the NUTS-3 region reported does not match the reported NUTS-2 region (or there are multiple NUTS-3 regions belonging to different NUTS-2 regions but only one NUTS-2 region reported). Therefore, the NUTS-3 level is not fully reliable, and to ensure consistency between the modified versions of the file we do not split financial amounts by (number of multiple) NUTS-3 regions in Poland.

## Poland (contd.)

<b>Variable</b>	<b>Original column name or fixed value</b>	<b>Manipulation</b>	<b>Coverage</b>
prj_descr	Skrócony opis [do 2000 znaków] / Project summary		100.0%
prj_name	Tytuł projektu/ Project name		100.0%
prj_postcode	-		0.0%
prj_start	Data rozpoczęcia realizacji projektu/ Project start date		100.0%
prj_end	Data zakończenia realizacji projektu/ Project end date		100.0%
tot_elig_exp	Wydatki kwalifikowalne (w zł, dla projektów EWT w euro)/ Total eligible expenditure (PLN, for ETC projects EUR)	Exchange rate EUR-PLN: 4.1546.	100.0%
type_f	ERDF		100.0%

## Portugal

<b>Source:</b>	<a href="https://www.portugal2020.pt/Portal2020/OperacoesAprovadas">https://www.portugal2020.pt/Portal2020/OperacoesAprovadas</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	9
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	18,431 unique projects (according to prj_nr)/23,529 entries (rows) <sup>48</sup>
Share of R&I-related projects:	31.4% of unique projects/29.1% of entries
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 9,120,654,939.0
Share of R&I-related funds:	25.7%
<b>Share of total committed ERDF amount<sup>49</sup>:</b>	84.6%
<b>Data status:</b>	31.03.2019

Variable	Original column name or fixed value	Manipulation	Coverage (among entries)
Code_Col	Code of category of intervention		66.4%
EU_cofin_rate	% Cofinanciamento   % EU funding	Format: pp/100.	97.2%
benef	Nome do Beneficiário   Beneficiary Name		100.0%
com_eu	Fundo Total Aprovado   Total Approved Fund[€]		100.0%
nuts2		Derived from region name; multiple (up to 5 regions): 3.8% of all entries.	100.0%
nuts3		Derived from region name; multiple (up to 17 regions): 4.7% of entries. For 23 entries, the NUTS-3 code was filled up with AMADEUS information.	96.5%
op	Programa Operacional   Operational Programme		100.0%
prj_descr	Resumo   Summary		50.5%
prj_name	Nome da Operação   Operation Name		100.0%
prj_postcode			0.0%
prj_start	Data Início   Start Date		100.0%
prj_end	Data Fim   Finish Date		97.2%
tot_elig_exp	Despesas Elegíveis Totais Atribuídas à Operação   Total Eligible Expenditure Allocated to the Operation[€]		100.0%
type_f	FEEI   ESI Fund		100.0%

<sup>48</sup> There are four possible true duplicates (flagged in duplicates\_prob) for which the same prj\_nr is reported in the list of operations. The information is the same too, apart from the location information and the EU co-financing rate as well as com\_eu. However, it could still be the case that the tot\_elig\_exp is counted twice (this would account for EUR 340,339.7 of total eligible expenditure).

<sup>49</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Romania

<b>Source:</b>	<a href="http://www.fonduri-ue.ro/fluxuri-financiare">http://www.fonduri-ue.ro/fluxuri-financiare</a>
<b>Number of lists of operations:</b>	4
<b>Number of operational programmes (excl. INTERREG):</b>	4
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	4265 (1 duplicate <sup>50</sup> )
Share of R&I-related projects:	5.3%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 13,095,575,210.0
Share of R&I-related funds:	4.4%
<b>Share of total committed ERDF amount<sup>51</sup>:</b>	122.1% <sup>52</sup>
<b>Data status:</b>	31.12.2018

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Area of intervention		95.4%
EU_cofin_rate	EU_cofin_rate	2014R016RFTA001: set to 0.85 (= com_eu / tot_elig_exp).	99.9%
benef	Beneficiary name		100.0%
com_eu	Eligible value of the project (LEI)   Financing   EU Funds		99.8%
nuts2	nuts2	Derived from name of region; multiple (up to 12 regions): 0.8% of projects.	98.6%
nuts3	nuts3	Derived from name of region; multiple (up to 42 regions): 1.5% of projects.	98.2%
op			100.0%
prj_descr	Project summary		99.3%
prj_name			100.0%
prj_postcode			0.0%
prj_start	Start date		93.3%
prj_end	End date		86.2%
tot_elig_exp		Eligible value of the project (EU Funds + National budget + Beneficiary private contribution). Exchange rate EUR-RON: 4.4624.	100.0%
type_f	ERDF, ERDF_CF (2014R016M10P001)		100.0%

<sup>50</sup> There is one project (not R&I-related) that seems to be reported twice (two lines contain exactly the same information). The double reporting accounts for EUR 3,839,349.0 of total eligible expenditure (EUR 3,073,623.3 com\_eu).

<sup>51</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>52</sup> One of the four operational programmes (large infrastructure OP) is co-financed by the ERDF and the CF. If one applies the relation between ERDF and CF funding within 2014R016M10P001 (24.8%) to com\_eu, the sum of com\_eu is 7,055,852,300.2EUR) amounts to 65.8% of the total ERDF amount committed in Romania for 2014-2020.

## Sweden

<b>Source:</b>	<a href="http://www.jordbruksverket.se/etjanster/etjanster/etjansterforstod/sokmottagareavstod/sokmottaga-reavstodinomlokaltledutveckling.106.664a4f4815e282ceb7640b7.html">http://www.jordbruksverket.se/etjanster/etjanster/etjansterforstod/sokmottagareavstod/sokmottaga-reavstodinomlokaltledutveckling.106.664a4f4815e282ceb7640b7.html</a> (2014SE16M2OP001); <a href="https://projektbank.tillvaxtverket.se/projektbanken2020#page=76150736-06ea-4f56-b3cf-a2503d23d9ff">https://projektbank.tillvaxtverket.se/projektbanken2020#page=76150736-06ea-4f56-b3cf-a2503d23d9ff</a> ; additional information requested by e-mail
<b>Number of lists of operations:</b>	2
<b>Number of operational programmes (excl. INTERREG):</b>	10
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	941 (2 duplicates <sup>53</sup> )
Share of R&I-related projects:	53.8%
<b>Sum of committed ERDF co-funding amount (actual, as reported) and maximum EU co-funding amount (2014SE16M2OP001):</b>	EUR 829,808,152.0
Share of R&I-related funds:	65.4%
<b>Share of total committed ERDF amount<sup>54</sup>:</b>	88.8% <sup>55</sup>
<b>Data status:</b>	17.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col		No Col but investment priority (apart from 2014SE16M2OP001) used to assign Code_Col and R_I. Coverage: 82.5%.	0.0%
EU_cofin_rate	Unionens medfinansieringsgrad	Format: pp/100.	17.5%
benef	Kundnamn (beneficiary name)		100.0%
com_eu		(not for 2014SE16M2OP001)	82.5%
nuts2		Derived from name, or nuts3.	78.6%
nuts3		2014SE16M2OP001: Derived from postcode. For 205 entries, nuts3 was filled up with AMADEUS information.	26.4%
op			100.0%
prj_descr	Beskrivning av ansökan		17.5%
prj_name	Namn på ansökan		100.0%
prj_postcode	Postnr (post code)		17.5%
prj_start	Ankomstdatum (start date)		17.5%
prj_end	Slutdatum (end date)		17.5%
tot_elig_exp	Totalt beslutade utgifter/Total godkända (stödb.) kostnader	Exchange rate EUR-SEK: 8.8566.	100.0%
type_f	ERDF		100.0%

<sup>53</sup> There are two projects (not R&I-related) that seem to be reported twice (two lines contain exactly the same information; without location information). The double reporting accounts for EUR 432,348.3 of total eligible expenditure.

<sup>54</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

<sup>55</sup> The operational programme 2014SE16M2OP001 is co-financed by the ERDF and ESF. In contrast to Bulgaria and Croatia, however, the co-financing fund can be identified in the list of operations (type\_f).

## Slovenia

<b>Source:</b>	<a href="http://www.eu-skladi.si/sl/seznam-projektov">http://www.eu-skladi.si/sl/seznam-projektov</a> , additional information requested by e-mail
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	1
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	2224
Share of R&I-related projects:	51.2%
<b>Sum of total eligible expenditure x EU co-financing rate per project (i.e. maximum EU co-financing amount):</b>	EUR 1,052,961,929.0
Share of R&I-related funds:	45.7%
<b>Share of total committed ERDF amount<sup>56</sup>:</b>	74.3%
<b>Data status:</b>	29.05.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Domena ukrepa 1/Code of intervention	Derived from name.	98.0%
EU_cofin_rate	Stopnja sofinanciranja Unije (po prednostnih oseh)/union co-financing rate, as per priority axis	Format: pp/100.	100.0%
benef	Ime upravičenca/Beneficiary name		100.0%
com_eu			0.0%
nuts2		Derived from nuts2.	100.0%
nuts3	Statistična regija/Statistical region	Derived from name.	100.0%
op	2014SI16MAOPO01		100.0%
prj_descr	Povzetek operacije/Operation summary		100.0%
prj_name	Ime operacije/Operation name		100.0%
prj_postcode	Poštna številka/ Operation postcode		100.0%
prj_start	Datum začetka operacije/ Operation start date		100.0%
prj_end	Datum zaključka operacije/ Operation end date		100.0%
tot_elig_exp	Skupni upravičeni izdatki, dodeljeni operaciji/Total eligible expenditure allocated to the operation		100.0%
type_f	Sklad/Fund		100.0%

<sup>56</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## Slovakia

<b>Source:</b>	<a href="http://www.partnerskadohoda.gov.sk/zoznamy-projektovlist-of-operations/">http://www.partnerskadohoda.gov.sk/zoznamy-projektovlist-of-operations/</a>
<b>Number of lists of operations:</b>	1
<b>Number of operational programmes (excl. INTERREG):</b>	6
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	4009 <sup>57</sup>
Share of R&I-related projects:	6.2%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 2,939,827,288.0
Share of R&I-related funds:	10.0%
<b>Share of total committed ERDF amount<sup>58</sup>:</b>	40.5%
<b>Data status:</b>	10.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Oblasti intervencie / Intervention field - name	Derived from name.	99.9%
EU_cofin_rate	Miera spolufinancovania zo strany Únie / Expenditures allocated to the selected operation - Union support	Format: pp/100.	99.9%
benef	Názov príjemcu / Beneficiary name		99.9%
com_eu	Príspevok Únie / Expenditures allocated to the selected operation - Union support		99.9%
nuts2		Derived from nuts2.	99.9%
nuts3		Derived from city name via postcode.	99.9%
op	Program / Programme		99.9%
prj_descr	Opis projektu / Operation summary		99.9%
prj_name	Názov projektu / Operation name		100.0%
prj_postcode			0.0%
prj_start	Začiatok / Operation start date		99.9%
prj_end	Koniec / Operation end date		99.9%
tot_elig_exp	Celkové nárokovateľné výdaje pridelené na projekt / Total eligible expenditure allocated to the selected operation		99.9%
type_f	ERDF		100.0%

<sup>57</sup> There is one possible true duplicate (flagged in `duplicates_sure` because of its large project amount) for which the same information is reported, apart from the location information and the EU co-financing rate as well as `com_eu`. However, it could still be the case that the `tot_elig_exp` is counted twice (this would account for EUR 34,812,294.5 of total eligible expenditure). For six projects in the list, only a project name is reported.

<sup>58</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## United Kingdom

### Source:

<https://www.gov.uk/government/publications/european-structural-and-investment-funds-useful-resources> (England);  
<https://gov.wales/funding/eu-funds/2014-2020/approved-projects/?lang=en> (Wales);  
<http://www.eufunding.gi/index.php?url=beneficiaries#> (Gibraltar);  
<https://www.gov.scot/publications/esif-operations-funding/> (Scotland);  
<http://www.jobsandgrowthni.gov.uk/> (Northern Ireland)

<b>Number of lists of operations:</b>	6: Lists of operations cover 5 <sup>59</sup>
<b>Number of operational programmes (excl. INTERREG):</b>	5
<b>Number of ERDF co-funded projects (excl. INTERREG):</b>	1347
Share of R&I-related projects:	50.4%
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 3,686,146,744.0
Share of R&I-related funds:	45.2%
<b>Share of total committed ERDF amount<sup>60</sup>:</b>	63.0%
<b>Data status:</b>	13.11.2018-11.09.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col	Type and focus of support (*Category of intervention)*	Derived from name.	96.7%
EU_cofin_rate	% of project funded by EU/Union co-financing rate	Format: pp/100.	99.9%
benef	Recipient of funds/Recipient organisation1/Leading partner		100.0%
com_eu	ERDF/ESF investment £/EU.Fundingm	Exchange rate EUR-GBP: 0.83106.	100.0%
nuts2	Categories of Intervention   NUTS Area (2014UK16RFOP004)	Derive from OP, or from nuts3; multiple (up to 2 regions): 2 projects.	96.4%
nuts3		Derived from postcode and city; multiple (up to 2 regions): 1.6% of projects.	86.6%
op			100.0%
prj_descr	Summary of project (max 100 words)		96.8%
prj_name	Name of Project		100.0%
prj_postcode	Location (postcode)		88.9%
prj_start	Start date		100.0%
prj_end	End date		100.0%
tot_elig_exp		Exchange rate EUR-GBP: 0.83106.	43.3%
type_f	Type of fund/Programme		100.0%

<sup>59</sup> OP that is covered: ERDF Gibraltar (2014UK16RFOP002).

<sup>60</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.

## INTERREG: KEEP database

<b>Source:</b>	<a href="https://www.keep.eu/">https://www.keep.eu/</a>
<b>Number of lists of operations:</b>	1
<b>Number of INTERREG operational programmes:</b>	87 (58 covered)
<b>Number of projects (with lead partner in EU-28):</b>	3232 unique projects (according to prj_nr)/17,475 entries (rows)
Share of R&I-related projects:	31.0% of unique projects /36.1% of entries
<b>Sum of committed ERDF co-funding amount (actual, as reported):</b>	EUR 3,938,985,625.0
Share of R&I-related funds:	28.1%
<b>Share of total committed ERDF amount<sup>61</sup>:</b>	41.9%
<b>Data status:</b>	17.06.2019

Variable	Original column name or fixed value	Manipulation	Coverage
Code_Col			0.0%
R_I		Derived from thematic objective(s) or, if not reported, specific objective in KEEP database (see below).	100.0%
EU_cofin_rate			0.0%
benef	Lead Partner	All project partners in EU-28 are included in the dataset.	100.0%
com_eu	EU Funding/ ERDF Budget	Filled with „EU Funding“ if type_f = "ERDF", or with ERDF Budget if type_f = "ERDF and Others". Amount is split by number of partners involved (including those located outside of EU-28).	83.4%
nuts2	NUTS2		99.9%
nuts3	NUTS3		99.9%
<b>nuts2&lt;&gt;3</b>		<b>Is filled if nuts3 is not located within nuts2 (and nuts3 is filled).</b>	0.9%
op	Programme		100.0%
prj_descr	Description EN		95.7%
prj_name	Project Name		96.6%
prj_postcode			0.0%
prj_start	Project start		100.0%
prj_end	Project end		100.0%
tot_elig_exp			0.0%
type_f	Co-Financing sources		100.0%

**Definition of R&I-relatedness:** based on the reported thematic objective(s) (or specific objective for 2014 - 2020 INTERREG VB North Sea): New products and services, Clustering and economic cooperation, Knowledge and technology transfer, ICT and digital society, Scientific cooperation, Innovation capacity and awareness-raising, SME and entrepreneurship, Green technologies.

<sup>61</sup> See <https://cohesiondata.ec.europa.eu/dataset/ESIF-Regional-Policy-budget-by-country-2014-2020/fift-a67j>.



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