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COMMISSION STAFF WORKING DOCUMENT

EVALUATION

of the

EUROPEAN UNION SOLIDARITY FUND 2002-2017

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Table of Contents

1	INTRO	DDUCTION	3
2	ВАСК	GROUND TO THE INTERVENTION	4
	2.1	DESCRIPTION OF THE INTERVENTION AND ITS OBJECTIVES	4
		BASELINE AND POINTS OF COMPARISON	
3	IMPLE	EMENTATION / STATE OF PLAY	.11
	3.1	DESCRIPTION OF THE CURRENT SITUATION	.11
4	METH	OD	.17
	4.1	SHORT DESCRIPTION OF METHODOLOGY	.17
		LIMITATIONS AND ROBUSTNESS OF FINDINGS	
5	ANAL	YSIS AND ANSWERS TO THE EVALUATION QUESTIONS	.20
		EFFECTIVENESS	
	5.1.1 5.1.2	The EU Solidarity Fund is effective in responding to requests for aid for major disasters The approval rate of support for regional disasters increased from 31% to 85% due to	. 21
		er admissibility criteria introduced by the 2014 reform	
	5.1.3 5.1.4	Budgetary flexibility proved effective in addressing exceptional major contingencies The capacity of the applicant country to provide complete and timely estimates for total	. 22
		damage impacts on the effectiveness of EUSF support	24
	5.1.5	EUSF support is fully used in most cases, with the largest share (58%) reported for	¬
	tempo	rary accommodation and rescue	. 28
	5.1.6	Effective implementation is contingent upon good governance and institutional coordination	on.
	5.1.7	The scope of eligible operations is not fully aligned with the 'building back better' principal	le
	5.1.8	A flexible eligibility period helps alleviate time constraints in implementation	.33
	5.1.9	Advance payment could help alleviate budget constraints for rapid response	
	5.1.10		_
	5.2	EFFICIENCY	
	5.2.1	Time needed to mobilise the Fund is reduced by 12%	
	5.2.2	The quality of reported data and administrative factors impact on the duration of the closu	re
	-	SS	
	5.2.3	Administrative burden and costs are considered proportionate in countries with an effective	
		n for implementing the Fund.	
		RELEVANCE	.43
	5.3.1 face o	EUSF support is appreciated as relevant for the post-disaster needs and welcomed in the fight financial constraints	11
	5.3.2	The EUSF experience is likely to benefit policy learning and development for disaster risk gement in the EU context	
	`	COHERENCE	
	5.4.1	Synergies with ESI Funds are significant in terms of the policy framework and investments	,
	for pr	eparedness, prevention and management of disaster risks	.47

	5.4.2	EUSF's management can be better integrated both in national systems and in the	governance
	struci	ture of ESI Funds	51
	5.4.3	There is scope for further streamlining the reporting on preparedness and preven	ition
	measi	sures for disaster risks in the implementation reports	52
	5.4.4	Immediate response to disasters was provided through UCPM in 26% of situation	ns of natural
	disasi	ters supported also by EUSF during 2002-2016	53
5	5.5	EU ADDED VALUE	55
5	5.6	EU SOLIDARITY	57
	5.6.1	EUSF contributed to the post-disaster response efforts in over 80 cases of signific	cant
	disasi	ters in 23 EU Member States and 1 accession country	57
	5.6.2	Close to 60% of the people in the EU are broadly aware of the EU Solidarity Fur	ıd, but only
	15%	are likely to have specific accurate knowledge of the Fund	59
	5.6.3	The media image of EUSF support in case studies is predominantly factual or pos	sitive 61
6	CONC	CLUSIONS	64
REF	ERENC	ES:	67
ANI	NEX 1: I	PROCEDURAL INFORMATION	69
INA	NEX 2: I	LIST OF EUSF CASES FOR DISASTERS DURING 2002-2017	70
ANI	NEX 3: I	EVALUATION QUESTIONS	73
INA	structure of ESI Funds		74
A N. I	NEV E. I		
AIVI	NEX 5: I	DESCRIPTIVE STATISTICS FOR DATA PRESENTED IN THE TEXT	75

1 Introduction

Solidarity is a core value upon which the Union is built, and the European Union Solidarity Fund (EUSF) is a budgetary instrument designed to support EU solidarity by contributing to post-disaster relief in Member States and accession countries confronted with devastating natural disasters.

The main objective of this evaluation is to assess the implementation and performance of EUSF over the period 2002-2017, and to identify the scope for further policy learning.

The specific objectives of the evaluation include the following:

- (1) Assess the extent to which the Fund meets its overall strategic and operational objectives of supporting EU solidarity and contributing with financial aid to the post-disaster response in affected countries.
- (2) Analyse the effectiveness and efficiency of the approval, implementation and closure (where applicable) of all EUSF interventions since the Fund's establishment in 2002 and until end-2017.
- (3) Gather further evidence on the Fund's implementation and performance based on case studies, including an analysis of the role of the reformed EUSF in inspiring further policy developments in national systems for disaster risk management.
- (4) Analyse public awareness of the EU's interventions in disaster situations with the EU Solidarity Fund, and the Fund's media image.
- (5) Analyse the synergies between EUSF and other EU policy instruments within the EU wider framework for preparedness, prevention and management of disaster risks.
- (6) Analyse stakeholders' perceptions of the EU added value of EUSF and their overall satisfaction with the Fund.

The evaluation covers all 24 beneficiary countries which received EUSF support during the reference period, including 23 Member States and 1 accession country, and was carried out between September 2017 and March 2019.

This report is structured as follows. Section 2 provides a description of the EUSF and its main features, discussing also the changes introduced with the Fund's revision in 2014. This section also explains the initial points of reference considered in the design of the evaluation. Section 3 summarises the data on the Fund's implementation between 2002 and 2017, and Section 4 presents the methodology of the evaluation, main challenges encountered, and a brief assessment of the robustness of the analysis. Section 5 presents the evaluation findings and the supporting evidence for each of the six evaluation criteria, and Section 6 concludes.

2 BACKGROUND TO THE INTERVENTION

2.1 Description of the intervention and its objectives

The European Union Solidarity Fund (EUSF) is a policy instrument created to support EU interventions in situations of significant disasters in EU Member States and accession countries, and it can be mobilised in the event of natural events such as floods, earthquakes, volcanic eruptions, forest fires, drought and other natural disasters.

EUSF was set up in response to the extraordinary flooding disaster that hit central Europe during summer 2002 - a catastrophic event of exceptional proportions. People lost their lives, and the direct damage caused in Austria, Czechia and Germany, and a few weeks later in France, alone amounted to over EUR 15 billion. The socio-economic infrastructure of entire regions was disrupted and their natural and cultural heritage was damaged¹.

Within two weeks after the disaster, Member States met at the 'flood summit' in Berlin where on 18 August 2002 they decided to create a new instrument with mobilisation procedures specifically adapted to respond to the consequences of major catastrophes by rapidly mobilising new resources. As a result, Council Regulation (EC) 2012/2002 establishing the European Union Solidarity Fund was adopted on 11 November 2002².

The solidarity support from the Fund is complementary to the efforts of the countries receiving it and is used to cover part of the public expenditure incurred in response to the disaster. The Fund can be used for emergency relief actions in areas affected by a significant natural disaster, regardless of the country's status under the Structural Funds. The Fund is designed in such a way that the amount of support is related to the size of the disaster and, in principle, it also takes into account the country's capacity to cope on its own with the significant financial burden triggered by the disaster.

Action under EUSF is to focus on: (i) restoring damaged essential infrastructure in the fields of energy, water and waste water, telecommunications, transport, health and education, (ii) operations for temporary shelter and rescue, (iii) securing preventive infrastructure and protecting cultural heritage, and (iv) cleaning-up of disaster-stricken areas.

The Fund can be mobilised upon an application from the concerned country, provided that the disaster event has a dimension justifying intervention at European level. If that is the case, once the application has been assessed, the Commission proposes the Fund's mobilisation and the amount of aid to the European Parliament and the Council. The two arms of the budgetary authority decide together on the Fund's activation and the budgetary appropriations for the EUSF grant.

The EUSF financial aid is implemented through shared management in the case of the Member States, and indirect management for EU accession countries. In both situations, the beneficiary country is responsible for coordinating the Fund's financial contribution with eligible types of operations, and with assistance from the European Structural and Investment Funds (ESI Funds), the European Investment Bank, and other financing instruments.

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The creation of the Fund is described in detail in COM(2004) 397.

² Council Regulation (EC) No 2012/2002 of 11 November 2002 establishing the European Union Solidarity Fund (OJ L 311, 14.11.2002, p. 3).

Over time, as it gained experience with the Fund's mobilisation, the Commission realised that major improvements in the operation of the Fund, and in particular a better responsiveness, could be achieved by adjusting some of the provisions in the Regulation, while maintaining the rationale and the nature of the Fund. Therefore, based on its 2011 Communication on 'The Future of the EU Solidarity Fund'³, the Commission presented a proposal in mid-2013 to amend the EUSF Regulation⁴. Following the deliberations of the proposal in the Council and the European Parliament, the amended regulation for the Fund entered into force on 28 June 2014. Currently, EUSF operations are regulated by Council Regulation (EC) 2002/2012 as amended by Regulation (EU) 661/2014⁵.

The features of the Fund revised by the amending regulation adopted in 2014 are listed in Box 2.1.1 below. In the following paragraphs we explain the most important changes introduced by the 2014 reform, namely a new definition for regional disasters, a longer period for submitting an application, the introduction of advance payments, the merging of the legal acts adopted by the Commission for the awarding of a EUSF grant and its implementation, the extension of the implementation period, and the link established by the legislator between EUSF and the wider context of disaster risk management in the EU.

A significant change in the Fund's operational basis is the introduction of a clear definition for regional disasters. Before 2014, the Fund could be mobilised for regional disasters only under exceptional circumstances when the disaster 'affected the major part of its [region's] population, with serious and lasting repercussions on living conditions and the economic stability of the region.' As it turned out, this definition posed significant challenges for the applicant countries, as they found it difficult to produce, within 10 weeks from the disaster, evidence which would prove serious and lasting repercussions on living conditions and the economic stability of the region. In fact, as it was confronted often with situations in which it had to reject the applications for regional disasters due to the lack of operational applicability of the admissibility criterion, the Commission realised early in the process that this was a critical deficiency of the Fund⁶.

The revision introduced in 2014 addressed this issue by clarifying the definition of regional disasters in terms of a threshold for total direct damage of 1.5% of regional GDP for all eligible NUTS2 regions, except for the outermost regions for which the threshold is established at 1% of the regional GDP.

³ COM(2011) 613.

⁴ COM(2013) 522.

Regulation (EU) No 661/2014 of the European Parliament and of the Council of 15 May 2014 amending Council Regulation (EC) 2012/2002 establishing the European Union Solidarity Fund (OJ L 189, 27.6.2014, p. 143).

⁶ See, for instance, COM(2004) 397 and COM(2006) 444.

Box 2.1.1 Revision of the EU Solidarity Fund in 2014

Amending Regulation (EU) 661/2014 introduced the following changes for the mobilisation and implementation of the Fund:

- 1) EUSF can be mobilised only for natural disasters. Previously, the Regulation provided for mobilisation mainly for natural disasters.
- 2) The threshold for major disasters is defined as damage estimated to be either EUR 3 billion in 2011 prices or 0.6% of gross national income (GNI), whichever is lower. Previously, the reference prices used for the absolute threshold were current prices.
- 3) 'Regional natural disasters' are defined as any natural disaster resulting in a region at NUTS2 level of an eligible State, with direct damage in excess of 1.5% of that region's GDP. For outermost regions, the threshold for regional natural disasters is set at 1% of the region's GDP.
- 4) The regulatory interpretations for 'restoring working order' and 'temporary accommodation' are clarified.
- 5) Value added tax (VAT) is not eligible unless it is non-recoverable under the national legislation.
- 6) The eligibility of technical assistance is defined for costs related to the preparation and implementation of EUSF projects, including costs with essential technical experts.
- 7) Following the decision of the European Parliament and the Council, the Commission adopts a decision awarding the financial contribution from EUSF by means of an implementing act. Previously, the Commission adopted a grant decision, and concluded an implementation agreement.
- 8) The regulatory deadline for applying for EUSF support was extended from 10 to 12 weeks, with a special provision for progressively unfolding natural disasters such as droughts. In addition, the applicants are required to provide information in the application on the implementation of Union legislation for disaster risk prevention and management of disaster risks similar to the one concerned by the application.
- 9) Commission guidance is provided on how to access and implement the Fund effectively.
- 10) A time period of 6 weeks is introduced for the Commission assessment of complete applications, excluding the time needed for translation.
- 11) Advance payments for eligible applicants are introduced. The amount of the advance is 10% of the EUSF support anticipated but not higher than EUR 30 million.
- 12) A provision is introduced for the eventuality of a rejection of an application or a reduction in the amount of support for Member States subject to infringement proceedings and for which the Court of Justice of the EU has delivered a final judgment that the Member State has failed to implement Union legislation on disaster risk prevention and management directly linked to the nature of the disaster suffered.
- 13) The length of the implementation period is increased from 12 to 18 months.
- 14) Additional information is required in the implementation report for issues related to disaster risk management for disasters similar in nature to the one supported by EUSF.

At the same time, in 2014 the annual budgetary ceiling for resources available for EUSF was reduced from EUR 1 billion in current prices to EUR 500 million in 2011 prices. In addition, the Fund was given more budgetary flexibility with it now being possible to carry forward in the following year the resources not allocated as financial aid in the current year.

An important change in 2014 was the decision to extend the regulatory deadline for applying for financial support under the Fund from 10 to 12 weeks so that the applicant countries could have more time to estimate the total direct damage caused by the disaster. The amended Regulation also introduced the provision enabling the rejection of an application or the reduction in the support proposed in cases of serious infringements of Union legislation by Member States on disaster risk management for disaster events similar in nature to the one for which the application is made. For this purpose, the applicant countries are required to include in their application information about compliance with relevant Union legislation.

Also, the 2014 reform included the possibility to request an advance payment when submitting the main application for financial assistance. The intention of the legislator in this case was to expedite disbursement from the Fund at least partly until the completion of the decision-making process for mobilising the full support.

Further efforts to accelerate the process leading to the actual deployment of the EUSF support were also made with the streamlining of the legislative process. Before 2014, once the European Parliament and the Council had decided on mobilisation and budgetary appropriations for EUSF support, the Commission had to adopt two legal acts implementing the decisions of the budgetary authority. The first act was the grant decision awarding the support to the beneficiary country, and the second was the implementation agreement concluded with the beneficiary country and including the conditions for implementation and the types of operations to be supported. Following the 2014 amendment, the two legal acts were merged into one implementing act which includes all relevant information for implementing the support. For accession countries, the requirement that two acts (implementing and delegating agreements) have to be adopted remains.

For implementation, the main changes are the longer implementation period from 12 to 18 months and the new requirement for the beneficiary country to report also on action plans and preventive and mitigation measures taken for disaster risks similar to the disaster addressed by EUSF.

As for the resources available for the EU Solidarity Fund, the Fund operates on the basis of an annual budgetary ceiling. Before 2014, the annual budgetary ceiling available for EUSF was EUR 1 billion euro in current prices. This budgetary ceiling was subsequently reduced in 2014 to EUR 500 million in 2011 prices⁷. Except for EUR 50 million annually entered in the budget for advance payments, these resources are not in the EU budget, but rather mobilised as needed following the mobilisation decision of the European Parliament and the Council.

On the basis of the Fund's regulatory framework, we identified its intervention logic in terms of strategic and operational objectives, types of operations, as well as outputs, impacts and expected results. This intervention logic is illustrated in Figure 2.1.1.

For example, the EUR 500 million in 2011 prices amounted to EUR 531 million in current prices in 2014.

EU solidarity with the population in the areas affected **National factors** Contribution to post disaster efforts for return to normal living conditions National systems for **EXPECTED IMPACTS** disaster risk management **EU Solidarity** Reduction of the pressure on national budgets STRATEGIC Resilience to Other EU policy **OBJECTIVE** disaster risks Support EU Solidarity Union legislation, UCPM, ESI Funds Stimulate follow up action plans and measures for disaster risk management OUTPUTS **OPERATIONS** INPUTS Securing infrastructure infrastructure restored Temporary commodation and rescue Assist countries for population Advance and final payments for EUSF grant, covering part of eligible public expenditure Secured infrastructure, preventative infrastructure and protected cultural cultural heritage heritage Clean up of disaster Cleaning up of affected areas

Figure 2.1.1 Intervention logic of the European Union Solidarity Fund

Source: Adapted from EPRC (2018a) - Interim Report

The overriding objective of EUSF is identified as supporting the EU's solidarity with countries in distress due to significant natural disasters. From the operational perspective, the Fund aims to help the population in the disaster-stricken areas return to normal living and working conditions as soon as possible. And it does so by contributing to the financial efforts to restore essential infrastructure, ensure temporary accommodation and rescue operations for the population affected, secure preventive infrastructure, protect cultural heritage, and clean up affected areas.

The expected impacts and results refer to the extent to which the Fund meets these objectives. Furthermore, the Fund is expected to function within the EU framework for disaster risk management, in synergy with other EU policy instruments and with the national systems for disaster risk management. These issues are analysed in depth in Section 5 on evaluation findings.

2.2 Baseline and points of comparison

As the evaluation covers the entire period of implementation for the EU Solidarity Fund since its creation, there are no previous evaluation findings which could be used to establish a baseline.

Nevertheless, over the years, the European institutions and researchers in the field have on several occasions assessed the Fund. We used these results as sources of inspiration for identifying issues perceived as critical for an effective and efficient implementation of the Fund. The main findings of some of these assessments are summed up in the following paragraphs.

The Commission's annual reports on EUSF implementation to the European Parliament and the Council start with 2004 and reflect the Commission's assessments of its experience with the Fund's mobilisation over time⁸. The first report summarising implementation for 2002-2003, for instance, signals the challenges with assessing and approving regional disasters due to their definition in the regulation at the time. Subsequent reports provide accounts on a variety of aspects, such as the Fund's main objective, the eligibility of operations, and the interpretation of regulatory terms. The reports published in 2013-2014 explain the Commission's initiative to revise the Fund and the main changes introduced by the amending regulation in 2014.

The European Court of Auditors also analysed EUSF's implementation in two special reports. The first report, published in 2008, concluded that the Fund was meeting its underlying objectives of demonstrating solidarity with countries confronted with significant disasters⁹. In addition, the Court found that EUSF was efficient in terms of administrative costs with its implementation, and that the beneficiary countries were satisfied or very satisfied with their experience of the Fund. From the operational perspective, however, the Court assessed that the process of mobilising the Fund was too long, taking more than 1 year, and it also questioned the calculation of the support for regional disasters. The Court's recommendations in this report concentrated on the application process, indicating the need to further develop Commission guidance for the application process and support provided to applicant countries.

A second performance audit by the European Court of Auditors published in 2012 focused on EUSF's intervention in the L'Aquila earthquake in Italy in 2009¹⁰. In this report, the Court questioned the validity of some of the expenditure incurred for temporary accommodation as part of EUSF's implementation, and it concluded with the recommendation on the need to clarify the regulatory interpretation of temporary accommodation supported by the Fund. The report also includes recommendations to Member States to have up-to-date disaster management plans so that timely and reliable information is available on the population affected by the disaster, and to have protocols for timely and efficient emergency procurement procedures.

For sources from the European Parliament, two resolutions from 2013 and 2016 based on assessments of specific features of EUSF were analysed. The 2013 resolution notes that EUSF is 'the main instrument allowing the European Union to respond to a serious disaster occurring within Union territory or countries negotiating after their accession'11. Nevertheless, the resolution mentions also that the way in which the Fund operated needed to be improved, especially with regard to the delays in providing EUSF assistance and the frequent rejections of applications for regional disasters. In its conclusions, the European Parliament supported the Commission proposal to revise the Fund Regulation.

The second resolution of the European Parliament from 2016 also emphasised that, despite the introduction of advance payments and simplification measures by the 2014 reform, beneficiaries still faced problems with the lengthy procedures for mobilising the

See COM(2004) 397. More recent reports are available at: https://ec.europa.eu/regional_policy/index.cfm/en/funding/solidarity-fund/#4.

ECA (2008).

ECA (2012).

European Parliament (2013).

Fund¹². In this resolution, the European Parliament mentioned a number of issues, such as the increase in the rate of advance payments from 10% to 15%, and the use of indicators other than GDP (such as the human development index and the regional social progress index) for admissibility criteria, and also called for an evaluation of EUSF before the end of the current multiannual financial framework.

Additional assessments of the Fund are provided by a number of research articles¹³. The article by Hochrainer-Stigler S. et all (2017), for instance, analyses EUSF's reform in 2014. The authors emphasise that the reform was motivated by a combination of dissatisfaction with the time taken with the Fund and the complexity of the application procedure, which resulted in too many applications being rejected. While they appreciated EUSF's overall functioning, the authors were also critical of a number of its features, such as the extent to which the Fund contributes to the post-disaster relief effort in countries which have less financial capacity to cope in the short term with the burden generated by significant disasters. An additional point raised by the authors refers to the reduction of the Fund's annual budgetary ceiling, which risked being depleted quickly given the increasing frequency of natural disasters.

In sum, based on existing literature, we identified a number of critical issues for the Fund, issues which we took as a point of departure for designing the evaluation. In the analysis that follows, we explore systematically the impact of the 2014 revision on the Fund's implementation.

European Parliament (2016).

The findings of several research articles are summarised in EPRC (2018a) Interim Report.

3 IMPLEMENTATION / STATE OF PLAY

3.1 Description of the current situation

Between 2002 and 2017, the Commission assessed 126 applications from 23 Member States and 1 EU accession country for financial support for disaster events. Figure 3.1.1 presents the number of applications received by type and category of disaster. In terms of category, a major disaster is defined in terms of direct damage in excess of 0.6% of a country's GNI, or over EUR 3 billion. A regional disaster is defined in terms of direct damage in excess of 1.5% of the region's GDP (and 1% of GDP for outermost regions).

Figure 3.1.1 Number applications for EUSF support 2002-2017 (by type and category of disaster)

Note: Based on 126 applications.

forest fires

floods

Source: European Commission, monitoring data 2002-2018.

earthquakes

By far the largest number of applications were received for floods (66 application, representing 52% in total), followed by forest fires (19%). The next two largest groups in terms of number of applications are storms (12%) and earthquakes (8%). The group "Other" includes non-natural events such as explosions, oil spill, red sludge.

severe winters

droughts

volcanic

eruption

other

storms

In terms of category of disaster, more than 60% of the applications were submitted for regional disasters, while 34% of the applications correspond to major disasters. For both categories, applications for floods are predominant, representing at least half of the total number of applications for each.

In Figure 3.1.2 below, we include the distribution of the number of applications for EUSF support by country and by their status (approved, rejected or withdrawn) over the same reference period.

■ withdrawn ■ rejected ■ approved

Figure 3.1.2 Number applications EUSF support 2002-2017 (by country and status of the application)

CZ Note: Based on 126 applications.

Source: European Commission, monitoring data 2002-2018.

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These data indicate that the highest number of applications were submitted by Italy, Spain, Greece and France, while countries with the highest number of applications accepted were Italy, Greece, France, and Romania. In total, a number of 84 applications were approved by the Commission for the 24 countries over the reference period.

As for rejected applications, Spain had the highest number of applications rejected (18) out of which 7 were applications submitted simultaneously for the regional forest fires occurring in 2004). Finally, there have also been a few cases where the applicant country decided to withdraw the application, generally due to insufficient evidence for the total direct damage caused by the disaster.

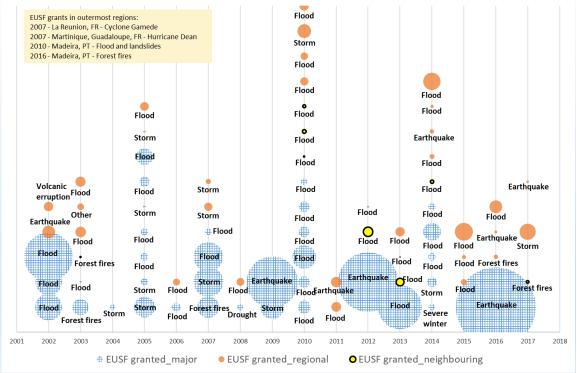
The complete lists of all EUSF cases approved and rejected for disaster events occurring between 2002 and 2017 are included in Annex 2. In the rest of this section we present summary data only for the approved cases¹⁴.

First, in the diagram in Figure 3.1.3 below, the distribution of all approved EUSF interventions is illustrated by year of disaster. Additional information is included in the diagram as follows: the colour of the bubble indicates the category of the disaster (major, regional, neighbourhood), and the text next to the bubble indicates the type of the disaster. The size of the bubble indicates the size of the EUSF grant, used here as indicative for the magnitude of the disaster.

A more detailed analysis of all cases (approved and rejected) is included in EPRC (2018a) Interim Report.

Figure 3.1.3 EU Solidarity Fund 2002-2017 (by year, category and type of disaster, and size of grant)

EUSF grants in outermost regions:



Note: Based on 84 EUSF cases approved with disaster year between 2002 and 2017

Source: European Commission, monitoring data 2002-2017

The data in Figure 3.1.3 illustrate a high unpredictability of the occurrence and magnitude of disaster events per year. For example, in terms of frequency, peak years with many disaster events for EUSF were 2010 and 2014 (with at least 10 events per year), and the calmest years in 2004, 2006 and 2011 (with 1-2 events per year).

As for the magnitude of the disaster, the earthquakes experienced in Italy in 2009, 2012 and 2016/2017 were highly devastating events, as were the floods which affected Germany in 2002 and 2013. In terms of frequency by category of disaster, EUSF is by far most frequently mobilised for major disasters (as reflected by the dominance of the blue bubbles in the diagram). Examples of EUSF interventions for the three main types of disaster events (earthquakes, floods, and forest fires) are presented in Box 3.1.1 below.

Box 3.1.1: Examples of disaster events with EUSF interventions

Earthquakes in Emilia-Romagna, Lombardy and Veneto, 2012

In May 2012, two major earthquakes hit the Italian regions of Emilia-Romagna, Lombardy and Veneto, causing 27 fatalities and major damage to buildings, infrastructure, and economy. The first earthquake struck the provinces of Modena and Ferrara in the morning of 20 May 2012, with a magnitude of 5.9 on the Richter scale. Several hundred aftershocks followed, two of which with a magnitude of 5.1, destabilising the region and causing additional fatalities due to collapsing buildings. These seismic events caused severe losses in the three regions, which have a combined population of one million people. The EU Solidarity Fund contributed EUR 670 million to the post-disaster relief efforts.

Box 3.1.1: Examples of disaster events with EUSF interventions (continued)

Floods in Serbia, 2014

In May 2014, the Republic of Serbia was confronted by severe flooding, along with much of south-eastern Europe as a result of a large cyclone affecting the area. This event caused the highest levels of rainfall seen in Serbia over the last 120 years of recorded measurements. As rivers rose several metres above their banks, entire cities were evacuated, and various towns remained inaccessible for several days due to damaged roads. The infrastructure over much of the country was disrupted, with numerous buildings damaged significantly, and a large population displaced. Overall, the impact of the flooding was estimated at 2.7 per cent of the country's GDP in direct damage, with a further 2% of GDP in economic losses especially in the energy, mining and agricultural sectors. The EU Solidarity Fund contributed EUR 60 million to the post-disaster relief efforts.

Forest fires in Attica, continental Greece, the Peloponnese and western Greece, 2007

Between June and September 2007, a series of forest fires broke out in the regions of Attica, continental Greece, the Peloponnese and western Greece. The fires reached their peak, with the most damaging blaze in August causing 65 fatalities. The fires burned an area of 2,700 square kilometres of land and damaged over 2000 buildings. With more than 120 villages destroyed or severely affected, around 100,000 people lost their homes, farms and livestock. The fires were eventually put out in early September 2007. The EU Solidarity Fund contributed EUR 90 million to the post-disaster relief effort.

Source: Case studies for Austria (EPRC 2018b), Serbia (EPRC 2018h) and Greece (EPRC 2018d).

For the 84 applications approved for EUSF support, the Commission disbursed a total of EUR 5.24 billion. The distribution of this funding by type and category of disaster is summarised in Table 3.1.1 below.

The data indicate that, while the most frequent applications are submitted and approved for floods, the largest type of disaster covered by EUSF in terms of financial resources are earthquakes. Earthquakes absorbed 46% of the total support approved over the reference period, with a large majority allocated to major events. Similarly, the next two largest types of events (floods and storms) amount to 49% of the total allocation and represent also predominantly major disasters. Overall, the major disasters represent close to 90% of the total EUSF grants approved for disasters occurring between 2002 and 2017.

Table 3.1.1: EUSF grants by type and category for disasters during 2002-2017 (amounts in million euro)

	Major	Regional	Neighbouring	Total EUSF	Share in total
	(42)	(31)	(11)	grants	support
Earthquakes (9)	2.361	61	0	2.422	46%
Floods (49)	1.686	316	52	2.054	39%
Storms (13)	393	115	0	508	10%
Forest fires (7)	196	4	5	205	4%
Volcanic eruption (1)	0	17	0	17	0,3%
Severe winter (2)	15	0	0	15	0,3%
Drought (2)	10	0	0	10	0,2%
Other (1)	9	0	0	9	0,2%
Total EUSF grants	4.670	512	57	5.240	100%
Share in total support	89%	10%	1%	100%	

Note: Total number of approved cases: 84. Number of cases by type and category of disaster in parentheses. Source: European Commission, monitoring data 2002-2018.

In the following table (Table 3.1.2), we also include the distribution of the cumulated EUSF grants by country over the same period.

Table 3.1.2: Total EUSF grants by country for disasters during 2002-2017

Country	Number cases	Years disasters	Type disasters	Categories disasters	Total EUSF grants (mill. euro)	Range grants (mill. euro)
Austria	4	2002, 2005, 2012, 2013	floods	major, regional, neighbouring	171	0.24 - 134
Bulgaria	5	2005, 2014, 2015	floods, severe winter	major, regional	39	1.98 - 10.63
Cyprus	2	2008, 2016	droughts and fires	major	15	7.30 - 7.61
Czechia	4	2002, 2010, 2013	floods	major, regional, neighbouring	161	5.11 - 129
Germany	4	2002, 2007, 2013, 2016	floods, storm	major, regional	1.003	31.48 - 444
Estonia	1	2005	storm	major	1	1.29
Spain	4	2003, 2011, 2017	forest fires, earthquake, other	regional, neighbouring	34	1.33 - 21.07
France	7	2002, 2003, 2007, 2009, 2010, 2017	floods, storms	major, regional	253	5.25 - 109.38
Greece	8	2006, 2007, 2014, 2015, 2017	earthquakes, floods, forest fires	major, regional	118	1.36 - 89.77
Croatia	5	2010, 2012, 2014	floods, severe winter	major, neighbouring	23	0.29 - 8.97
Hungary	2	2006, 2010	floods	major	38	15.06 - 22.49
Ireland	1	2009	flood	regional	13	13.02
Italy	9	2002, 2009, 2010, 2011, 2012, 2013, 2014, 2016	earthquakes, floods, volcanic eruption	major, regional	2.516	16.31 - 1196.80
Lithuania	2	2005, 2017	flood, storm	major, neighbouring	17	0.38 - 16.92
Latvia	2	2005, 2017	flood, storm	major	27	9.49 - 17.7
Malta	1	2003	flood	major	1	0.96
Poland	2	2010, 2017	flood, storm	major, regional	118	12.28 - 105.57
Portugal	4	2003, 2010, 2016, 2017	floods, forest fires	major, regional	134	3.93 - 50.67
Romania	7	2005, 2008, 2010, 2012, 2014	floods, drought and fires	major, regional, neighbouring	119	2.48 - 52.41
Serbia	1	2014	flood	major	60	60.23
Sweden	1	2005	storm	major	82	81.73
Slovenia	4	2007, 2010, 2012, 2014	floods, storm	major	48	7.46 - 18.39
Slovakia	2	2004, 2010	flood, storm	major	26	5.67 - 20.43
United Kingdon	n 2	2007, 2015	floods	major, regional	223	60.30 - 162.39

Note: Based on all 84 EUSF approved cases.

Source: European Commission, monitoring data 2002-2018.

The table includes the number of cases approved for each country, the years when the disasters occurred, the type and category of disaster covered, total EUSF grants cumulated for these events, and the range (minimum and maximum) of these grants.

The largest beneficiaries of EUSF support include Italy (with a total of EUR 2.5 billion for 9 major and regional disasters), Germany (with one billion euro for 4 major and regional disasters), followed by France (with EUR 253 million for 7 major and regional disasters), and the United Kingdom (with EUR 223 million for two major and regional disasters).

In summary, in this section we presented the main coordinates of the implementation of EU Solidarity Fund for 2002-2017, summarising the number of applications received, the number of applications approved, and the total funding allocated for the post-disaster relief. In Section 5 of the report, we analyse the extent to which the Fund fulfils its mission effectively, efficiently, and in synergy with other policy instruments and with the national systems. We explore also the EU added value and the political value of the Fund in terms of EU solidarity extended to countries confronted with significant disasters.

4 METHOD

4.1 Short description of methodology

For this evaluation we conducted a number of analyses of the Fund's implementation and performance. The evaluation started with an external study (September 2017-December 2018) to explore the application and implementation data for all EUSF cases and collect additional data based on desk research and an in-depth analysis of case studies. Furthermore, as the research in the external study was initially intended to cover 2002-2016, the evaluation was complemented with an additional internal analysis by the Commission in order to extend the time horizon of the evaluation findings to end-2017.

The evaluation follows the Commission's principles of better regulation, providing evidence for the five evaluation criteria: effectiveness, efficiency, coherence, relevance, and EU added value, to which we added the instrument-specific criterion of EU solidarity. The list of evaluation questions for each of these evaluation criteria is included in Annex 3.

As for the Fund's implementation, the analysis focused on: (i) the number and type of applications received, (ii) the effectiveness of the Fund in terms of coverage and the extent of support approved, (iii) the time efficiency of the decision-making process for mobilising the Fund and (iv) the administrative burden and costs incurred with the Fund's implementation.

More in-depth analysis of governance arrangements, factors influencing implementation on the ground, as well as perceptions of the Fund's EU added value was carried out through seven case studies. The case studies were chosen on the basis of the following six criteria: 1) they should cover both periods pre- and post-reform; 2) they should include all types and categories of disasters representative of the Fund; 3) no two case studies should cover the same country; 4) one case study should cover an EU accession country; 5) one case study should cover an outermost region; and 6) all case studies should have implementation reports submitted to the Commission by the time of the evaluation. The final list of case studies was decided by the evaluation's Steering Group. The main characteristics of these case studies are presented in Table 4.1.1 below.

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<i>Table 4.1.1</i>	List of	cases stud	ues anai	vsea	jor in	ie evai	uation

ID_Case	Country	Year	Type disaster	Category	EUSF aid granted
ID_case	Country	disaster	Type disaster	disaster	(mill. euro)
GR50	Greece	2007	Forest fires	major	90
PT72	Portugal	2010	Flood	major	31
IT91	Italy	2012	Earthquakes	major	670
AT102	Austria	2013	Flood	neighbouring	22
RO115	Romania	2014	Flood	regional	4
RS112	Serbia	2014	Flood	major	60
BG120	Bulgaria	2015	Severe winter	major	6

The case for Portugal refers to the outermost region of Madeira, and the case for Serbia was chosen according to the criterion for the EU accession countries. Overall, the choice of case studies proved rather challenging, mainly due to the availability of the implementation reports for post-reform cases at the time of the evaluation. For this reason we chose 4 pre-reform cases and 3 post-reform EUSF interventions.

The research in the case studies was designed to contribute, with qualitative evidence, to all evaluation criteria, but especially to the EU added value and EU solidarity for which data are not available from administrative sources.

For the analysis of synergies between EUSF and other EU policy instruments, we primarily analysed the coverage of cohesion investments for disaster risks targeted by EUSF support. We also explored whether the regions and countries affected by disasters for which EUSF intervened make use of ERDF and Cohesion Fund resources to further develop and consolidate their preparedness for and prevention and management of disasters risks. And we mapped the number of times the Union Civil Protection Mechanism (UCPM) was activated for disaster events in which EUSF intervened.

On 14 February 2019, we organised a workshop in Brussels dedicated to the findings of the external study. Attended by representatives from 14 countries which received EUSF support over time and by policy officers from the Commission, the event was perceived as a good opportunity to share knowledge on the experience with the Fund's mobilisation and implementation.

As for the public consultations carried out for the evaluation, first the prevalence of public knowledge of the Fund in the EU population was explored by including a survey question dedicated to the EU Solidarity Fund in the Eurobarometer on regional policy carried out in 2017. Based on the survey, we learnt that at most 15% of the EU population is likely to have accurate, more specific knowledge of EUSF¹⁵. Therefore, given the low probability of knowledge of the Fund in the general population, we relied on targeted consultations for the collection of qualitative evidence on stakeholders' perceptions of the functioning of the Fund. Details on these consultations are included in Annex 7. Furthermore, the public image of the Fund was also explored through an analysis of the content of relevant articles harnessed from online media news outlets.

The findings of the evaluation are summarised in Section 5 below, and presented in detail in the following reports from the external study¹⁶:

- EPRC(2018a): Interim report
- EPRC(2018 b-i): Case studies reports (seven) and their comparative analysis
- EPRC (2018i): Media survey report
- EPRC (2018k): Synergies with other EU policy instruments and national systems
- EPRC (2018l): Final report

4.2 Limitations and robustness of findings

The robustness of evaluation findings is contingent upon the completeness and quality of the data used in the analysis.

For our analysis of the EUSF application and mobilisation process, we primarily relied on the administrative data collected in the Commission since the Fund's creation. We were able to retrieve administrative data for all EUSF applications received and EUSF grants approved, with content data for applications also available for a large majority of cases. In this regard, we learnt that the existence of a template for EUSF aid applications

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These results are presented in Section 5.6.2.

Most of these reports are published at: https://ec.europa.eu/regional_policy/en/policy/evaluations/, except for the background document EPRC(2018k) which is available upon request from: REGIO-EVAL@ec.europa.eu.

made it possible to provide structured data of good quality on various aspects of the application process.

The main challenge for data collection was encountered with data on implementation. Due to significant variations in the format of data included in implementation reports across countries and over time, the possibilities of collecting comparable data on types of operations financed and the timing of these operations were more limited. For this reason, the analysis of the types of operations supported is based on a subset of cases (which is, after all, sufficiently large to ensure robustness of the findings), while aspects such as the timing of projects could be analysed only on the basis of indicative data from case studies Furthermore, some other aspects, such as the relevance of EUSF in total expenditure to the disaster response in the beneficiary countries, could not be analysed at all due to a lack of comparable data. The same applies to the analysis of the cost-efficiency of operations.

During the course of the evaluation, however, we learnt that the quality of data reported for EUSF has improved over time, with the Commission and the beneficiary countries gaining experience in implementing the Fund. Moreover, the future prospects for data availability are significantly brighter due to the Commission's initiative to introduce a template in 2017 for the implementation reports, requiring the necessary information to be provided in a structured (and therefore comparable) manner. In addition, the Commission has introduced further guidance on issues perceived as difficult for the interpretation of the regulatory terms of the Fund and for the closure process¹⁷.

In addition to the data collected from EUSF documents, the evaluation also used qualitative data collected through case studies. Although results based on these data cannot be generalised for all EUSF cases, we interpret the findings as illustrative of the common challenges and perceptions of the experience with the Fund's implementation in those specific circumstances.

As for the process of evaluation, the main challenge in the process was experienced initially with the quality of the data collected and analysed for the evaluation. These challenges were eventually overcome, but they had an impact on the time available for the evaluation. Efforts were made, however, to maintain the initial design of the evaluation so that the impact on the quality of the analysis and the robustness of the evaluation findings could be reduced to a minimum.

In terms of the peer-review process, this evaluation benefited from the cooperation of several departments in the Commission which formed the Steering Group, including DG Budget, DG Humanitarian Aid and Civil Protection, DG Employment, Social Affairs and Social Inclusion, DG Environment, DG Neighbourhood and Enlargement Negotiations, Secretariat-General and with DG Regional and Urban Policy in the lead. The Steering Group held 8 meetings between 2017 and 2018 in order to assess the reports provided by the external study, review the progress on the evaluation and discuss the next steps. This process supported the evaluation throughout the period and helped to make the analysis more coherent and robust.

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¹⁷ See REGIO (2018).

5 ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS

In this section we present the main evaluation findings and the supporting evidence for the six evaluation criteria of effectiveness, efficiency, relevance, coherence, EU added value and EU solidarity.

5.1 Effectiveness

For the evaluation criterion of EUSF's effectiveness, we analysed the Fund's performance both at the strategic and operational level. From the strategic perspective, we examined the extent to which the Fund fulfils its core mission to mobilise and contribute to reconstruction efforts in countries hit by significant natural disasters. From the operational perspective, we looked at the extent to which the beneficiary countries can make optimal use of the resources awarded by the Fund, the challenges with implementation, and the perceptions of the overall experience with the Fund's implementation. The main findings for this evaluation criterion are summarised in Box 5.1.1 below and the supporting evidence is presented after that.

Box 5.1.1: Main findings for effectiveness:

- ✓ The EU Solidarity Fund is effective in responding to requests for aid with major disasters, with a 100% rate of approval of applications for such cases.
- ✓ The approval rate of support with regional disasters increased from 31% to 85% due to clearer admissibility criteria introduced by the 2014 reform.
- ✓ Budgetary flexibility proves effective in addressing exceptional major contingencies.
- ✓ The capacity of the applicant country to provide timely and complete estimates of total direct damage impacts on the effectiveness of EUSF support.
- ✓ EUSF support is fully used in most cases. Close to 60% of total support contributed to operations for temporary accommodation and rescue.
- ✓ Effective implementation is contingent upon swift governance and institutional coordination.
- ✓ The scope of eligible operations is not fully aligned with the key principle of "Building Back Better" for disaster risk management.
- ✓ The flexible eligibility period helps alleviate time constraints in implementation.
- ✓ Advance payments may help alleviate budget constraints for rapid response.
- ✓ The overall experience of beneficiaries with EUSF is positive, although some of its aspects remain challenging.

5.1.1 The EU Solidarity Fund is effective in responding to requests for aid for major disasters

The main objective of the EU Solidarity Fund is to serve as an effective and flexible instrument to provide assistance to people affected by significant natural disasters with serious consequences for their living conditions. As explained in Section 2.1, access to the Fund and the amount of the support are determined according to the magnitude of the disaster, which, for the purpose of EUSF, is divided into three categories: major, regional and neighbouring.

For major disasters, which absorb 89% of the Fund, the Commission received a total of 42 applications. This represents 33% of all applications submitted between 2002 and 2017. The rate of approval for applications for assistance with major disasters is 100%, as the assessment process of the application is usually straightforward due to the clarity of the criterion applied for admissibility. Therefore, on this basis we conclude that the Fund is mobilised effectively for major disasters.

5.1.2 The approval rate of support for regional disasters increased from 31% to 85% due to clearer admissibility criteria introduced by the 2014 reform

If major disasters proved easily discernible at the time of application, the requests for support for regional disasters proved much more challenging to assess and approve. In Figure 5.1.1 we illustrate the number of applications received by the Commission for regional disasters pre- and post-reform. The graph also illustrates the status of the application, defined as approved, rejected or withdrawn.

70 60 50 18 40 30 38 20 10 13 3 0 Pre-reform Post-reform ■ Withdrawn ■ Rejected # Accepted

Figure 5.1.1 Number EUSF applications for regional disasters 2002-2017

Note: Based on 74 EUSF applications for regional disasters. Source: European Commission, monitoring data 2002-2018.

Before 2014, regional disasters were defined as admissible in 'exceptional circumstances' affecting a major part of the population in the region. Under this criterion, from 2002 to 2014 (prior to the reform), the rate of approval of applications for regional disaster was 31%, with the Fund being mobilised for only 18 out of 59 such requests. The main reason for such applications being rejected at the time was the challenge that the applicant countries had in providing evidence that the disaster affected the majority of the population with serious and lasting consequences for economic stability and living standards. In effect, the admissibility criteria for regional disasters at the time lacked operational applicability.

The Commission acknowledged this issue already early on in the Fund's life¹⁸, stating that, despite the applications for regional disasters representing more than 60% of all the applications received, the Fund had limited possibility to respond effectively to such requests due to the regulatory conditions for admissibility of applications in such cases.

The issue was addressed with the Fund's reform in 2014, when the condition of 'exceptional circumstances' was replaced by the definition of a 'regional natural disaster' as any natural disaster which results in direct damage representing more than 1.5% of GDP NUTS 2 level (except for outermost regions, for which the threshold is 1%). Thus, while the relative frequency of applications for regional disasters continued to be similar to the pre-reform period, the rate of approval of requests for assistance increased substantially to 85%. Out of a total of 15 applications received for regional disasters beween 2014 and 2017, only 2 could not be approved. The reader should note, however, that this evidence is still preliminary due to the relatively lower number of applications available for the post-reform period.

In sum, the Fund has also become more effective in addressing the requests for assistance with regional disasters as a result of the revision of the admissibility criteria for regional disasters introduced in 2014. We interpret this finding as an indication that this change enabled potential applicants to understand better the chances of mobilising the Fund in the event of a regional disaster of a given magnitude, thus reducing the administrative efforts required in the countries concerned and making it easier for the Commission to prepare and assess applications.

5.1.3 Budgetary flexibility proved effective in addressing exceptional major contingencies

Due to the high uncertainty associated with the occurrence of natural disasters, the resources available for the Fund are not pre-committed annually but are funded from the EU budget as needed, outside the budgetary ceilings of the multiannual financial framework (MFF). Following the severe floods which hit Austria, Czechia, Germany and France in summer 2002, the Fund was created initially with an annual maximum budgetary ceiling of 1 billion euro, which could be mobilised for solidarity support if needed. Figure 5.1.2 illustrates the percentages of annual payments for EUSF support out of the total resources available for the year, calculated on the basis of the annual budgetary ceiling and, after 2014, of the resources unspent in the previous year and carried forward.

¹⁸ See, for instance, COM(2004) 397.

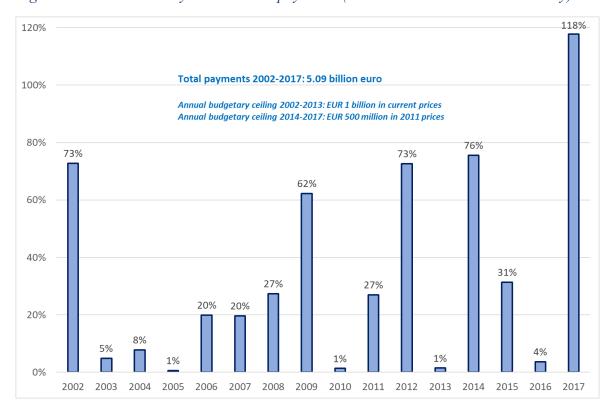


Figure 5.1.2 EU Solidarity Fund annual payments (% in resources available annually)

Note: Based on 76 EUSF cases with advance and/or final payments made.

Source: European Commission, monitoring data 2002-2017.

For the first 12 years of the Fund's activity, the annual payments for the Solidarity Fund ranged between 1% and 73% of the annual budgetary ceiling. In 2014, the legislators reduced the annual budgetary ceiling to EUR 500 million in 2011 prices, while also introducing the possibility that resources earmarked in a given year and not used could be carried forward to the next year. In addition, the Fund maintained the flexibility of also being able to draw upon resources allocated for the next year in order to meet exceptional needs for disaster assistance.

This new flexibility clause proved instrumental in 2017, when the solidarity support for the series of earthquakes which occurred in Italy between August 2016 and January 2017 amounted to an unprecedented EUR 1.2 billion. In this case the EUSF grant approved drew upon resources carried forward from unspent aid in 2016 and from part of the resources allocated for 2018.

In summary, the analysis indicates that, historically, the resources available annually for the Fund have been sufficient, and the budgetary mechanism introduced in 2014 proved effective even when the Fund was called upon to assist with extreme events of exceptional magnitude. The case of Italy approved in 2017, however, also signals the risk that the Fund may be rapidly depleted if confronted with several disasters of large magnitude over a short period of time.

5.1.4 The capacity of the applicant country to provide complete and timely estimates for total direct damage impacts on the effectiveness of EUSF support

In this section we analyse the extent to which EUSF is effective in its response to requests for assistance with natural disasters from the perspective of aid intensity. We define aid intensity as the extent to which the support from the Fund covers the estimated expenditure with eligible operations declared in applications. Figure 5.1.3 illustrates the distribution of the rates of aid intensity for all approved EUSF cases, with the aid intensity at the case level calculated as the ratio between the EUSF grant and the estimated costs of eligible operations. The numbers displayed on the bars represent the number of approved cases with aid ratios in the respective interval. Annex 5 includes descriptive statistics for the data series on aid ratios at case level.

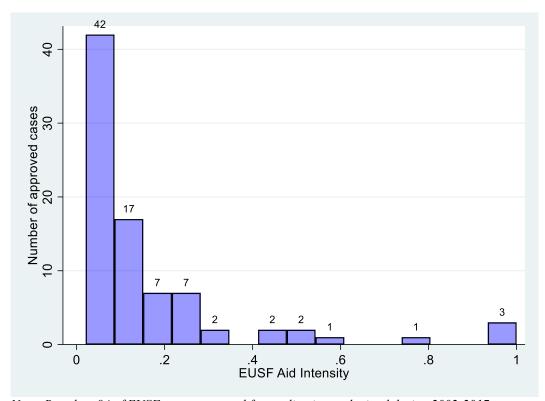


Figure 5.1.3 Distribution of EUSF aid intensity ratios for the approved cases

Note: Based on 84 of EUSF cases approved for applications submitted during 2002-2017. Source: European Commission, monitoring data 2002-2017.

The histogram in Figure 5.1.3 is constructed by first arranging the aid ratios across cases in increasing order, and then grouping the values in intervals. For example, the first bar indicates that the aid intensity ratios for 42 cases are in the interval 0.02 to 0.08 (i.e. 2% to 8% of total estimated eligible cost covered by EUSF aid), while the aid ratio for the following 17 cases range in the interval 0.09 to 0.15 (i.e. 9% to 15%).

These data illustrate that for over 65% of the cases, less than 20% of the total estimated cost of eligible operations is covered by the EUSF grant. For a limited number of cases, however, the values of aid ratios range between 0.40 and 0.80 (representing a coverage of 40% and 80% respectively) or even higher.

In order to understand the factor driving the highly skewed distribution of aid intensity ratios, we analysed the structure of the total direct damage reported by applicants in their

applications and its implications for the calculation of the EUSF grant. The calculation method of the EUSF grant by category of disaster is explained in Box 5.1.2.

Box 5.1.2 Calculating the EUSF grant

Major disaster

The EUSF financial contribution is calculated as 2.5% of the part of the total direct damage below the threshold for a major disaster, plus 6% of the part of total direct damage above the threshold for a major disaster. The threshold for a major disaster is defined as 0.6% of gross national income (GNI) or 3 billion euro, whichever is lower (with reference year n-2 and data source ESTAT).

Regional and "neighbouring country" disasters

The EUSF financial contribution is calculated as 2.5% of the total direct damage. For the "neighbouring country" disasters, the amount of aid cannot be higher than the aid for the country where the corresponding major disaster originated.

For all categories of disasters, the amount of aid may not exceed the cost of eligible operations.

Source: COM(2004) 397: EUSF Annual Report 2002-2003¹⁹

In the case of the Solidarity Fund, the applicant countries are required to submit within 12 weeks an estimate of total direct damage incurred in the aftermath of the disaster, and to identify the share of the costs of eligible operations. In addition, the applicant country is expected to provide also a breakdown of total direct damage in public and non-public components, and by sector. The definitions of 'total direct damage', 'public damage', and 'cost of eligible operations applied for the Fund' are presented in Annex 4.

When looking at data on direct damage and its components, we observe that some countries report total direct damage with a large component of public damage, while others report a more balanced combination between public and non-public damage in total direct damage. Given that the EUSF grant can only be used to cover costs with public eligible operations, it follows that the coverage of these costs by the grant (i.e. the aid intensity) is likely to vary with the share of public damage in total direct damage²⁰.

In Figure 5.1.4 we illustrate the correlation between the share of public damage in total direct damage (x-axis) and the EUSF aid intensity (y-axis) at the aggregate level. Both series are calculated at country level as follows. The share of public damage in country X is determined as the ratio between the cumulated public damage declared by country X in approved applications, and the corresponding cumulated total direct damage declared in the same applications. The result gives an average ratio at country level. The data series for the EUSF aid intensity is calculated at country level in the same manner.

While the heterogeneity of aid intensity ratios diminishes when calculated at country level, the skewed distribution of the values remains, showing 19 countries with average ratios below 20%, and 3 countries with ratios of 30% or higher.

The data in Figure 5.1.4 illustrates the tendency for an inverse correlation between the share of public damage in total direct damage and the EUSF aid intensity, thus indicating that the higher the share of public damage in total, the lower the aid intensity.

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See also the online note: 'Determination of aid amounts' (https://ec.europa.eu/regional_policy/en/information/publications/factsheets/2017/eu-solidarity-fund-determination-of-aid-amounts).

As public damage is to be covered by public eligible expenditure, there is a direct positive correlation between the total estimated cost with eligible operations and the share of public damage in total direct damage.

40% ΙT 35% UK LV 30% PT 25% **EUSF Aid Intensity** 20% DE RS 15% ΙE 10% ΜT CZΕE ΗU BG 5% 0% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Share of Public Damage in Total Damage

Figure 5.1.4 EUSF aid intensity vs share of public damage in total damage

Note: The data covers 70 approved cases with applications submitted between 2002 and 2017. The case for Sweden is not included due to high value (95%) for the EUSF aid intensity.

Source: European Commission, monitoring data 2002-2017.

Therefore, the evidence indicates that the aid intensity tends to vary with the structure of the estimated total damage in terms of its public and non-public component²¹, as it is lower in cases where total direct damage is reported mostly in terms of public damage, and with little or no contribution of estimates of private damage.

We interpret these results as indicative of the importance of a country's capacity to provide timely and complete estimates of total direct damage not only for gaining access to the Fund, but also for determining the amount of the financial assistance paid out.

It is worth noting, however, that estimating losses from disasters is widely recognised as a difficult exercise. For example, in its 2018 report on the real cost of disasters, the OECD concludes that the challenges of estimating damage for disaster events are substantial, mainly because reliable historical data on the direct economic impacts of such events is lacking²². For the Solidarity Fund, the challenge is even more important, as the applicant countries need to produce such estimates in a relatively short period of time²³.

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In addition, we also explored whether the breakdown of total direct damage into eligible and noneligible costs varies between the major disasters, on the one hand, and the regional and neighbouring disaster on the other, and found that the differences are not sizeable for a majority of countries. These results are not presented, but they are available upon request from REGIO-EVAL@ec.europa.eu.

To remedy this, the Commission's Joint Research Centre is developing a *Risk Data Hub* (https://drmkc.jrc.ec.europa.eu/risk-data-hub) to provide a tool for the systematic collection of comparable data for disaster damage assessment. The tool is designed to address the current gap in the availability of data on disaster damage and the lack of comparability of available data due to different methodologies and estimation approaches.

The European Commission's Copernicus Emergency Management Service (satellite and aerial impact mapping) can provide a rapid overview of the damage useful for EUSF application.

The issue of the capacity and/or possibility of applicant countries to provide timely and complete estimates of total direct damage was explored further through the case studies²⁴.

First, from the case studies of Austria (floods, 2013) and Italy (earthquake, 2012) we learn that well-established national systems for damage estimation in disaster situations can be used effectively when requesting assistance from the EU Solidarity Fund. In both cases, the national authorities relied on the coordinated collection of damage estimates by municipalities in the affected areas (Box 5.1.3).

Box 5.1.3 Effective national systems of damage estimation (case studies)

Estimation of disaster damage in Austria (Case study: floods, May and June 2013)

The national system of estimation of damage caused by natural disasters is based on a network of municipal commissions for the collection and assessment of data on local damage. The commissions are formed by local councillors, experts and administrative staff, and are responsible for visiting the sites and drawing up the damage reports. These reports are then forwarded to the Federal or State Governments in order to support requests for financial assistance. For the analysis in the case study, the representative of the national departments for flood prevention and recovery stated that the same system for damage estimation is used both for the Austrian Disaster Fund and when applying for EUSF assistance.

Estimation of disaster damage in Italy (Case study: earthquake, May 2012)

Due to its experience with repeated major earthquakes, Italy has built a national system of damage assessment which relies on the coordinated involvement of local and national public administrations, as well as private entities. For the earthquake in 2012, the assessment of damage and the usability of buildings was coordinated and managed by the National Civil Protection Department, in cooperation with the regions of Emilia-Romagna, Lombardy and Veneto, and with substantial support from other regions, the National Fire Service, and specialised centres. The public authorities who were consulted for the case study stated that the assessment tools and technical support provided by the National Civil Protection Department proved effective for quantifying the damage to public and private properties, especially during a very difficult and disconcerting period for the affected population.

Source: Case studies for Austria (EPRC 2018b) and Italy (EPRC 2018e).

Other case studies, on the other hand, reflect the challenges that national authorities experienced with estimating damage when applying for EUSF support. In Bulgaria (severe winter, 2015), for example, it considered it difficult to estimate the damage in the time period available, as it required setting up commissions for the collection and assessment of data for 18 municipalities in 12 districts. As a result, the national authorities based the application for EUSF support mostly on damage to public property, since there was not enough time to collect damage estimates for private assets.

Similarly, in the case study for Romania (flood, 2014), assessing damage was perceived as very challenging, as it involved collecting data from a large number of entities (prefectures, ministries, etc.), and it was difficult to ensure an effective coordination across various institutions. Additional challenges included insufficient documentation on the value of existing damaged infrastructure (especially for old local infrastructure in small municipalities) as well as limitations with the methodology for assessing damage, which entailed using low historical values instead of current real values.

The issue of damage estimation was also raised during the discussion on the effectiveness of the application process in the workshop dedicated to this evaluation, which was organised in Brussels in February 2019. The participants in the workshop emphasised the suboptimal timing available for producing damage estimates for EUSF applications,

A more extensive presentation of evidence on damage estimation from case studies is included in EPRC (2018 l) Final Report.

timing which is not aligned with similar national procedures. In addition, some participants explained that uncertainty in damage estimation can also be generated by the weather conditions during the period when the disaster occurs, with adverse conditions limiting the possibility of on-site visits and verifications of damage declarations. The various factors identified as limiting the possibility to produce an accurate estimate for total direct damage in a relatively short period of time led to further discussion on whether it would not be appropriate to consider simplified and more robust methods for calculating EUSF support based on objective criteria for which reliable data could be provided rapidly.

In sum, we conclude that the capacity of applicant countries to provide timely and complete estimates for the damage incurred in the aftermath of a significant disaster has an impact on the aid intensity of the support, and therefore on the Fund's effectiveness.

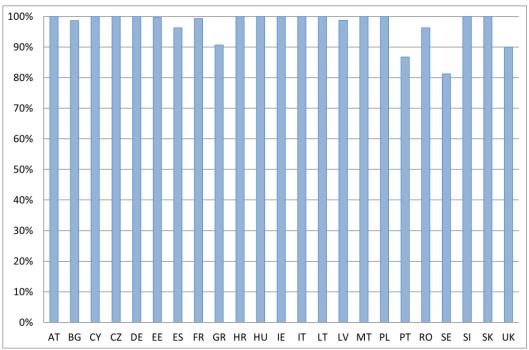
5.1.5 EUSF support is fully used in most cases, with the largest share (58%) reported for temporary accommodation and rescue

In this section, we first analyse the extent to which the EUSF grant is used fully by the beneficiary country. Subsequently, we explore the relative financial weight of the four types of operations financed by the Fund. This analysis is carried out for 51 cases which were implemented and closed by the end of 2017 (for which recoveries are known).

At the end of the implementation period, the beneficiary country submits an implementation report justifying the use of the EUSF grant. In most cases, the grant approved is used in its entirety over the eligibility period. Of a total of EUR 3.5 billion allocated to the 51 EUSF cases implemented and closed by the end of 2017, a total of EUR 3.43 billion (98%) was accepted by the Commission as eligible expenditure at closure. The difference represents recoveries due to either unspent amounts or expenditure declared ineligible. Figure 5.1.7 below illustrates the rate of use of the EUSF grant, calculated as the ratio between cumulated grants minus recoveries and the total grants approved initially at the country level.

While most of the countries display a 100% rate of use of the EUSF aid, in 6 countries the use of the grant is at most 96% due to recoveries at closure. For the UK floods in 2007, for instance, the Commission recovered EUR 16 million (out of a EUR 162 million EUSF grant) due to ineligible expenditure related to salaries. For the Gudrun storm in Sweden, the recovery amounted to EUR 15 million in unspent aid (for a EUSF grant of EUR 82 million). The third largest recovery was applied for the 2003 forest fires in Portugal, were EUR 10 million were returned to the Commission due mostly as unspent aid.

Figure 5.1.7: Use of EU Solidarity Fund support (% in total approved by country)

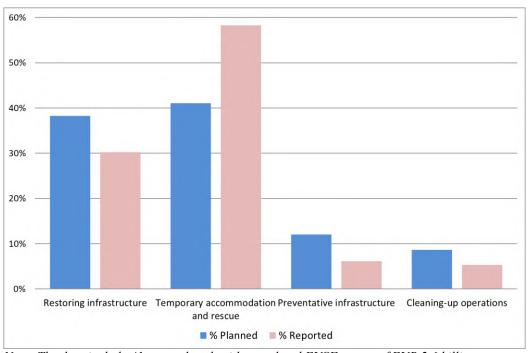


Note: Based on EUSF cases closed.

Source: European Commission, monitoring data 2002-2017.

In terms of the use of grants by type of eligible operations, Figure 5.1.8 illustrates the distribution of the amounts planned at the time of signature of the implementing act and the expenditure reported in implementation reports. The analysis is based on 41 cases implemented and closed by December 2017, with a total of EUR 2.6 billion in EUSF grants, representing 50% of all cases implemented over the reference period.

Figure 5.1.8: Share of EUSF grants planned and reported by type of operation



Note: The data include 41 cases closed, with cumulated EUSF grants of EUR 2.6 billion (51% of total grants approved up to 2017).

Source: Data collected from EUSF implementing acts and implementation reports, 2002-2017.

Given the uncertainty surrounding the disaster events, during implementation there is often some fluctuation relative to the initial planning in the level of funding allocated to operations. In this respect, the Fund is flexible to the extent that changes in the planned amounts by type of operations are possible during implementation, provided that the respective type of operation is specified in the implementing act. Extending the scope of operations (i.e. introducing a new type of operation, not planned initially) is also possible but requires a formal modification of the implementing act.

The data represented in Figure 5.1.8 indicate that, although the ranking order of EUSF allocations by type of operations is maintained in planning and implementation, the distribution of the actual expenditure on the ground for the four types of operations adapts to the conditions in implementation. The largest share in total reported expenditure (58%) is represented by operations for temporary accommodation and rescue (versus 41% planned initially), followed by expenditure for restoring the working order of infrastructure in the fields of energy, water and waste water, telecommunications, transport, health and education (30% reported versus 38% planned initially). Correspondingly, relative to initial planning, the proportion of expenditure reported for preventive infrastructure and cleaning-up operations goes down by as much as 50%.

The distribution of expenditure by type of operations, however, differs with the magnitude of the disaster event. When compared with the regional and neighbourhood events, the overall distribution represented in Figure 5.1.8 is, in fact, more representative for major disasters. Table 5.1.1 includes the breakdown of the planned and reported eligible expenditure by type of operation and category of disaster. The percentages indicate the shares in total planned/ reported expenditure for the respective category of disaster.

Table 5.1.1: Breakdown of planned and reported EUSF expenditure by category of disaster

	Major disa	asters	Regional and neighbouring disasters		
	% Planned	% Reported	% Planned	% Reported	
Restoring infrastructure	36%	30%	65%	36%	
Temporary accommodation and rescue	44%	60%	10%	16%	
Preventative infrastructure	11%	5%	21%	35%	
Cleaning-up operations	9%	5%	4%	12%	

Note: 41 cases, of which 23 major, 11 regional and 7 neighbourhood.

Source: Data collected from EUSF implementing acts and implementation reports, 2002-2017.

These data indicate that the largest shares of reported expenditure for regional and neighbourhood disasters are represented by operations for restoring infrastructure to working order, securing preventive infrastructure and protecting cultural heritage, while the distribution for major disasters largely mirrors the distribution at aggregate level.

5.1.6 Effective implementation is contingent upon good governance and institutional coordination

Information on factors supporting or hindering implementation is provided by case study research and based on replies from 61 respondents in the seven countries. Respondents were asked to rate the importance of seven factors identified by the evaluation experts as relevant for EUSF's implementation: 1) governance and national and subnational level, 2) institutional factors, 3) availability of economic resources to cope with the disaster, 4) requirements to ensure accountability on implementation, 5) public procurement procedures, 6) time needed to ensure the transfer of funds from the central to local levels,

and 7) the availability of administrative competencies at local level. The replies to this consultation are reported in Table 5.1.2 below. The percentages reported in the last column are calculated as weighted shares of replies indicating high or highest influence for each factor.

Table 5.1.2 Stakeholder consultation on factors influencing EUSF implementation

	Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total
Governance	High	High	High	High	Highest	High	High	100%
Institutional factors	Moderate	High	High	Moderate	Highest	High	High	71%
Economic resources	Moderate	Moderate	None	High	High	Highest	Moderate	49%
Accountability	Slight	Moderate	Slight	None	High	High	Slight	31%
Public procurement	None	High	Moderate	High	n.a.	Slight	High	50%
Time need for transfer of funds	Slight	Slight	None	High	n.a.	n.a.	Moderate	18%
Local competencies	None	Moderate	None	Moderate	n.a.	Slight	High	20%
Disaster details	Flood, 2013, neighbouring	Severe winter, 2015, major	Forest fires, 2007, major	Earthquake, 2012, major	Flood, 2010, outermost	Flood, 2014, regional	Flood, 2014, rmajor	
Number respondents	7	7	5	11	7	12	12	61

Source: Case studies EPRC (2018 b-h).

According to this evidence from case studies, the two most important factors considered highly influential for EUSF's implementation are governance and institutional factors.

For governance, the respondents in the case study for the 2010 floods in Madeira, for instance, declared that having one institution managing and coordinating the full implementation process was a key factor that contributed to EUSF's good implementation. Similarly, the interviewees from Serbia emphasised two pivotal factors which enabled a well-coordinated and targeted implementation of EUSF: 1) the establishment in 2015 of the Public Investment Management Office, which had the role of coordinating EUSF's implementation and providing support to other implementing bodies; and 2) the capacity-building needed to address the EUSF requirements.

The case study for the 2012 earthquakes in Italy, on the other hand, illustrates the potential trade-off between a place-based governance model with a greater focus on the specific territorial needs and the need for implementation procedures that are consistent across territories. In this situation, the performance of the supported operations was partly conditioned by the Fund's tripartite management by the three regions affected (Emilia-Romagna, Lombardy, and Veneto), each responsible for the territories under its jurisdiction. This led to some differences in the implementation process, as each regional administration adopted its own organisational structure and rules. Overall, however, the interviewees concluded that the three models, albeit operating differently, ultimately succeeded in supporting the affected municipalities as needed.

Next, institutional factors were rated as highly influential by experts and political representatives replying for the case study on the 2014 floods in Bulgaria. The respondents stated that institutional cooperation had a decisive role in the effective implementation of interventions, with close working relationships among staff across institutions enabling effective and time efficient implementation. Respondents from Greece, on the other hand, emphasised that effective implementation of operations responding to a disaster situation can be impaired by an institutional model with overlapping responsibilities and ambiguity between various administrative levels. Such factors generated difficulties in estimating damage, which was required to apply for EUSF support, and in allocating support according to the EUSF eligibility rules.

The next two factors identified by respondents in case studies as having a moderate to high influence on the Fund's implementation include public procurement procedures and the availability of economic resources to implement operations. The requirements and

time needed to carry out public procurement procedures for the operations implemented were rated as highly influential for EUSF's implementation in Bulgaria, Italy and Serbia. Respondents from Bulgaria, for instance, noted that the length of the public procurement procedures (which can be up to 12 months) had a significant influence on the decision to finance retrospective projects rather than projects newly started for which the implementation period of 18 months would, in all probability, have proven rather short.

As for the availability of economic resources needed to respond to the disaster situation, most of the respondents explained that immediate interventions rely primarily on own resources, notably from the central government budget, as the EUSF support is deployed late in the process. The respondents emphasised that, while the availability of the EU funding is regarded positively, the time needed to deploy this support is long both at the EU and national level - a process which does not help relieve the initial budget constraints faced by local municipalities, which need to address local problems quickly.

5.1.7 The scope of eligible operations is not fully aligned with the 'building back better' principle

One significant issue revealed by the research for the case studies and during the workshop dedicated to the evaluation refers to the fact that EUSF support cannot be used to finance projects aimed at rebuilding the infrastructure to more resilient, modern standards. Stakeholders explained that the eligibility conditions for EUSF interventions are not aligned with the key principle of disaster risk management, according to which the recovery phase is seen as a critical opportunity to "Build Back Better" in order to increase resilience to disaster risks.

Indeed, EUSF support can help to restore infrastructure only up to the situation prior to the disaster. Article 3 of EUSF Regulation 2012/2002, as amended by Regulation 661/2014, stipulates that 'restoring the working order' of infrastructure should be interpreted as restoring the infrastructure to the condition prior to the occurrence of the natural disaster. Therefore, if the beneficiary decides to improve the functionality and resilience of the asset affected by the disaster, the Fund can contribute to the restoration costs only up to the estimated cost of returning it to its original state.

A number of respondents to the case studies (for example, from Greece, Romania, Serbia) also explained that this regulatory requirement of the Fund generates significant difficulties for the selection of eligible projects since, especially in situations where the initial infrastructure was obsolete or not resilient to disasters, the reconstruction process often entails rebuilding to newer, more robust standards. The workshop participants further emphasised that a possible solution to this problem is to combine EUSF and national funding in such a way that the national funding could be used for modernising the infrastructure. In any case, the EUSF regulatory requirement is perceived as generating an artificial process of estimating the share of costs which would be incurred by a hypothetical return to the infrastructure's original state, which is no longer warranted.

methodologies, projects and standards for disaster risk management and resilience".

See Priority 4 "Enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation and reconstruction" of the Sendai Framework for Disaster Risk Reduction: https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf . Correspondingly, the EU action plan on Sendai also has a sub-priority "Integrate the 'Build Back Better' objective into the assessment

5.1.8 A flexible eligibility period helps alleviate time constraints in implementation

Unlike the rules of the ESI Funds, a specific feature of EUSF is the possibility to reimburse costs incurred with projects already started and implemented before the Fund's deployment (called retrospective funding). The eligibility period for the EUSF interventions starts with the first (official) date of the disaster, covers the entire period during which applications are assessed and approved, and lasts until the end of the implementation period.

As noted in Section 2.2 (and analysed further in Section 5.2 on efficiency), the time needed to mobilise and pay the EUSF support to the beneficiary country is perceived as too long. In addition, the qualitative evidence from the case studies also indicates that the implementation period is considered challenging, at least prior to the 2014 reform of the Fund when it was 12 months. For the eligibility period, however, the Fund's flexibility helps alleviate (at least partly) these two main challenges by allowing for retrospective funding.

The 2014 reform has extended EUSF's implementation period to 18 months from the time of the grant's payment by the Commission, while also maintaining the flexibility of the eligibility period. Based on 67 approved cases with implementation reports available for the evaluation, we calculate that the eligibility period is, on average, 34 months, increasing to over 39 months in 10% of cases due to the longer duration of approval and payment of the support.

Figure 5.1.9 illustrates the positive correlation between the time from the disaster date to the payment of the grant²⁶ and the resulting duration of the eligibility period, averaged at country level for 67 approved EUSF cases.

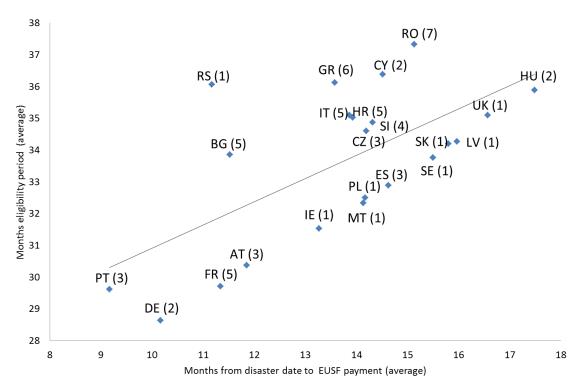
For example, for the three cases analysed for Germany, the average time for the EUSF payment is little more than 10 months, with an average eligibility period of almost 29 months. And the more time that has elapsed between the disaster date and payment, the longer the period for which the beneficiary country can declare eligible expenditure for the operations implemented.

This correlation illustrates that the Fund's flexibility helps alleviate the time constraints for implementation, at least for cases where national authorities have the possibility to mobilise resources initially from other sources and then reimburse the expenditure from EUSF.

Several implementation reports and case studies provide evidence that EUSF is often used retroactively, contributing to recovery and reconstruction projects already launched or implemented by the time the grant is paid. For example, the report on the floods in Slovenia in 2010 notes that eligible operations were first financed from the budget of the central government and subsequently reimbursed by EUSF. Similarly, the report for the 2009 floods in Ireland states that the grant from EUSF was used to reimburse expenditure incurred by the Exchequer.

²⁶ The time taken to disburse the EUSF grants is analysed in detail in the section on efficiency.

Figure 5.1.9 Time to EUSF payment and eligibility period (average in months per country)



Note: Based on 67 EUSF cases approved and with payments made over the period 2003-2016. Source: European Commission, monitoring data 2003-2016

The case study from Bulgaria (severe winter conditions, 2015) illustrates that 60% of the EUSF grant covered retrospective projects, most of which were completed 1 year after the time of the disaster and before the disbursement of the Fund.

While the possibility to finance projects retroactively has the benefit of also covering emergency operations implemented closer to the disaster date even if the EUSF grant arrives later, this option is less effective in situations where central and local authorities cannot start all necessary projects earlier based on own resources²⁷. In these situations, if implementation needs to be carried out during the implementation period only, then the challenges become substantial, notably due to the time needed to prepare and carry out complex projects and the time required with public procurement. For example, the respondents in the case study for Italy 2012 stated that, despite the national efforts to anticipate and plan the use of the EUSF grant prior to its actual disbursement, the deadline of 12 months for the completion of implementation and reporting was perceived as extremely tight and challenging, considering the severity and the exceptional nature of the post-earthquake context along with the timing provided for by the national procurement code. Therefore, the extension of the implementation period by 50% (to 18 months) introduced by the Fund's reform in 2014 is likely to facilitate the implementation of new or ongoing projects to a larger extent once the support is disbursed, although it does not have the potential to also address the issue of availability of resources earlier in the process of disaster response.

In addition, experience with the implementation of ESI Funds indicates that, in order to guarantee adequate protection of EU financial interests, the financing of retrospective projects needs to be accompanied by sound procedures for financial management and control. These aspects were not included within the scope of the EUSF evaluation.

5.1.9 Advance payment could help alleviate budget constraints for rapid response

In 2014, the legislators addressed the issue of rapid response from the Fund by introducing the possibility of advance payments. A request for an advance payment can be made by the applicant country together with the main application. The advance is paid if, based on a preliminary assessment, the Commission considers that the application is likely to meet the regulatory requirements for the Fund's mobilisation. The advance payment is calculated as 10% of the anticipated EUSF financial assistance, and no more than EUR 30 million.

Implementation data indicates that, of the 20 approved applications under the scope of the amended Regulation during 2014-2017, 12 also included requests for advance payments, of which 10 were approved. For these cases, a total of EUR 39 million was paid in advances, on average 3 weeks after the submission of the complete application file (i.e. within 21 weeks from the first date of the disaster on average). Depending on the size of the total EUSF support granted, these advance payments are in the range of EUR 160 000 to EUR 30 million (see Annex 2).

5.1.10 Overall experience with EUSF is positive, although some of its aspects remain challenging

The overall assessment of challenges experienced with EUSF support is based on the interviews conducted for the case studies²⁸. Close to 50 stakeholders were asked to rate the complexity of the procedures and requirements dealt with in the context of the Fund. Table 5.1.3 illustrates the percentage of respondents who rated the challenges with applying and implementing as fairly complex or complex. The number in parentheses represents the number of interviewees who responded to the question.

Table 5.1.3: Stakeholder consultations: challenges with applying and implementing EUSF

	Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total
Application	0% (6)	0% (7)	100% (3)	0% (11)	50% (4)	100% (2)	42% (12)	27% (45)
Assessment of application	0% (6)	0% (7)	0% (1)	19% (11)	24% (4)	0% (1)	0% (12)	7% (42)
Implementation	0% (7)	0% (7)	67% (3)	18% (11)	50% (4)	80% (5)	17% (12)	25% (49)
Disaster details	Flood, 2013, neighbouring	Severe winter, 2015, major	, , ,	Earthquake, 2012, major	Flood, 2010, outermost	Flood, 2014, regional	Flood, 2014, rmajor	

Source: Case studies EPRC (2018 b-h).

Clearly, respondents from beneficiary countries vary in their perception of the complexity of the EUSF procedures. When applying, for instance, stakeholders in Austria, Bulgaria and Italy did not perceive the preparation of the application as complex, although some respondents in Italy found the assessment process more challenging. In Greece and Romania, on the other hand, all respondents find the process complex.

For implementation, the process involved proved challenging mainly in Romania, Greece, and Portugal. In Romania, the interviewees emphasised several challenges with implementation generated by the following issues: the interpretation of eligibility of operations for restoring infrastructure to its original state, absence of technical documentation related to the infrastructure (needed to prove the state before disaster), and difficulties in collecting documents justifying the costs incurred with emergency operations. In Greece, on the other hand, the respondents explained that, although the eligibility criteria were clear, they encountered difficulties with the selection of projects

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²⁸ More details on the interviews conducted for the case studies are included in Annex 7.

and with the timetable for disbursement and reporting expenditure (which was perceived as extremely tight).

We interpret these differing results as reflecting a combination of several co-founding factors, such as the Fund's regulatory requirements, the implementation conditions in the beneficiary country, and the experience built up with EUSF in the past. Overall, however, we note that the application and implementation procedures are perceived as complex by around 25-27% of the respondents.

Furthermore, stakeholders in case studies were consulted about the closure procedures for EUSF. Table 5.1.4 presents the rating provided, by case study, for three items: the bureaucracy involved, the complexity of the process, and the time constraints. The last column includes the weighted share of respondents who considered the respective factors as excessive²⁹.

Table 5.1.4: Stakeholder consultations: challenges with EUSF closure

	Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total
Bureaucracy	Minimal	Moderate	Moderate	Minimal	Excessive	Excessive	Minimal	19%
Complexity	Minimal	Minimal	Moderate	Minimal	Moderate	Excessive	Excessive	23%
Time issues	Moderate	Moderate	Moderate	Excessive	Excessive	Excessive	Moderate	44%
Disaster details	Flood, 2013, neighbouring	Severe winter, 2015, major	Forest fires, 2007, major	Earthquake, 2012, major	Flood, 2010, outermost	Flood, 2014, regional	Flood, 2014, rmajor	
Number respondent	7	7	4	11	4	4	6	43

Source: Case studies EPRC (2018 b-h).

As with the application and implementation process, we note that countries differ in their perception of the closure process. While it is considered excessively bureaucratic and with a tight time schedule in Portugal and Romania, it appears to be less so to respondents in Austria, Bulgaria and Greece. Overall, taking into account all respondents, a majority of them consider that closure procedures are minimal to moderate, with the most challenging aspect identified by 44% in terms of time constraints.

Finally, the stakeholders in case studies also rated their overall experience with EUSF, covering the following issues: the application process, the availability of information on how to apply, the support provided by the Commission, the administrative demand, reporting requirements, as well as their overall perception of EUSF. Table 5.1.5 presents the results. The last column in the table includes the weighted shares of all respondents who rated the experience with the item as positive or very positive.

Table 5.1.5 Stakeholder consultations: overall experience with EUSF

Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total			
Very positive	Positive	Positive	Very positive	Very positive	Positive	Positive	100%			
Very positive	Positive	Very positive	Very positive	Very positive	Neutral	Very positive	82%			
Very positive	Very positive	Very positive	Very positive	Very positive	Pasitive	Very positive	100%			
Positive	Positive	Neutral	Neutral	Neutral	Neutral	Neutral	26%			
Positive	Positive	Positive	Positive	Positive	Neutral	Neutral	71%			
Very positive	Positive	Positive	Very positive	Very positive	Pasitive	Positive	100%			
Disaster details Flood, 2013, neighbouring 2015, major 2007, major 2012, major 2012, major 2014, major 2014, major										
7	7	5	11	9	10	6	55			
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Source: Case studies EPRC (2018 b-h).

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The weights applied for determining the percentages in the last column are calculated as ratios between the number of respondents for each country and the total number of respondents across all case studies; the same applies for all similar tables that follow.

Overall, we learn that all stakeholders interviewed for the case studies have positive perceptions of their experience with the Fund, especially with the application process and the support received from the Commission. The diversity of perceptions is apparent especially for the administrative demand and, to a much lesser extent, the reporting requirements and availability of information on how to apply for support.

Portugal, for example, appreciated the guidance provided by the Commission on the application process, as well as the support provided throughout the subsequent stages of EUSF implementation. Respondents in Italy emphasised that, despite the difficulties encountered at certain stages, the experience with EUSF is overall very positive, as the Fund is an important additional resource supporting public institutions in dealing with the challenging post-disaster environment. For Serbia, the local representatives (both public and from NGOs) stated that EUSF enabled all local interest groups to come together on issues which were relevant for the local population. Greece also appreciated the revision of the EUSF Regulation in 2014, which helped to clarify a number of issues.

5.2 Efficiency

For the evaluation criterion of efficiency, we analysed the factors driving the timing for the deployment of EUSF support on the ground and looked at where there was scope for further improvements. We explored also the extent to which the administrative burden and costs incurred with the Fund's implementation are perceived as proportionate with the extent of the support. The main evaluation findings for this criterion are summarised in Box 5.2.1, and the supporting evidence presented after that.

Box 5.2.1: Main findings for efficiency:

- ✓ Following the 2014 reform, the time needed to mobilise the Fund was reduced by 12%.
- ✓ The scope for further accelerating mobilisation of the Fund is limited.
- ✓ The quality of reported data and administrative factors impact on the duration of the closure process.
- ✓ Administrative burden and costs are considered proportionate in beneficiary countries with an effective system for implementing the Fund.

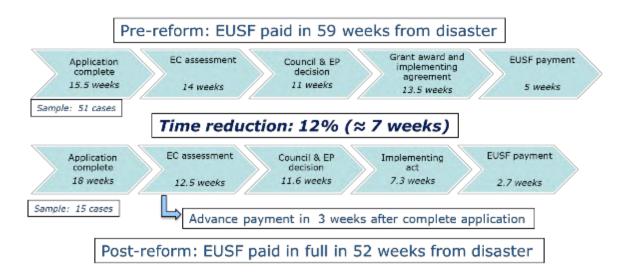
5.2.1 Time needed to mobilise the Fund is reduced by 12%.

The European institutions, including the European Parliament, the Council and the European Court of Auditors, have expressed their concerns that the time needed to deploy the EUSF grant to the beneficiary country is often too long. In this evaluation, we undertook to explore this issue closely in order to understand the effects of the 2014 reform on the timing of the Fund's mobilisation, and to what extent there was scope for further improvements.

For this purpose, we analysed the time taken with each of the main steps in the process that leads to the EUSF payment: application, assessment by the Commission and proposal to the budgetary authority, the decisions of the European Parliament and the Council for the Fund's mobilisation and the appropriation of the resources for the grant, the adoption of the legislative act(s) for the award and implementation of the support, and the execution of the payment decision.

Figure 5.2.1 illustrates the average time needed for each of these five main phases in the process of mobilising EUSF support. The data are calculated based on 66 approved cases covering the period 2002-2017 for which we collected complete implementation data. The impact of the 2014 reform on the (average) duration of each of these procedural steps can be distinguished by comparing the 51 cases approved based on the initial regulation with the experience with the 15 cases post-reform. Descriptive statistics for the duration of the five phases (before and after the 2014 reform) are included in Annex 5.

Figure 5.2.1 Duration of phases of the EUSF mobilisation process pre- and post-reform



The comparison pre- and post-reform indicates that the time needed to mobilise the Fund has been reduced, on average, by 12%, with the main time savings achieved by merging the two implementing acts after the European Parliament and the Council decision and by accelerating the transfer of the grant from the Commission to the Member State. Both average durations are reduced by 46% each. Further time gains were achieved for the time needed by the Commission to assess a complete application (a reduction of 11%, from 14 to 12.5 weeks). Nevertheless, the time to complete an application increased, on average, from 15.5 to 18 weeks (also as a result of the extension of the regulatory time for submitting an application from 10 to 12 weeks).

The provision of support can be speeded up further with advance payment, provided such requests are made and approved. For the 10 post-reform cases where advance payments were made, the average time of payment of the advance is 3 weeks after the completion of the application.

Despite the time gains described above, the time it takes to mobilise the Fund and pay support remains significant, averaging approximately a total of 1 year. In the following subsections, we explore the factors influencing the duration of these procedural steps.

A) Application phase

Applicants for EUSF support must submit an application no later than 12 weeks after the first date of the disaster. Subsequent updates to the application are possible in justified cases, either if the disaster continues or if the Commission requests additional information. The deadline prior to the 2014 reform was 10 weeks, with updates possible.

The possibility to provide updates to the application submitted by the regulatory deadline extends the effective time of application, sometimes significantly. For the pre-reform period, while all approved applications met the regulatory deadline of 10 weeks, for at

least 25% of them the effective duration of the application process lasted for at least 20 weeks. Similarly for the post-reform cases, while all approved applications comply with the regulatory deadline of 12 weeks, preliminary evidence indicates that for some of these cases the effective application time can go beyond 20 weeks.

The external study has identified a number of factors that may influence the effective duration of the application process, such as: the ongoing nature of a disaster (which implies a re-assessment of the damage incurred), the difficulties in gathering timely and complete data on total direct damage and on the estimated cost of eligible operations, and the applicant country's experience with previous applications for EUSF support³⁰. Of these factors, the clarifications requested by the Commission in relation to damage estimation and the estimated cost of eligible operations have been by far the main reasons for extensions in the effective time of the application process. This is especially the case in situations where damage estimation proves challenging due to the nature of the unfolding nature of the disaster. For example, in the case of the 2012 drought in Romania, the EUSF application submitted 10 weeks after the disaster was followed by a Commission request for a revision of the total direct damage due to the date applied in the estimation. The Commission explained that the application should take into account the date of the disaster as the date when the damage is presumed to have peaked, and asked the national authorities to recalculate the damage. The final application was completed 40 weeks after the date of the disaster.

As emphasised in Section 5.1 as well, the issue of damage estimation is critical for an optimal functioning of the Fund. Both its effectiveness and efficiency depend to a significant extent on the applicant's ability to provide timely and complete estimates for total direct damage. While there are examples of good practices where applicant countries draw on strong experience and comprehensive domestic systems for damage estimation, there are also many situations in which beneficiary countries are yet to develop such capabilities. This highlights the need for further work both at national and EU levels to develop robust methodologies to estimate the damage resulting from disasters, work which may help reduce the need for subsequent updates for damage estimation of EUSF applications and also benefit the overall national systems of disaster risk management.

B) Commission assessment process

The Commission assessment of applications is the second step in the process of mobilising the Fund. If an application is assessed as complying with the regulatory requirements, the Commission adopts a proposal for the European Parliament and the Council to activate the Fund and approve the budget for the financial assistance proposed.

As indicated in Figure 5.2.1, the duration of this phase is, on average, more than 12 weeks, even after the 2014 reform. This is due to the fact that the assessment process involves a series of consultations with relevant departments within the Commission (such as the Joint Research Centre, DG Environment, DG Humanitarian and Civil Protection, DG Agriculture and Rural Development, etc.), as well as procedures for adopting the Commission Communication for the proposal. Overall, the estimated duration for these processes combined amounts to 8 weeks, to which must be added a period of 3 weeks,

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The analysis in this section focuses on the duration of procedural steps for cases where the mobilisation of EUSF support was approved. A similar analysis carried out also for the rejected applications is included in the external study supporting this evaluation. See EPRC (2018a) Interim Report.

the time usually necessary to translate the application reports and supporting documents into at least one of the Commission's working languages.

Over time, the Commission has implemented measures to streamline the process, such as simplifying and clarifying the application form and guidance, and reducing the interservice consultation to only 5 working days. Despite these efforts, however, we find that, given the institutional protocols for consultation and adoption of acts within the Commission, the estimated duration of the assessment phase is 11 weeks, a duration much higher than the 6 weeks specified in the amended Regulation. Therefore, given the current regulatory and institutional framework in which the Fund operates, the scope for significant further reductions in the assessment time in the Commission appears rather limited.

C) European Parliament and Council decisions

Following the assessment of a successful application, the Commission proposes the mobilisation of the Fund, and the amount for the grant and its use, to the European Parliament and the Council. In parallel with the decision to mobilise the Fund, the two arms of the budgetary authority also approve the budget appropriations for the proposed financial contribution.

The time required for them to adopt any amending budget and for national parliaments to scrutinise the proposal is at least 8-10 weeks, thus establishing a baseline for this stage in the process. Moreover, the duration of this phase can vary depending on the timing of the voting of the proposed mobilisation of the Fund in the European Parliament's calendar of plenary sessions. For example, if the Parliament's decision on mobilising the Fund is required 1 day after the end of a plenary session, the EUSF decision has to wait for several weeks until the next session. Given the unpredictability of disaster events, it is difficult to synchronise the EUSF procedures with the institutional calendars in order to ensure immediate response.

The interviews carried out for the evaluation revealed the efforts made over time by the European institutions (the European Parliament, the Council and the Commission) to streamline the process as much as possible. EUSF decisions, for instance, are treated as a stand-alone, independent process not tied to any other budgetary debates or decisions, so that the duration of the decision on the Fund's mobilisation could be shortened. In 2014, the European Parliament's Committee on Regional Development also adopted a streamlined procedure to deal with EUSF proposals.

Our analysis of the duration of this phase based on pre- and post-reform cases indicates that the average duration of the decision process remains at around 11 weeks. Nevertheless, the variability of the duration across cases has been reduced from a maximum of 27 weeks for the pre-reform cases to a maximum of 16 weeks for the post-reform cases. Therefore, we conclude that the scope for further reductions in the timing of the decisional process for the Fund's mobilisation is also rather limited.

D) Commission implementing act

Before the reform in 2014, the decision of the European Parliament and the Council was followed by the Commission's adoption of two legal acts: a decision awarding the aid addressed to the beneficiary country (grant decision), and an implementation agreement developed with the beneficiary, specifying the conditions for using the grant, the types of eligible operations, and the responsible national authorities. After the Fund's revision in 2014, the two legal acts were merged into a single implementing act for Member States,

while for accession countries the two acts are maintained in the form of a grant decision and the delegation agreement.

The effect of this change was to shorten the EU decision process by 6 weeks on average. In addition, it reduced the variability of the duration of this phase in the process by 57%, from a maximum of 30 weeks to a maximum of 14 weeks.

E) Transferring the EUSF grant to the beneficiary country

Efforts have been made to also shorten the time it takes to transfer the EUSF financial assistance to the beneficiary country once the implementing act has been concluded. Analysis of the time taken to make this transfer reveals a process of institutional learning over time within the Commission and the beneficiary countries. If for the pre-reform cases an average duration was 5 weeks, but more than 9 weeks in 10% of these cases, for the post-reform cases the average duration of the transfer is reduced to an average of 2.7 weeks, with a period longer than 4 weeks only in the case of Serbia.

In conclusion, this analysis indicates that the scope for accelerating the decision-making process for the Fund's mobilisation has been fully exploited through the changes introduced by the Fund's revision in 2014. Therefore, additional scope for further acceleration, beyond the average duration of 1 year, remains limited.

5.2.2 The quality of reported data and administrative factors impact on the duration of the closure process

Regarding the end of the implementation period and the closure process, we analysed the time needed to complete implementation reports, and the duration of the closure process.

No later than 6 months after the implementation period, beneficiary countries should submit an implementation report and a statement of assurance to justify the expenditure to the Commission. The end of the implementation period is calculated as 18 months from the date the Commission pays the EUSF grant. Before the 2014 revision of the Fund, the implementation period was 12 months.

Until the first quarter of 2018, the Commission received implementation reports for 70 cases implemented between 2002 and 2017, of which 60 reports correspond to cases implemented before the 2014 reform.

As with the applications, the process of completing the implementation reports also involves submitting updates if the Commission requests further information. On average, however, we find that effectively completing the implementation reports (with updates included) does not take much more than the expected time of 6 months. In some cases, however, the time allowed for completing these reports was extended significantly either due to requests for an extension from the beneficiary countries experiencing challenges with implementation, or due to requests from the Commission for additional information for the implementation report (or both). For 10% of the cases in total, we find that this process lasted for more than 1 year.

The submission of a complete implementation report together with the statement of assurance for the declared expenditure is followed by closure, which entails the Commission's acceptance of the documents submitted. For this purpose, the Commission verifies the data reported with all relevant departments (audit, financial and legal) — it may issue subsequent requests for information on the audit methodology applied by the beneficiary country for the statement of validity — and it carries out on-the-spot audits. Finally, once the reporting provided has been accepted, the Commission issues a letter of closure of the case.

The data on implementation and closure indicates that, of the 60 pre-reform cases implemented, 88% (i.e. 53 cases) have been closed to date, and the closure process for the 10 post-reform cases with submitted implementation reports is ongoing. The pre-reform cases not yet closed date from 2010-2014.

The average duration of the closure procedure is over 2.5 years, with 10% of the cases requiring much longer. According to the interviews with Commission staff working with EUSF, the closure process has evolved over time in line with the experience at EU and national level. Furthermore, the duration of the closure process may be influenced by a number of issues. First, the closure process involves communication between implementing authorities and audit authorities in the beneficiary country, and the process can be protracted due to the time needed for the various players to exchange information, changes in government, institutional reorganisation and staff turnover. At the EU level, the duration of the closure process is driven by the time needed for the inter-service consultations with the relevant departments, and by the availability of resources.

A common cause for lengthy closure processes are legal issues arising from the need to clarify the eligibility of the expenditure declared, revise the statement of validity, and possibly recover part of the EUSF grant. This highlights the role the audit authorities in beneficiary countries play in checking the eligible expenditure and identifying any issues at an early stage. An example of a comprehensive and efficient process of auditing provided by Austria is illustrated in Box 5.2.2.

Box 5.2.2: Efficient closure – Case study: Austria (floods, 2013)

EUSF provided a EUR 21 million grant for the 2013 floods in Austria, and the duration of the process, from the submission of the implementation report to closure, lasted approximately 1 year. Following the submission of the implementation report in August 2015, the Commission prepared the translated versions of the report, carried out the audit checks, ran the inter-service consultations from September 2015 to June 2016, consulted OLAF in July 2016, and closed the case in August 2016. In this process, the acceptance of the statement of validity was sent in May 2016.

This efficient process of closure was due to a large extent to a well-functioning national audit system. The national audit system in Austria is based on comprehensive checklists for the monitoring and inspection of individual projects. These checklists are based on the experience gained from the financial auditing of domestic interventions, and from EUSF operations funded previously in earlier cases of floods.

Source: Case study for Austria (EPRC 2018b).

More generally, we find that the closure process could be improved with the submission of complete and reliable data on the operations implemented. The two main factors identified as pivotal in strengthening the regularity of EUSF implementation and the reliability of data reported on implementation include the following: 1) an efficient and reliable monitoring system, and 2) alignment between the national and EU procedures in financial management and control.

Regarding the monitoring system, the monitoring of project implementation was rated highly in the case study for the 2012 earthquakes in Italy, and was also emphasised as a significant factor in the closure process for the case of the 2007 forest fires in Greece.

The alignment of financial management and auditing systems plays an important role in ensuring the regular allocation of funding to beneficiaries and preventing double-funding from different sources. Difficulties can arise, for instance, when auditing bodies are not functionally independent from final beneficiaries, and when the interpretation of regulatory terms for eligibility is not consistent across beneficiaries.

5.2.3 Administrative burden and costs are considered proportionate in countries with an effective system for implementing the Fund.

The extent of administrative burden and costs generated by EUSF's implementation is assessed on the basis of qualitative data collected in the cases studies as follows.

For the administrative burden, 58 stakeholders were asked to assess the burden generated by the administrative requirements and procedures with the EUSF application, implementation and reporting. The stakeholders include a variety of national and local players, such as representatives of national, regional and local authorities, other implementation bodies, and civil society. Around 64% of the stakeholders rated the administrative burden as appropriate and proportionate, considering the scale of support. For administrative costs, 93% of the respondents found that these costs were moderate to minimal.

Nevertheless, about a third of the stakeholders consulted rated the administrative burden of EUSF as significant or excessive, primarily in Romania, Portugal, Serbia, and to some extent also Bulgaria and Italy.

For Romania, the interviewees emphasised the low administrative efficiency due to the need to deal with large volumes of paperwork for low-value expenditure, and the low return of significant administrative efforts at local level to complete applications and collect supporting documents (in one case, for example, only 1% of the amount requested was reimbursed). Additional administrative burden was generated also due to a lack of consensus on the interpretation of the regulatory terms for the eligibility of expenditure for reconstruction works. In Portugal, although it is recognised that the administrative burden of EUSF is less onerous than other EU Funds, the stakeholders still considered that EUSF implementation implies a significant administrative workload and that its strict requirements and procedures could be an impediment for EUSF to reach all the people affected. For instance, the Fund cannot address situations where immediate response to disaster implied that people / organisations had to rectify damages using their own means, without contracting any service or asking for formal approval.

Overall, we interpret these findings as indicating that effective implementation and monitoring mechanisms at national level, and coordination among the players involved at EU, national and local level play a significant role in containing administrative burden.

5.3 Relevance

Relevance is assessed based on qualitative evidence gathered from case studies on the stakeholders' perceptions of the appropriateness of the EUSF interventions for people's needs in the aftermath of the disaster. In addition, we explored the potential for EUSF to inspire more long-term changes in national practices for managing disaster risks. The main findings are summarised in Box 5.3.1 below, and the supporting evidence is explained in the following subsections.

Box 5.3.1: Main findings for relevance

- ✓ EUSF support is relevant for meeting post-disaster needs and is welcomed in the face of tight budget constraints.
- ✓ Experience implementing EUSF support is likely to benefit policy learning and development for disaster risk management in the EU context.

5.3.1 EUSF support is appreciated as relevant for the post-disaster needs and welcomed in the face of tight financial constraints

First, stakeholders in case studies were consulted on whether they considered the objectives of EUSF interventions as appropriate for the population's needs and the overall recovery needs, and whether the support provided helped alleviate cash flow constraints for implementing bodies.

Table 5.3.1 summarises the replies on the significance of the operational objectives of the EUSF-funded projects. The last column in the table includes the percentage of respondents who rated the respective type of operation as highly or most significant.

Table 5.3.1: Stakeholder consultations: significance of operational objectives of EUSF operations

operations								
	Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total
Restoration infrastructure	None	Most	High	Most	Most	High	Most	95%
Temporary accommodation and rescue	None	n.a.	High	Most	High	None	Limited	42%
Preventative infrastructure	Most	High	Limited	Moderate	High	Limited	Most	58%
Cleaning-up operations	None	Most	Moderate	Limited	Most	Limited	Limited	39%
Disaster details	Flood, 2013, neighbouring	Severe winter, 2015, major	Forest fires, 2007, major	Earthquake, 2012, major	Flood, 2010, outermost	Flood, 2014, regional	Flood, 2014, rmajor	
Number respondents	3	9	4	11	10	10	12	59

Source: Case studies EPRC (2018 b-h).

Many of the stakeholders interviewed perceived the works on infrastructure as most or highly significant for the recovery needs in the aftermath of the disaster, with projects dedicated to temporary accommodation and cleaning-up operations rated highly for the earthquake in Italy, the forest fires in Greece, and the floods in the outermost region of Madeira.

Further insight into the relevance of EUSF operations can be gleaned from the commentaries provided by the interviewees. Some examples are provided below.

In Austria, there is a consensus among national and regional authorities on EUSF's relevance for European solidarity, with EUSF also being considered an important source of funding, especially for local authorities with tighter budget constraints.

In Bulgaria, stakeholders explained that the most urgent local needs were to restore the basic working condition of infrastructure and ensure cleaning-up operations. They appreciated the availability of additional EU resources to help local authorities cope with the significant financial constraints they were experiencing in the aftermath of the disaster. The EUSF support was much appreciated by these authorities as they had limited alternative possibilities to mobilise resources to cover the total amount of damage generated by the severe winter conditions in 2015.

An additional example of feedback on the relevance of EUSF interventions is provided by Italy, in the context of the 2012 earthquake. The appropriateness of the EUSF support was confirmed by all the interviewees, as the sizeable grant of EUR 671 million was dedicated to covering the most urgent needs of the population in the affected areas. An illustrative example is the immediate restoration of school facilities in Emilia-Romagna that enabled the 2012/2013 school year to start on time (see Box 5.3.2).

Box 5.3.2: Interventions in Emilia-Romagna following the 2012 earthquakes

Immediate restoration of schools

Two major earthquakes hit the Italian regions of Emilia-Romagna, Lombardy and Veneto in May 2012, causing 27 deaths and major damage to buildings, infrastructure and economic activity. Upon assessing the damage, the authorities learnt that around half of the public schools in the region of Emilia-Romagna had been affected by the disaster, with the schooling of more than 63 000 students at risk of disruption.

Therefore, for Emilia-Romagna, one of the main priorities in the process of recovery after the earthquakes was to proceed with the immediate restoration of schools in order to enable the 2012/2013 school year to start. The EUSF support co-financed the restoration of schools for 286 of the 314 planned interventions. In addition to restoring schools, EUSF also co-financed other types of related interventions for temporary buildings and gymnasiums, urbanisation works and alternative solutions for schools.

All these interventions combined required a financial effort of approximately EUR 126 million.

Source: Case study for Italy (EPRC 2018e).

In Serbia, the public authorities and stakeholders also considered the EUSF support as highly relevant for the projects restoring infrastructure to working order, which required substantial investments. The consensus among interviewees is that EUSF was used to meet Serbia's post-disaster needs, especially to restore traffic infrastructure, water management infrastructure, public facilities and energy infrastructure. NGO representatives, on the other hand, stressed that EUSF was less relevant for meeting urgent needs, such as temporary accommodation and rescue operations, due to the fact that the aid was disbursed only 1 year after the flooding occurred. One reason for this observation of EUSF's reduced relevance in meeting urgent needs can be that the country does not have a national emergency fund that it can first draw upon and then use EUSF to refund the initial disbursement.

5.3.2 The EUSF experience is likely to benefit policy learning and development for disaster risk management in the EU context

We also explored the extent to which the experience with the implementation of EUSF support helps emulate efforts to improve the preparedness for and the prevention and management of disaster risks in the beneficiary countries. On the basis of information provided in implementation reports and additional qualitative evidence collected in case studies, we identified some examples where EUSF contributed directly to or appears to be associated with further policy learning for disaster risk management.

Serbia is a case in point for policy learning. In preparing the application for EUSF support, the national authorities set up a working group for the Fund's implementation that involved assessing the post-disaster damage and at the same time defining a set of procedures for EUSF's implementation. The experience was perceived as challenging as there was no prior experience with the Fund's implementation in the country, and the existing national framework relied on an outdated rulebook from the 1980s for damage assessment, which was inadequate for the EUSF application process. The interviewees for the case study explained that, despite the steep learning curve, the experience with damage assessment for the EUSF application proved valuable not only because it provided a more realistic account of damages incurred in the current situation, but also because it encouraged an examination of the need to assess the country's capacity to manage disaster risks. And in doing so, it provided useful baseline information for strategic planning.

Furthermore, the main national strategic change which EUSF support contributed to after the disaster in Serbia was the development of the national disaster risk management programme and the corresponding action plan for 2016-2020. The country also introduced a more coordinated process of assessing and planning priorities in disaster risk management and developed a more long-term programming timeline with a focus on prevention.

In Bulgaria, institutional changes were introduced with the appointment of the managing authority of the ERDF operational programme 'Regions in Growth' as the national coordinator for EUSF. Specifically related to EUSF, a ministerial decree issued in 2015 set out the rules for the coordination of damage assessment and the approval and implementation of restoration projects and laid down reporting requirements. Furthermore, in the wider context of the EU framework for disaster risk management, the country put in place a series of measures, such as hazard maps, strategies, action plans, and committees for disaster and flood risk prevention. Clearly, while such measures cannot be attributed directly to EUSF, they illustrate the complementarity between the experience with the Fund and policy development in the wider EU context.

Similarly, in the process of repeated experiences with the implementation of EUSF support, Romania identified the need for a more reliable methodology for damage assessment. As a result, together with other institutional partners, the EUSF managing authority has launched a project to develop a more robust and reliable methodology for assessing disaster damage. The project is being financed through technical assistance from the ESI Funds. Furthermore, in cooperation with the World Bank, the country has also started a EUR 50 million initiative to consolidate the national system for disaster risk management.

In Italy, the Department of Civil Protection introduced the national risk assessment warning system in 2012. This system enables real-time forecasting, monitoring and surveillance of natural events as well as the appraisal of their possible effects on national territories. It is being implemented through the network of regional offices for civil protection. An important component of this system is hazard maps for hydrogeological and seismic risks. At regional level, based on the experience gained from past disasters, Emilia-Romagna introduced a regional warning system in May 2017 as a web-based tool. The website includes useful information necessary for disaster situations, such as tips and rules of behaviour, updates on alerts and events in progress, and offers members of the public the option of registering with the new system and receiving direct alert messages.

In sum, in going through the available documentation, we find a number of examples of changes introduced in national disaster risk management systems across the countries considered in the analysis. While these examples cannot reflect a direct causal link between EUSF and institutional and policy changes at national level, they nevertheless provide circumstantial evidence of converging processes of policy learning and development within the wider EU context, which includes a number of complementary instruments such as EUSF, the EU framework for disaster risk management, and the governance of ESI Funds.

5.4 Coherence

The EU Solidarity Fund operates in the context of the wider EU regulatory and coordination framework aiming to strengthen disaster risk management in the Member States. With the Fund's revision in 2014, the legislator has linked the Fund's regulatory basis to the EU priorities of prevention and preparedness for disaster situations in a number of ways. First, when applying, the beneficiary country has to provide a description of the implementation of Union legislation on disaster risk prevention and management related to the nature of the natural disaster for which the application is being

made. Second, when assessing the application, the Commission may reject an application or reduce the amount of the grant if the Member State is subject to infringement proceedings and the Court of Justice of the EU has delivered a final judgment that the Member State has failed to implement the relevant Union legislation directly linked to the natural disaster concerned³¹. Finally, in its implementation reports, the beneficiary country has to provide the state of play of and future planning for the country's implementation of relevant Union legislation and relevant preparedness and prevention measures.

From the operational perspective, EUSF's primary objective is to intervene in disaster situations to help address people's immediate needs and contribute to the efforts to restore damaged essential infrastructure in the short term so that economic activity in the affected areas can be resumed as soon as possible. As such, the Fund is complementary to EU policy instruments which aim to respond rapidly to disaster situations, develop and consolidate disaster risk management in the Member State and ensure investment in prevention and preparedness for disaster risk.

In this context, the evaluation examined EUSF's coherence with complementary EU policy instruments for the prevention and management of disaster risk, notably the investments from the Structural and Investment Funds for Cohesion Policy (ERDF and Cohesion Fund) and the Union Civil Protection Mechanism (UCPM). We also explored the usefulness of the information on lessons learnt and relevant measures planned in the future that are reported in the implementation reports. The main findings are summarised in Box 5.4.1 below, and the supporting evidence is provided after that.

Box 5.4.1: Main findings for coherence

- ✓ Synergies with ESI Funds are significant in terms of the policy framework and investments for preparedness, prevention and management of disaster risks.
- ✓ Management of EUSF can be integrated better at national level and with the management structures of ESI Funds.
- ✓ There is scope for further streamlining the reporting on preparedness and prevention measures for disaster risks in the EUSF implementation reports.
- ✓ Immediate response to disasters was provided through UCPM in 26% of the situations of natural disasters supported also by EUSF during 2002-2016.

5.4.1 Synergies with ESI Funds are significant in terms of the policy framework and investments for preparedness, prevention and management of disaster risks

The potential for synergies between the EU Solidarity Fund and the policy framework of ESI Funds is significant in terms of governance, delivery mode, management and financial control, and this is particularly the case for ESI investments in the preparedness for and prevention and management of disaster risks in Member States and accession countries. The experience built up with the design and implementation of cohesion policy (and notably through ERDF and the Cohesion Fund) in the Commission and in the Member States also benefits the implementation of EUSF operations in terms of preparing the ground for their effectiveness.

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There has been no such situation with EUSF applications to date.

In this section, we analyse the extent to which the regions affected by disasters for which the EUSF intervenes also invest resources from the ERDF and the Cohesion Fund to consolidate regional systems for disaster risk management. Further, we look at the results of a recent Commission screening of the operational programmes and the extent to which they invest in cohesion policy to cover various risks associated with natural disasters.

The recent Commission screening of cohesion policy's contribution to disaster risk management³² concludes that the 2014-2020 operational programmes for the ERDF and the Cohesion Fund include a broad array of support for the prevention of, preparedness for and recovery for a variety of disaster risks such as floods, coastal erosion, forest fires, earthquakes, landslides, droughts, as well as man-made environmental risks associated with closed mines and industrial sites. For example, 18 Member States are planning to invest in prevention measures, including flood prevention infrastructure, disaster-proofed buildings, management of land, forests and rivers, ecosystem-based approaches to risk prevention, and awareness-raising campaigns and actions to improve the knowledge base for disaster risk management. In addition, 11 Member States have allocated funds for investments in the preparedness of civil protection units, including integrated rescue stations, coordinated centres, vehicles and equipment, as well as training. Finally, as regards recovery measures addressing the consequences of disasters, 6 Member States are investing in reforestation after fires, the reconstruction of coastlines and ecosystems, the development of post-flood zones, as well as protective infrastructure and reconstruction after hurricanes (in the outermost regions).

Cohesion policy is making an additional significant contribution to disaster risk management systems in Member States with the regulatory innovation introduced for the 2014-2020 programming period in the form of *ex ante* conditionalities (EACs). The EACs had to be assessed systematically by all Member States and, in case of nonfulfilment of any condition at the time of the programme's adoption, the Member State had to provide an action plan stating the time by which the EAC would be met. For cohesion investments in risk prevention and management, the relevant *ex ante* conditionality, EAC 5.1, provides for national and regional risk assessments for disaster management that take into account climate change adaptation. The rationale for introducing this requirement was to ensure that EU investments address the key disaster risks that a country or a region faces. According to the analysis by the European Court of Auditors³³, close to 80% of the programmes had already fulfilled EAC 5.1 at the time of their adoption, while the 13 action plans covering 12 Member States for the remaining programmes were completed by September 2017.

To understand the extent to which the relevant cohesion investments from the ERDF and the Cohesion Fund cover the areas affected by natural disasters for which EUSF support was granted, we mapped the ERDF and Cohesion Fund operational programmes which cover or are likely to cover the regions affected by the natural disasters for which EUSF support was granted during 2002-2017. These data are presented in Table 5.4.1 below.

Data reported in Table 5.4.1 reads as follows. The second column reports the years of disaster events for which EUSF granted support to the Member State. The following four columns summarise the ERDF and Cohesion Fund allocations to the categories of expenditure for the prevention and management of disaster risks (related to climate, non-

The background note: 'Commission internal analysis of cohesion policy's contribution to disaster risk management', 2018, available upon request from REGIO-EVAL@ec.europa.eu.

³³ ECA (2017).

climate, and human activities)³⁴. Such expenditure includes awareness-raising campaigns, civil protection and disaster management systems, and preventive infrastructure. The value 'n.a.' marked in the cells of the table stands for 'not applicable' in situations where the Member State does not have either regional or national programmes. Furthermore, the data reported for regional operational programmes (OPs) include only those programmes which cover areas affected by the disaster events and supported by EUSF grants. Nevertheless, Ireland and Sweden (countries which also received EUSF support) are not included in the table since there are no allocations for the relevant intervention fields in the operational programmes of these countries for the two programming periods. Finally, the sums reported represent only EU amounts, as detailed data on actual national co-financing rates for these categories of expenditure are not readily available.

On this basis, we learn that the cohesion policy programmes included in the analysis allocated a total of EUR 11 billion to measures for preparedness, prevention and management of disaster risks, of which 68% is allocated in national programmes³⁵. Except for countries which do not have relevant national programmes (such as Italy, France and Germany), the majority of Member States tend to allocate the bulk of this financing in their national rather than regional programmes.

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The relevant intervention fields for 2007-2013 include: 49 (mitigation and adaptation to climate change) and 53 (risk prevention). For 2014-2020, the relevant intervention fields are 87 (adaptation to climate change and management of climate-related risks) and 88 (risk prevention and management of non-climate related risks).

The total amount allocated from ERDF and Cohesion Fund to the 4 relevant intervention fields in all operational programmes in all countries and for Interreg over the two programming periods adds up to more than EUR 13 billion.

Table 5.4.1: ERDF and Cohesion Fund allocations to disaster risk management in affected regions (supported by EUSF) and at national level (EU amounts)

		Allocation	2007-2013	Allocation	2014-2020	Total	Total
Country	Years EUSF cases		euro)		euro)	2007-2013	2014-2020
		Regional OPs	National OPs	Regional OPs	National OPs	(mill euro)	(mill euro)
Austria	2002, 2005, 2013	12	n.a.	0	n.a.	12	0
Bulgaria	2005, 2014, 2015	n.a.	87	n.a.	67	87	67
Cyprus	2008, 2016	n.a.	0	n.a.	12	0	12
Czechia	2002, 2010, 2013	48	378	n.a.	364	426	364
Germany	2002, 2007, 2013, 2016	411	n.a.	582	n.a.	411	582
Estonia	2005	n.a.	38	n.a.	58	38	58
Spain	2003, 2011, 2017	188	2	71	0	190	71
France	2002, 2004, 2007, 2009, 2010, 2017	77	n.a.	178	n.a.	77	178
Greece	2006, 2007, 2014, 2015, 2016, 2017	113	193	209	105	306	314
Croatia	2010, 2013, 2014	n.a.	0	n.a.	245	0	245
Hungary	2006, 2010	173	796	n.a.	906	968	906
Italy	2003, 2009, 2011, 2012, 2014, 2016	475	0	584	0	475	584
Lithuania	2005	n.a.	0	n.a.	109	0	109
Latvia	2005	n.a.	25	n.a.	66	25	66
Malta	2003	n.a.	36	n.a.	0	36	0
Poland	2010	129	597	134	612	726	746
Portugal	2003, 2010, 2016, 2017	39	518	8	426	557	434
Romania	2005, 2008, 2010, 2012, 2014	n.a.	238	n.a.	469	238	469
Slovenia	2007, 2010, 2013, 2014	n.a.	97	n.a.	90	97	90
Slovakia	2005, 2010	n.a.	321	n.a.	646	321	646
United Kingdom	2007, 2016	54	n.a.	87	n.a.	54	87
Tot	al	1.718	3.327	1.854	4.175	5.045	6.029

Source: SFC 2014-2020, European Commission, data downloaded in February 2019

For coverage in the regional programmes, our analysis also reveals that, in some cases, the programmes for regions affected by disaster events financed by EUSF grants do not allocate any resources to disaster risk management. For example, in Germany we found that 6 to 9 regional programmes out of 14 relevant programmes planned to use ERDF for relevant measures over the two periods. Similarly, in Italy, 9 to 11 regional programmes out of 14 regions affected by disaster events addressed by EUSF also allocated ERDF resources for disaster risk management.

Nevertheless, several caveats apply to this analysis. First, we could not distinguish the regional coverage by relevant measures financed through the national programmes. Second, data reported in Table 5.4.1 does not provide a comprehensive picture of the total financing for disaster risk management, since it does not include the national sources of funding.

As the analysis above cannot elucidate the extent to which the identified EU funding covers disaster risks similar to the one for which EUSF support was granted, we gain further insight into the coverage of disaster risks through cohesion funding from the Commission screening of these investments mentioned earlier. This analysis reveals that the priorities of cohesion policy match very closely the disaster risks identified by the Member States in their national risk assessments (NRAs), although gaps still remain in some cases.

First, the Commission finds that a number of Member States (Austria, Denmark, Finland, Ireland, the Netherlands and Sweden) as well as some individual regions are not using cohesion policy funds to address the risks identified in the NRAs. In this regard, the additional information gathered during the screening indicates that these are Member States which in general have a low allocation of EU funds, and therefore have chosen to invest in disaster risk management using national means.

Second, with respect to the type of disaster risks covered, the Commission analysis also indicates that, while the policy coverage of risks of floods and drought is appropriate, gaps still remain in the coverage of disaster risks from earthquakes and, to some extent, forest fires. For earthquakes, Italy is the only Member State which invests resources in counteracting the associated risks, while other Member States (such as Bulgaria, Croatia and Romania), although exposed to the risks of earthquakes, did not allocate any resources for earthquake prevention measures. For forest fires, while 8 Member States are considered most prone to this type of risk, only 4 of them are investing cohesion policy funds in related preparedness and prevention measures. In the cases of Cyprus, France, Malta, and Italy, their Partnership Agreements indicate that forest fires are to be addressed by the Rural Development Fund instead³⁶.

In this context, we note that the main disaster risks of earthquakes, floods and forest fires are also highly relevant for EUSF. Therefore, the cohesion policy investments in the preparedness for, prevention of and response to these risks are likely to benefit the Solidarity Fund as well.

Finally, the Commission also observes the civil protection authorities' lack of involvement in setting the priorities for cohesion investments. In this regard, although this is primarily a responsibility of the Member States, the Commission can also help to raise greater awareness among civil protection authorities and facilitate the exchange between the various services, for instance through events such as the European Civil Protection Forum.

In sum, based on this analysis, we conclude that ERDF and Cohesion Fund investments are likely to significantly help improve Member States' capacity for preparedness, prevention and disaster risk management, investments which prepare the ground for more effective EUSF operations in the future. Moreover, as explained in this and other sections of this report, EUSF benefits from the experience gained with the governance practices established for ESI Funds, such as the *ex ante* conditionality for risk management, the systems for monitoring operations in beneficiary countries, and management and financial control.

5.4.2 EUSF's management can be better integrated both in national systems and in the governance structure of ESI Funds.

Synergies between the management of EUSF and the national and ESIF management structures can ensure an effective and efficient use of resources, and sound financial management and control of the various sources of funding of investments in response to disasters.

The integration between EUSF's management, on the one hand, and national management structures for disaster risk and the management of ESI Funds, on the other,

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Due to time constraints, the analysis for this evaluation could not cover the European Agricultural Fund for Rural Development (EAFRD). Nevertheless, it is worth noting that the EAFRD constitutes an important additional source of EU funding for restoring agricultural production and introducing prevention measures.

has been analysed based on desk research carried out for the external study supporting the evaluation³⁷. This analysis covers primarily the Member States which received EUSF support after the Fund's reform in 2014 (i.e. Bulgaria, Croatia, Cyprus, Germany, Greece, Italy, Portugal, Romania, Serbia, and the UK), but was also extended to other countries whenever feasible.

On this basis, the overall coherence between EUSF's management and domestic structures for disaster risk management is assessed as moderate, as Member States differ in their governance practices. In Italy, for example, the EUSF system is fully integrated in the domestic institutional system, which is coordinated by the Civil Protection department, while in Romania the coordinating structure for EUSF (included in the General Secretariat of the Government) is separate from the national institution which coordinates emergency interventions (IGSU in the Ministry of Internal Affairs).

As for the synergies between EUSF and ESIF management systems, the study finds that some countries take advantage of the knowledge they have gained managing EU Funds and have integrated EUSF in this context. In Bulgaria, the managing authority for the 2007-2013 operational programme for regional development had a leading role in EUSF's implementation for the disaster situation with the 2015 floods. Greece is another example of strong complementarity between EUSF and ESIF, as the delivery mechanism for EUSF interventions has been incorporated in the monitoring and control system for operations under the 2014-2020 ESI Funds.

Coherence is assessed as weak or non-existent in countries where EUSF and ESIF are built on separate institutional structures, such as in Austria, Czechia, Poland, Romania, Slovenia and Spain. Furthermore, based on the case study for Austria, we learn also that, when these institutions are separate, the managing authorities of ESI Funds have a low level of knowledge of EUSF, therefore reducing the scope of potential synergies between the two instruments.

The integration or complementarities in governance structures also have implications for the potential for concerted actions for EUSF and the ESI Funds. We find that the scope for joint funding of strategies and measures with the two policy instruments is not feasible due to separate governance structures and different timelines for implementation. While EUSF is an instrument designed to intervene in specific disaster situations, the ESI Funds have a longer life cycle, focusing primarily on more long-term investments, with longer processes for the selection and appraisal of projects.

5.4.3 There is scope for further streamlining the reporting on preparedness and prevention measures for disaster risks in the implementation reports

The reporting on disaster risk management in EUSF implementation reports could be considered an opportunity to further inform cohesion policy on lessons learnt from the experience with the disaster and possible needs for investments in preparedness and prevention measures.

For this purpose, we analysed the extent to which the information provided in the EUSF implementation reports on measures for disaster risk management is also useful for following up, through cohesion policy, on the need for restoration works and for adapting relevant action plans in the areas affected by the specific disaster addressed by EUSF.

Following the 2014 reform, the implementation reports for EUSF are expected to include information on the following issues: 1) the preventive measures taken or proposed to be

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³⁷ See EPRC (2018k) available upon request from: REGIO-EVAL@ec.europa.eu.

taken in order to limit future damage and avoid a recurrence of similar natural disasters, 2) the state of implementation of relevant Union legislation for the prevention and management of disaster risks, 3) the experience gained from the natural disaster and the measures taken to ensure environmental protection and resilience to climate change and natural disasters, and 4) any other relevant information on the prevention and mitigation measures taken.

Analysis of the implementation reports received for cases implemented after the Fund's revision indicates that all beneficiary countries report primarily on the transposition of relevant Union legislation into national legislation, and to some extent on progress in implementation. The approach to disaster risk management, however, is not elaborated in detail when it comes to specific measures, projects and investments addressing the type of disaster experienced in the affected areas³⁸. A good example, however, is provided by the implementation report of the EUSF intervention in Bulgaria (floods, 2015), which includes a detailed assessment of problems identified in the context of the disaster situation, and of the extent to which these problems have been or are planned to be addressed.

In conclusion, given the varying reporting practices regarding the follow-up measures for disaster risk management across beneficiary countries, our assessment is that this information is of little subsequent practical use for informing further the strategic and operational planning for cohesion investments. Further consideration is warranted of the possibilities to streamline and use this information provided by beneficiary countries in order to help define investment priorities for disaster risk preparedness and prevention in the areas affected by the disaster addressed by EUSF.

5.4.4 Immediate response to disasters was provided through UCPM in 26% of situations of natural disasters supported also by EUSF during 2002-2016

The Union Civil Protection Mechanism (UCPM) aims to enhance preparedness for, prevention of and response to disaster³⁹. The precursor UCPM was established in 2001 and further consolidated in 2007 to promote cooperation among civil protection authorities across EU and neighbouring countries for assisting victims of natural and man-made disasters⁴⁰. In 2013, Decision No 1313/2013 of the European Parliament and the Council established the UCPM with the objective not only of ensuring rapid response to disasters, but also to foster cooperation for disaster prevention and preparedness.

The Emergency Response Coordination Centre (ERCC) is the operational hub of UCPM that monitors emergencies 24/7. Whenever an overwhelming disaster strikes, a request for assistance can be submitted through ERCC. Until the recent revision⁴¹, the UCPM relied on a voluntary system of mutual assistance and response capacities offered by the participating states. A "Voluntary pool" of national resources pre-committed by the participating states brings together specialised equipment, rescue teams and trained experts ready to intervene when called upon by the Commission.

³⁸ See EPRC (2018k) available upon request from: REGIO-EVAL@ec.europa.eu.

https://ec.europa.eu/echo/what/civil-protection/mechanism_en.

The Community Civil Protection Mechanism was created by Council Decision 2001/792/EC, Euratom, recast by Council Decision 2007/779/EC, Euratom. The financing of the mechanism was introduced by Council Decision 2007/162/EC, Euratom, which established a Civil Protection Financial Instrument.

Decision 2019/420/EU of the European Parliament and of the Council of 13 March 2019 amending Decision No 1313/2013/EU on a Union Civil Protection Mechanism.

For this evaluation, we mapped the activations of the UCPM for immediate response in situations of natural disasters which were supported also by EUSF between 2002 and 2016 (Table 5.4.2 below).

The table reads as follows: the first column shows, for example, that Bulgaria activated the UCPM emergency system for assistance with the 2005 spring and summer floods, and it received assistance from Austria, Czechia, Sweden, and Slovakia.

Over the reference period, 11 countries receiving EUSF support also activated the emergency assistance from UCPM in 20 instances of natural disasters, which represents 26% of all cases supported by EUSF during the period. The immediate assistance provided through UCPM included firefighting means (planes, helicopters), equipment (water pumps, power generators, water purification units, cable traction devices, etc.), medical items, as well as manpower (technical experts, firefighters, and other intervention personnel).

In view of increasingly complex and recurrent emergencies, the Commission proposed a revision of the UCPM legislation in order to strengthen the EU collective response to disasters⁴². The revised UCPM Decision was adopted and entered into force in March 2019⁴³. An important new element of UCPM is the establishment of rescEU – a reserve of civil protection capacities at European level to be used as a last resort, when Member States cannot cope with a disaster themselves and when capacities in the 'Voluntary Pool' are not sufficient. The revised UCPM legislation also strengthened incentives for participating states to commit their response capacities to the 'Voluntary Pool'. Moreover, provisions on prevention and preparedness were reinforced and administrative rules simplified.

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⁴² COM(2017) 772 and COM(2017) 773.

Decision 2019/420/EU of the European Parliament and of the Council of 13 March 2019 amending Decision No 1313/2013/EU on a Union Civil Protection Mechanism.

Table 5.4.2: Activation of UCPM in natural disasters supported also by EUSF, 2002-2016

						ACTIVA	TORS				
CONTRIBUTORS	BG	CY	FR	GR	HU	PL	PT	RO	RS	SE	SI
CONTRIBUTORS	floods	forest	flood	forest	floods	flood	forest	floods	flood	storm	flood
		fires		fires			fires				
AT	2005			2007	2006			2005, 2008, 2010	2014		2014
BE			2004					2010			
BG					2010				2014		
CZ	2005		2004		2010	2010		2005, 2008	2014	2005	2014
CY				2007							
DE			2004	2007	2010	2010	2003	2005, 2010	2014	2005	2014
DK					2006	2010		2008	2014		
EE						2010					
ES				2007				2005			
FI								2005			
FR		2016		2007		2010		2005	2014		
GR		2016									
HR					2010			2010			
HU				2007				2005, 2008, 2010			2014
IT		2016	2004	2007			2003, 2016	2005, 2008			
LT						2010					
LU								2005			
LV						2010					
MT								2005			
NL				2007	2010	2010					
NO				2007	2010						
PL						,		2005, 2008			2014
PT				2007							
RO				2007	2006, 2010				2014		2014
SE	2005			2007	2006			2005			
SK	2005							2005, 2008			
SI				2007	2006, 2010			2005	2014		

Note: Based on 20 EUSF cases approved and for which UCPM was activated.

Source: European Commission, DG ECHO, 2018.

5.5 EU added value

The EU added value of EUSF is assessed based on the stakeholder consultations run for the case studies. Respondents were asked to comment on the following dimensions: 1) the economic added value, defined in terms of the additionality of resources and the role in alleviating cash flow constraints; 2) political added value, defined in terms of greater visibility of the EU and closer cooperation between political levels in the EU and the Member States; 3) policy added value, defined as additional emphasis or investments on national policies for disaster risk management; 4) operational added value, defined as changes in planning, management, implementation, and monitoring and evaluation of disaster management operations; and 5) learning added value, defined in terms of the acquisition of new knowledge and the dissemination of good practice. The results from the consultations are summarised in Table 5.5.1. The last column in the table includes the weighted share of respondents who rated each dimension as most or highly significant.

Table 5.5.1: Stakeholder consultations: significance of EUSF's EU added value, by dimension

	Austria	Bulgaria	Greece	Italy	Portugal	Romania	Serbia	Total
Economic	High	High	Moderate	Most	Most	High	Most	92%
Political	Moderale	Moderale	Moderale	Most	High	Limited	Limited	31%
Policy	Limited	Limited	Limited	High	High	Moderate	Moderate	31%
Operational	None	Moderate	High	High	Most	Moderate	High	58%
Learning	None	High	High	High	High	Moderate	High	72%
Disaster details	Flood, 2013, neighbouring	Severe winter, 2015, major	Forest fires, 2007, major	Earthquake, 2012, major	Flood, 2010, outermost	Flood, 2014, regional	Flood, 2014, rmajor	
Number respondents	8	9	5	11	9	10	12	55

Source: Case studies EPRC (2018b-i).

Most of the respondents considered EUSF's economic added value as highly significant. Respondents in Italy, for instance, explained that EUSF was considered most useful for providing financial resources mainly to local public authorities in an emergency situation and within relatively short time. In this regard, the interviewees called EUSF 'a breath of oxygen' for the municipalities involved. The respondents from Greece, on the other hand, rated the significance of the economic added value as moderate due to the fact that the funding was received with considerable delay, and also because the resources available from other sources (EU, national, voluntary) tended to overshadow EUSF's role in covering expenditure with disaster recovery.

The second highest rated dimension of EU added value is learning. Stakeholders from Bulgaria stated that the logic of EUSF's intervention helped institutions to organise themselves better and to develop the knowledge and skills of their personnel, notably in the small municipalities with less experience of EU financed projects. In Portugal, learning has benefited the authorities in the autonomous region of Madeira where, in the aftermath of the disaster, several measures were implemented to reduce risks of new disasters such as the regularisation of streams, the consolidation of cliffs, the monitoring of critical areas, and the implementation of weather radars.

From the operational perspective, the experience with EUSF was seen by interviewees from Serbia as an opportunity to introduce good quality standards for disaster prevention and management, notably with the coordinating system and the introduction of EU standards for public procurement. An example of effective cooperation emulated across various levels in Serbian society in this context refers to the support for the creation of a network of more than 100 local NGOs and citizen groups in order to assist the population affected. Similarly, respondents from Greece appreciated the opportunities created, within the context of EUSF's implementation, for establishing an effective mechanism for collecting and assessing data on disaster damages. The operational experience gained in financing and monitoring restoration works was also assessed as highly significant.

The Fund's policy dimension, however, received rather modest ratings from the respondents in case studies (except for Italy and Portugal), indicating a rather weak direct impact of EUSF on domestic policies for disaster management. In Greece, for instance, respondents emphasised that, in their opinion, the national civil protection system has not yet incorporated the risk assessment approach to address the impact of climate change, and it is still focused primarily on addressing disasters as they occur, rather than on prevention and preparedness. In Italy, respondents addressed the policy added value from the perspective of the experience built up with EUSF, emphasising that, in the aftermath of the L'Aquila earthquake in 2009, the Department of Civil Protection developed a set of tested methods and tools for damage assessment and implementation of disaster

interventions, thus building on the capacity to cope effectively with emergency situations.

As for the Fund's political dimension, the national authorities in Austria emphasised that the political added value of EUSF is, in principle, represented by its capacity to increase awareness of EU solidarity. For the stakeholders in Bulgaria, EUSF helped increase EU visibility mostly at the local level, as local municipalities helped to collect data for the application for EU support. In Greece, on the other hand, the opposite seems to have occurred: the Fund did not succeed in increasing awareness of EU solidarity, as the relationship with the EU was most of the time managed by the central level, with limited involvement of local municipalities only at the time of closure.

5.6 EU solidarity

EUSF's core mission is to ensure EU solidarity with the population of the countries and regions hit by significant natural disasters by contributing to a rapid return to normal living conditions in these areas. The Fund's objective is to cover a share of a beneficiary country's public expenditure incurred for emergency services to meet immediate needs and the short-term restoration of damaged infrastructure. Furthermore, the amount of the aid should reflect the degree to which a disaster-stricken country is capable of facing the situation with its own means, meaning that for the same amount of damage poorer countries (expressed by GNI) should receive more aid than richer countries.

For this evaluation criterion, we analysed two main aspects of EUSF's solidarity value: 1) effective solidarity, as witnessed by the Fund's availability to support disaster-stricken countries and regions, and to the extent to which the Fund contributes to the post-disaster reconstruction efforts, and 2) perceived solidarity, in terms of the public's perception of the Fund and its image conveyed in the media. Box 5.6.1 below summarises the main conclusion of the analysis, while the supporting evidence is discussed after that.

Box 5.6.1: Main findings for EU solidarity

- ✓ EUSF fulfils its overall mission by contributing to the post-disaster response efforts in situations of significant disasters.
- ✓ The extent of EUSF's contribution to post-disaster response efforts is contingent upon beneficiary countries being able to provide timely and complete estimates of total direct damage.
- ✓ Close to 60% of the people in the EU are broadly aware of the EU Solidarity Fund, but up to 15% are likely to have specific knowledge of the Fund.
- ✓ The media image of EUSF in case studies is predominantly factual or positive.

5.6.1 EUSF contributed to the post-disaster response efforts in over 80 cases of significant disasters in 23 EU Member States and 1 accession country.

There is clear evidence that the EU Solidarity Fund fulfils its mission to ensure EU solidarity with countries confronted with devastating natural disasters. Between 2002 and 2017, EUSF deployed EUR 5.24 billion in 24 countries for 84 significant natural disasters, with 89% of this support allocated to major natural disasters. As presented in Section 5.1, the Fund was mobilised in all situations of major disasters and, following its reform in 2014, the possibility of mobilising it also for large-scale regional disasters has been improved significantly.

The extent to which the Fund contributes to the post-disaster response efforts in the disaster-stricken areas, however, is contingent upon the implementation conditions. As explained in Section 5.1, although by design the Fund is intended to benefit more countries which are less capable of coping with the consequences of a significant disaster from their own resources, the extent to which it manages to do so depends on the applicant country being able to provide timely and complete estimates of total direct damage. When looking at the correlation between the percentage of EUSF aid in estimated total eligible costs incurred with post-disaster response, on the one hand, and the GDP per capita of the beneficiary country, on the other hand, we find that, with some exceptions, the aid ratio tends to increase with the level of real GDP per capita. These data are illustrated in Figure 5.6.1.

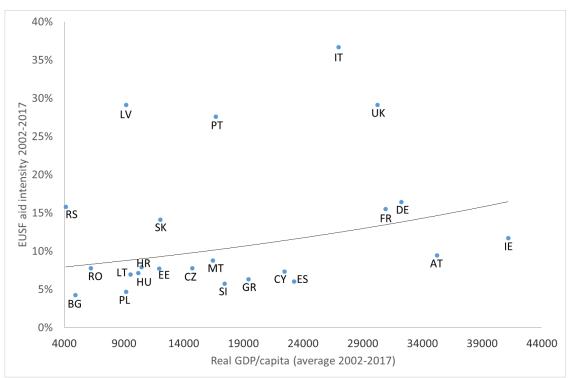


Figure 5.6.1 EUSF aid intensity vs real GDP per capita 2002-2017

Note: Based on 70 approved cases with applications submitted during 2002-2017. The case for Sweden is not included due to the high value (95%) for the EUSF aid intensity.

Source: European Commission, monitoring data for 2002-2017; ESTAT data on annual real GDP/Cap.

The data series presented in Figure 5.6.1 is calculated as follows. For the aid ratio, we calculated the ratio between the total EUSF grants cumulated by the country over the period 2002-2017 and the cumulated estimated costs with eligible operations reported by the country over the same period. The series of real GDP per capita is calculated as an average of the annual levels over the period 2002-2017, and it is interpreted as a proxy measure for the country's ability to cope effectively with large unexpected adverse events.

Figure 5.6.1 illustrates two main groups of countries: the first group includes countries with lower GDP per capita (below 24 000) and also relatively low levels of EUSF aid intensity (below 10%). The second group of countries displays higher GDP per capita (over 24 000) and relatively higher levels of aid intensity (between 10% and 37%). The remaining countries display atypical patterns. Therefore, at aggregate level, the data indicate that countries with higher GDP per capita (which is usually highly correlated with good administrative capacity and institutional development) tend to benefit from a

higher EUSF coverage of public expenditure with eligible operations. As explained in our analysis in Section 5.1, this can be explained by the fact that, at the time of the disaster, countries differ in their capacity to mobilise quickly and collect complete estimates for the total direct damage due to the disaster, notably estimates for damages to private property and non-insurable assets which are most difficult to assess on a large scale⁴⁴.

5.6.2 Close to 60% of the people in the EU are broadly aware of the EU Solidarity Fund, but only 15% are likely to have specific accurate knowledge of the Fund

For the purpose of this evaluation, we included a Eurobarometer question on people's knowledge in the EU of the existence of the Fund and its intervention in their country. The question on EUSF was included in the Flash Eurobarometer Survey on 'Citizens' awareness and perceptions of EU regional policy' carried out in March-June 2017.

The Eurobarometer survey question 'Are you aware that there is a European Solidarity Fund to respond to natural disasters?' provided the following reply options: a) yes, and you know it was used in your country, b) yes, and you know it was not used in your country, c) yes, but you do not know if it was used in your country, d) no, and e) don't know. The distribution of replies is illustrated in Figure 5.6.2 by country.

Overall, all 'yes' replies combining options a), b) and c) for the survey question amount to 59% of the people surveyed. This indicates that close to 60% of EU citizens state that they know that there is a Solidarity Fund to respond to disaster situations. Of these, 21% also state that they know whether the Fund was or was not used in their country. Upon closer analysis of the distribution of these replies by country, however, we learn that the rate of accurate knowledge about the use of the Fund is likely to be lower. For example, we note that 1% of the replies 'yes, and I know it was used in my country' come from Belgium, Denmark, Finland, Luxembourg, and the Netherlands – countries which never applied for the EUSF support. Similarly, the replies 'yes, and I know it was not used in my country' are provided across all countries which received EUSF support since its introduction in year 2002.

the Fund meets this criterion of EU solidarity.

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These results are in line with the findings of the research study by Hochrainer-Stigler, S., Linnerooth-Bayer, J. and Lorant, A. (2017). In this article, the authors also discuss the contribution-based solidarity of EUSF, defined as the extent to which the payouts as a percentage of eligible costs are proportionate with the Member State contribution to the budget for EUSF. The authors conclude that

90% 80% 70% 60% 50% 40% 30% 20% 10% GR $\, \, \cap \, \,$ DE F BE Н SK 30 Yes, and you know it was not used in the country ☐ Yes, but you do not know if it was used in the country ■ No.

Figure 5.6.2: Eurobarometer results on people's awareness of the EU Solidarity Fund

Note: Based on 27 173 replies in all EU Member States.

Source: Based on data from the Flash Eurobarometer 452/2017: 'Citizens' awareness and perceptions on EU Regional Policy 45

All the replies indicating inaccurate specific knowledge amount to almost 6% of all replies to the survey, thereby reducing the percentage of citizens with specific accurate knowledge on the use of the Fund to 15% of the EU population. The rest of the replies to the question indicate that either there is broad knowledge of the Fund (38% for "yes, but I do not know if it was used in my country) or no awareness (41% for 'no' or 'don't know').

Therefore, on the basis of the evidence elicited through Eurobarometer survey, we conclude that only 15% of the EU population are likely to have an accurate awareness of the use of the Fund in their country, with the large majority of population having broad or no knowledge that there is EU financial assistance for responding to disaster situations.

Using the case studies, we explored possible reasons for this lack of specific knowledge and learnt that the stakeholders consulted believed that, although the Fund is well-known and valued by the national and local authorities in charge of its implementation, its contribution to the post-disaster return to normal living conditions is unlikely to be acknowledged by the final beneficiaries in the affected areas due to two main reasons. First, given that the Fund's resources are deployed rather late in the process of disaster recovery, they are often allocated to retrospective projects. Therefore, at the time the projects are implemented, the final beneficiaries have no way of knowing whether the EU will come to their assistance by reimbursing the expenditure. Second, EUSF's regulatory framework does not provide for an obligation for the beneficiary country to communicate on the EU support to the implemented operations.

^{45 &}lt;a href="http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLAS">http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLAS
H/surveyKy/2145

The issue of late deployment of the Fund's resources on the ground is analysed in-depth in Section 5.2 for the evaluation criterion of efficiency. As for the issue of communicating on the EU support, however, despite the absence of a corresponding regulatory obligation, we found evidence of good practices of countries which chose to publicise the financial help received from EUSF, thus increasing the Fund's visibility for the general population. In Madeira, Portugal, for example, the public institution managing the EUSF support, the *Instituto de Desenvolvimento Regional* (IDR – the Institute for Regional Development), organised a number of initiatives to publicise the support received from the European Union and the way the aid was used, and it also encouraged the beneficiaries to publicise the aid received on their websites. Similarly, in Italy, flags and EU logos were used to signal works and services financed by EUSF. The EU support was acknowledged also on the online platform "Openricostruzione" launched by the region of Emilia-Romagna to provide up-to-date information on the actual state of play of reconstruction efforts, and to indicate the quotas of public and private financial resources and donations devoted to these efforts.

5.6.3 The media image of EUSF support in case studies is predominantly factual or positive

One of the main sources for public knowledge on EU instruments is the media. Therefore, to analyse the perceived solidarity of EUSF, the external study also did an analysis of the framing used in the public media to present the Fund⁴⁶. The analysis is based on a survey of the online sources of news articles relevant for the natural disasters explored in the seven case studies in the evaluation.

The media analysis proceeded in two main steps. First, the relevant news articles were identified through web crawling retrieval, starting from an initial set of more than 4 200 documents published in online news outlets representative at country level. The final set of articles deemed relevant for EUSF was reduced to 79 documents – articles that included at least one reference to EUSF. Annex 6 presents details on the number of articles per country, the period covered, and the sources.

In a second step, the focus of the analysis shifted to the content of the articles and the frames employed by the authors to present EUSF, with the framing analysis structured in two components: a) the "consequence frame" to assess how the event is represented in terms of three dimensions of consequences: economic, political-institutional, and socio-cultural; and b) the 'sentiment analysis' to assess the valence associated with a particular frame, which can be positive, neutral or negative. Table 5.6.1 below summarises the three consequence sub-frames and their valence attributes.

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⁴⁶ See EPRC (2018j) Media image of EU Solidarity Fund.

Table 5.6.1 Analysis of consequence frames: sub-frames per country

Country	Econom	ic consec	quences	Politic	al Instit	utional	Socio-	-Cultural	
	_	N	+	_	N	+	_	N	+
Austria	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	NA	NA	NA	\checkmark
Bulgaria	NA	\checkmark	\checkmark	NA	\checkmark	NA	NA	NA	NA
Greece	\checkmark	NA	\checkmark						
Italy	\checkmark	\checkmark	\checkmark	✓	NA	√	\checkmark	NA	√
Portugal	\checkmark	\checkmark	\checkmark	NA	\checkmark	√	NA	NA	NA
Romania	NA	NA	\checkmark	\checkmark	\checkmark	\checkmark	NA	NA	\checkmark
Serbia	NA	\checkmark	\checkmark	NA	\checkmark	\checkmark	NA	NA	NA

Note: Valence/Sentiment is denoted by "-", "N", "+" respectively for negative, neutral and positive. A tick represents the presence of a sub-frame. NA refers to the absence of a sub-frame.

Note: Based on 79 documents retrieved from online news outlets. Source: EPRC (2018j) Media image of EU Solidarity Fund.

The analysis summarised in Table 5.6.1 focuses on the presence or absence of a particular frame in the content of the articles analysed per country. A neutral valence is assigned for factual statements such as 'country X has been granted EUSF funding.' Positive scoring is assigned to content including statements such as 'EU funds will help towards reconstruction', and negative valence is assessed for content presenting the Fund mostly in negative terms, such as in cases where the EU help is acknowledged but criticised as insufficient and bureaucratic. For example, for Bulgaria, some of the articles analysed were characterised as having a positive valence (+), some a neutral valence, while none included a predominantly negative valence for the frame of economic consequences.

For the frame of economic consequences, in all countries the articles with positive framing mentioned how EUSF contributed to rebuilding damaged areas or to the implementation of essential infrastructure, thus helping establish normality on a short-term basis as well as supporting more long-term measures to alleviate the economic burden caused by the disaster. The negative framing in countries such as Austria, Greece and Italy focused, for example, on payment delays and the bureaucracy involved with the decision-making process to mobilise the Fund. The results of such "cumbersome" procedures were assessed negatively, as they were perceived as an obstacle to economic recovery in the affected areas.

For the political-institutional frame, the evidence suggests a predominantly neutral sentiment, although some articles adopted either a positive or a negative stance. On the positive side, the authors welcomed the positive EU decisions to mobilise the Fund, while on the negative side, the emphasis was put on the politicised process of the intergovernmental negotiations which delayed the Fund's release. Neutral frames simply reported that the national authority submitted an application for EUSF support.

Third, the socio-cultural dimension displays a greater polarisation between positive and negative valence frames, with neutral framing absent in the sample analysed. The positive accounts focused almost always on the solidarity aspect of EUSF, with the Fund

presented as a tangible manifestation of EU level solidarity towards the EU population. In addition, this was presented as one of the core values upon which the EU is founded.

This frame was detected most noticeably in Greece and Italy, and to some limited extent in Austria and Romania. At the same time, the most negative frames also emerged in Greece and Italy with articles politicising the decision-making process for the Fund's mobilisation or criticising the EU institutions more generally.

At the aggregate level, however, the distribution of the overall valence frames by country for the sample analysed indicates a rather factual or favourable image of the Fund in most cases. Figure 5.6.3 below presents the share of articles displaying a given type of valence overall, with the number of articles analysed per country indicated on the x-axis next to the country name.

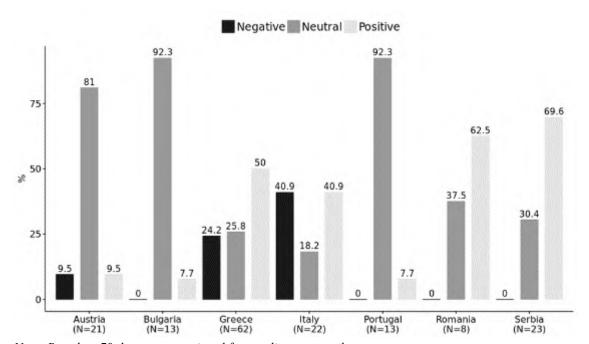


Figure 5.6.3: Distribution of sentiment in EUSF articles by country

Note: Based on 79 documents retrieved from online news outlets. Source: EPRC (2018j) Media image of EU Solidarity Fund.

Data in Figure 5.6.3 read as follows: for Austria, for example, 81% of the 21 articles analysed displayed a predominantly factual stance, with the rest of the articles equally split between a positive and negative overall message.

The analysis of the overall sentiment distribution across the articles identified per country indicates that in all cases, the percentage of articles which are predominantly factual or framed positively is in the range of 68% (for Italy) to 100% (for Bulgaria, Portugal, Romania and Serbia), with less favourable framing in Italy, Greece, and Austria.

Is it worth noting, however, that generalisations beyond the sample about the overall distribution of sentiment in the media reporting should be made with caution, especially in the light of the fact that the online selection of the sampled articles may be sensitive to a variety of factors such as the time coverage, visibility of the articles at the time of search, the initial choice of keywords, etc. Therefore, we interpret the results presented above more as preliminary rather than definitive evidence, as the topic would warrant a more in-depth analysis than the one we could carry out for this evaluation.

6 CONCLUSIONS

The European Union Solidarity Fund (EUSF) was established in 2002 to 'enable the Community to respond in a rapid, efficient and flexible manner to emergency situations'⁴⁷. EUSF deployed more than EUR 5 billion euro in 24 countries for assistance with large natural disasters such as floods, earthquakes, forest fires and other natural disasters which occurred between 2002 and 2017. This evaluation analysed the extent to which the Fund meets its strategic and operational objectives, the extent to which its interventions are effective, efficient and relevant, as well as its EU added value and coherence with other relevant EU policy instruments. The main evaluation findings and conclusions of this analysis are summarised as follows.

From the perspective of its strategic objective to support EU solidarity with Member States and accession countries confronted by significant natural events, the evaluation concludes that EUSF fulfils its mission effectively. The Fund provides most of its support to major natural disasters, and it responds successfully whenever it is called upon in such situations. Furthermore, the clarification introduced in 2014 of the admissibility criteria for applications for regional disasters significantly increased the Fund's capacity to intervene in such cases as well. This clarity of the regulatory criteria for mobilising the Fund is likely to have saved the applicant countries and the Commission a significant amount of administrative effort when preparing and assessing relevant applications.

EUSF is also experienced in bringing EU added value to Member States and accession countries, notably because of its readiness to intervene with additional financial resources. Its financial contribution to the post-disaster efforts for assisting the affected population and for reconstruction is valued, especially in countries with tight cash flow constraints, and at local level. Furthermore, the Fund is highly appreciated for its potential to promote EU standards with public administration, and to inspire further learning and policy developments in the national systems for disaster risk management.

The evaluation also finds that EUSF is an adaptable and flexible instrument for EU interventions in disaster situations. At the EU level, the mechanism established for the availability of resources on an annual basis ensures that the Fund can provide assistance even in catastrophic events, as witnessed by the record grant of more than one billion euro approved for the series of earthquakes which hit Italy during 2016 and 2017. This instance, however, also signals the risk that the Fund may be easily depleted if confronted with several disasters of exceptional magnitude over a relatively short period of time.

At the operational level, the Fund's flexibility is ensured by the possibility for beneficiary countries to use the EUSF grant to cover expenditure incurred retrospectively, i.e. with projects started and implemented already before the actual deployment of EUSF on the ground. This feature of the Fund is most effective in countries which have the possibility to mobilise resources from other sources early in the process, and then reimburse expenditure from EUSF.

As for the time needed to mobilise EUSF, one of the most criticised aspects of the Fund, the evaluation finds that the streamlining of the decision-making process achieved by the revision of the Fund in 2014 helped reduce this timing by 12%. The 2014 reform also introduced advance payments, thus enabling a partial deployment of resources earlier in the process. Nevertheless, given the institutional context in which the Fund operates, the time taken to deploy the full grant on the ground remains, on average, at about one year.

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⁴⁷ Article 1 of the Regulation No 2012/2002/EC.

We also find that the scope for further time savings in the context of the actual regulatory framework is very limited. On this basis, we conclude that the Fund is not an instrument for rapid intervention in disaster situations, and further consideration should be given to additional solutions which could help address the issue of timing for its mobilisation.

The evaluation also explored the extent to which EUSF contributes to the public costs of eligible interventions. We learnt that the Fund's effectiveness in this regard varies with the capacity and the possibility of applicant countries to provide timely and complete estimates for the total direct damage incurred with the disaster. The evidence indicates that the coverage of public eligible costs by the EUSF grant is higher for countries which provide a more complete estimate of total direct damage (i.e. including also robust estimates of private damage). We interpret this finding as indicative of the robustness of the methodology applied for the estimation. In this regard, the Commission services can play a significant role in promoting good practices and the further development of robust methodologies for damage estimation in the Member States – an action which would benefit not only an optimal use of the EUSF support, but also the overall framework of disaster risk management in the countries concerned. Moreover, this result points to the need to consider alternative methods for calculating EUSF support based on more reliable data, which could be collected within the short timeframe available for the applications.

In terms of the scope of its interventions, EUSF contributes primarily to post-disaster expenditures on providing temporary accommodation and rescue for the affected population, and restoring infrastructure. Moreover, as a result of the flexibility in the eligibility period mentioned earlier, EUSF financial assistance is 100% used in most countries.

A key result regarding the scope of interventions, however, refers to the lack of alignment between the Fund's eligibility conditions and the principle of disaster risk management according to which the post-disaster recovery phase is seen as a critical opportunity to "Build Back Better" in order to make the infrastructure more resilient to disaster risks. The fact that EUSF can finance the restoring of infrastructure only up to its original state prior to the intervention limits the possibility of using the Fund to re-build to newer, more robust standards. Therefore, further consideration should also be given to the alignment between the eligibility conditions for the EUSF operations and the most recent principles guiding the practices of disaster risk management and post-disaster reconstruction.

As for the management of ESUF implementation, the evaluation finds that its integration within the national systems of disaster management is likely to generate synergies in implementation. Moreover, some countries also capitalised on the cumulated knowledge with the management of EU funds more generally, by assigning EUSF implementation to the managing authorities of European Structural and Investment Funds (ESI Funds). Overall, we find that implementation is most effective in countries which are better prepared institutionally and organisationally for prompt interventions when confronted with challenging natural events. From this perspective, the Commission could play an important coordination role in promoting good management practices and in emulating knowledge-sharing among beneficiary countries of solutions which proved effective for the Fund's management and implementation. In addition, the current emphasis of EU disaster risk management on preparedness for, prevention of and resilience to disaster risks is also likely to benefit the Fund's operations in the long term.

From the administrative perspective, we learnt that the regulatory burden of EUSF is not perceived as excessive, especially in the light of the guidance and support provided by the Commission on applications and reporting requirements. The evidence suggests also that the perceptions of the administrative burden of EUSF procedures on the ground, however, are potentially dependent on the administrative capacity, notably on the coordination between the players involved and the effectiveness of monitoring systems. Many of the stakeholders interviewed appreciated the EUSF procedures as appropriate and proportionate with the scale of support, while others stated that they encountered difficulties with these procedures. As for administrative costs, however, the large majority of the stakeholders consulted agreed that they are proportionate.

At EU level, EUSF operates in synergy with other EU policy instruments addressing disaster risk management, notably the ESI Funds. EUSF is complementary to the ESI Funds in that it addresses interventions in specific situations of natural disasters in the short to medium term, while the Funds take a more long-term perspective of investments in civil protection, preventive infrastructure and strengthened administrative capacity for the preparedness, prevention and management of disaster risks. Moreover, given their similar mode of shared management, some national authorities take advantage of the experience gained in managing ESI Funds, including the delivery mechanism, the monitoring system, and financial management and control. In this regard, the evaluation also finds that further streamlining in EUSF implementation reports of information on preparedness and preventions measures for disaster risks could help inform better the prioritisation of investments from the ESI Funds.

Second, we also found synergies with the UCPM in that, in some cases, countries receiving EUSF grants also activated immediate assistance with disaster response through the Commission's Emergency Response Coordination Centre.

Finally, the evaluation also explored the Fund's media image and people's awareness in the EU of its existence and activities. Based on case studies, we learnt that EUSF is most often featured factually or positively in written media, mainly at the time of the application or decision for the Fund's mobilisation. On people's awareness, we learnt that a majority of them are broadly aware of the instrument's existence, although a smaller number are aware that the Fund intervened in their country. This latter result may be partly explained by the fact that the Fund is used to a large extent to reimburse expenditure for projects already implemented (and therefore, its contribution was not known at the time of the intervention), but also by the absence of regulatory requirements for communicating on EU support for the Fund's interventions. Nevertheless, we also found situations where beneficiary countries decided to promote the EU contribution to the post-disaster operations, even when there were no specific regulatory requirements. In any case, the issue of communicating on EU support is likely to be addressed in the future with the "single rule book" for communication and transparency for all EU funds proposed by the Commission for the next multiannual financial framework.

In sum, this evaluation concludes that the European Union Solidarity Fund is a valuable instrument in the EU toolkit for interventions in disaster situations, bringing EU added value to the post-disaster response in Member States and accession countries. The evaluation also calls for further consideration to be given to policy actions that increase the potential for the Fund to intervene.

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ANNEX 1: PROCEDURAL INFORMATION

1. Lead DG, Decide Planning/CWP references

DG REGIO, Decide Planning: PLAN/2017/789 (Roadmap) and ISC/2019/02722 (SWD).

2. Organisation and timing

European Commission, September 2017 – April 2019

3. Exceptions to the better regulation guidelines

Derogation for open public consultation due to limited public awareness of the Fund. As the Eurobarometer survey carried out in 2017 indicated that only around 15% of the EU population is likely to have accurate awareness of the use of EUSF, we considered that a general open public consultation online would be unlikely to generate relevant information on the features and working of the Fund across the EU. Therefore, the evaluation relied on the qualitative evidence collected based on the targeted consultations run through the case studies and the workshop organised for the evaluation (see Annex 7).

4. Evidence, sources and quality

See Section 4 on method.

ANNEX 2: LIST OF EUSF CASES FOR DISASTERS DURING 2002-2017

Table A2.1: List of EUSF cases approved for disaster events during 2002-2017 (amounts in million euro)

ID_Case	Year	Country	Category disaster	Type disaster	Total damage accepted by EC	Cost eligible operations	EUSF grant	Advance payment
DE2	2002	DE	major	flood	9.100	1.699	444,0	n.a.
AT1	2002	AT	major	flood	2.900	1.200	134,0	n.a.
CZ3	2002	CZ	major	flood	2.300	1.186	129,0	n.a.
FR4	2002	FR	regional	flood	835	225	21,0	n.a.
IT6	2002	IT	regional	earthquake	1.558	248	30,8	n.a.
IT7	2002	IT	regional	volcanic eruption	849	204	16,8	n.a.
PT10	2003	PT	major	forest fires	1.228	104	48,5	n.a.
MT13	2003	MT	major	flood	30	11	1,0	n.a.
ES12	2003	ES	neighbouring	forest fires	53	29	1,3	n.a.
ES5	2003	ES	regional	Other	436	416	8,6	n.a.
FR15	2003	FR	regional	flood	785	132	19,6	n.a.
SK26	2004	SK	major	storm	195	107	5,7	n.a.
LV30	2005	LV	major	storm	193	57	9,5	n.a.
SE28	2005	SE	major	storm	2.297	86	81,7	n.a.
EE29	2005	EE	major	storm	48	17	1,3	n.a.
RO33	2005	RO	major	flood	490	161	18,8	n.a.
BG34	2005	BG	major	flood	222	144	9,7	n.a.
BG35	2005	BG	пијог	flood	237	190	10,6	n.a.
RO36	2005	RO	major	flood	1.050	259	52,4	n.a.
LT31	2005	LT	neighbouring	storm	15	9	0,4	n.a.
AT37	2005	AT	regional	flood	592	259	14,8	n.a.
HU40	2006	HU	major	flood	519	335	15,1	n.a.
GR39	2006	GR	regional	flood	372	325	9,3	n.a.
DE43	2007	DE	major	storm	4.687	1.025	166,9	n.a.
UK46	2007	UK	major	flood	4.612	357	162,4	n.a.
GR50	2007	GR	major	forest fires	2.118	1.007	89,8	n.a.
SI60	2007	SI	пијог	flood	233	154	8,3	n.a.
FR44	2007	FR	regional	storm	212	24	5,3	n.a.
FR49	2007	FR	regional	storm	511	120	12,8	n.a.
CY61	2008	CY	major	drought	176	154	7,6	n.a.
RO62	2008	RO	regional	flood	471	154	11,8	n.a.
FR63	2009	FR	major	storm	3.805	463	109,4	n.a.
IT64	2009	IT	major	earthquake	10.212	2.004	493,8	n.a.
IE69	2009	IE DT	regional	flood	521	112	13,0	n.a.
PT72	2010	PT SK	major	flood	1.080	165 78	31,3	n.a.
SK74	2010		major projer	flood	2.999		20,4	n.a.
PL75	2010	PI.	major	flood		2.196	105,6	n.a.
HU77	2010	HU	major	flood	719	194	22,5	n.a.
RO80	2010	RO	major	flood	876 251	715	25,0	n.a.
SI84 CZ76	2010	SI CZ	major neighbouring	flood	201	171 137	7,5	n.a.
$\overline{}$	2010				153	12	5,1	n.a.
HR78	2010	HR	neighbouring		47	29	3,8	n.a.
HR83	2010	HR	neighbouring				1,2	n.a.
FR73	2010	FR	regional	storm	1.425	474	35,6	n.a.

Table A2.1 (continued): List of EUSF cases approved for disaster events during 2002-2017 (amounts in million euro)

HR113 2014 HR major flood 298 109 9,0 0 10 10 10 10 10 10 1	ID_Case	Year	Country	Category disaster	Type disaster	Total damage accepted by EC	Cost eligible operations	EUSF grant	Advance payment
ITR86	CZ81	2010	CZ	regional	flood	436	335	10.9	n.a.
ESS7 2011 ES regional earthquake 843 104 21,1 n.a.					flood	676			n.a.
TIT89	ES87	2011	ES		earthquake	843	104		n.a.
TT91				-	<u> </u>	722	511		n.a.
RO94 2012 RO major drought 807 2 2,5 n.a.			IT		earthquake		715		n.a.
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DE101 2013 DE major flood 8.154 3.289 360,5 m.a.	AT99	2012	AT	neighbouring	flood	10	2	0,2	n.a.
HR98 2013 HR neighbouring flood 11							3.289		n.a.
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				-	1				0
	FR134	2017	FR	regional	storm	1.956	191	48,9	4,89

Note: n.a. = not applicable (application submitted before the 2014 revision of EUSF)

Source: European Commission, implementation data 2002-2018

Table A2.2: List of EUSF cases rejected or withdrawn for disaster events during 2002-2017

TD . C	37	G t	Category	T1'	Status
ID_Case	Year	Country	disaster	Type disaster	application
IT8	2003	IT	regional	flood	rejected
GR9	2003	GR	regional	severe winter	rejected
FR11	2003	FR	regional	forest fires	rejected
IT14	2003	IT	regional	flood	rejected
ES16	2004	ES	regional	flood	rejected
SK18	2004	SK	regional	flood	rejected
SI17	2004	SI	regional	earthquake	withdrawn
ES24	2004	ES	regional	forest fires	rejected
ES21	2004	ES	regional	forest fires	rejected
ES25	2004	ES	regional	forest fires	rejected
ES22	2004	ES	regional	forest fires	rejected
ES23	2004	ES	regional	forest fires	rejected
ES20	2004	ES	regional	forest fires	rejected
ES19	2004	ES	regional	forest fires	rejected
IT27	2005	IT	regional	flood	rejected
GR32	2005	GR	regional	flood	rejected
UK38	2006	UK	regional	Other	withdrawn
ES41	2006	ES	regional	forest fires	rejected
ES42	2007	ES	regional	flood	rejected
ES45	2007	ES	regional	flood	rejected
CY47	2007	CY	regional	forest fires	rejected
ES48	2007	ES	regional	forest fires	rejected
IT51-59	2007	IT	regional	forest fires	rejected
GR65	2009	GR	regional	forest fires	rejected
CY66	2009	CY	regional	storm	rejected
GR67	2009	GR	regional	flood	rejected
IT68	2009	IT	regional	Other	rejected
IT70	2010	IT	regional	flood	rejected
ES71	2010	ES	regional	flood	rejected
FR79	2010	FR	regional	flood	rejected
DE82	2010	DE	regional	flood	rejected
HU85	2010	HU	regional	Other	rejected
CY88	2011	CY	major	Other	rejected
IT90	2012	IT	regional	severe winter	rejected
ES92	2012	ES	regional	forest fires	rejected
ES93	2012	ES	regional	forest fires	rejected
ES95	2012	ES	regional	forest fires	withdrawn
ES96	2012	ES	regional	flood	rejected
PT100	2013	PT	regional	flood	rejected
HU104	2013	HU	regional	flood	rejected
FR106	2014	FR	regional	storm	rejected
RO109	2014	RO	regional	severe winter	rejected
ES127	2017	ES	regional	flood	rejected
ES130	2017	ES	regional	forest fires	rejected

Source: European Commission, implementation data 2002-2018

ANNEX 3: EVALUATION QUESTIONS

The evaluation design is structured according to six evaluation criteria: effectiveness, efficiency, relevance, coherence, EU added value, and EU solidarity. The evaluation questions are the following:

Effectiveness

- 1. To what extent have the overall goals of the EU Solidarity Fund been achieved?
- 2. Has the EUSF achieved the operational objectives stated in the application for EUSF support and detailed in the Commission implementing agreements or in the decisions awarding a financial contribution from the Fund (implementing acts)?
- 3. What factors and to what extent have they influenced the achievement?

Efficiency

- 4. Is the process with the mobilisation and closure of the Fund time efficient?
- 5. Is there any evidence of an excessive administrative burden associated with the application, approval, implementation and closure of EUSF support?
- 6. What factors influenced the efficiency with which the achievements observed were attained? (e.g. administrative capacity or administrative procedures at national, regional or EU level)

Relevance

- 7. How relevant is EUSF to EU citizens?
- 8. How have these changes matched and addressed the recovery needs?
- 9. To what extent does EUSF provide incentives for long-term changes, particularly in relation to the measures planned by beneficiary countries for the prevention and management of similar disasters in the affected areas?

Coherence

- 10. To what extent were the EUSF interventions coherent with wider EU policies?
- 11. How coherent is the EUSF instrument with the wider EU policy in the domain of the prevention and management of natural disasters in EU Member States and accession countries?

EU Added Value

12. What is the EU added value of EUSF?

EU Solidarity

- 13. Has the EUSF achieved the high level objective of ensuring EU Solidarity with the Member States and accession countries affected by natural disasters with serious repercussions on living conditions, the natural environment or the economy?
- 14. To what extent is the public in the affected beneficiary areas aware of the financial support provided by the EU Solidarity Fund?

ANNEX 4: DEFINITIONS TOTAL DIRECT DAMAGE AND ITS COMPONENTS

The definitions of the total direct damage and its main public components are included in Box A4.1.

Box A4.1: Categories of damage and costs

Total direct damage

Total direct damage includes damage incurred for fixed and mobile assets, as well as the costs incurred with emergency operations. For fixed assets, for instance, this means 'cost of reconstruction' (for buildings, infrastructure in particular) whereas for destroyed mobile assets the current value of the asset should be used. Damage incurred for insured or insurable assets is excluded from the estimate of total direct damage. The calculation of total direct damage is left to the applicant country according to its national practice.

Public damage

Public damage refers to the costs related to all state-owned assets and infrastructure, as well as the costs of emergency operations.

Costs of eligible operations

The costs of eligible operations covers the cost incurred with: (i) the restoration to working order of public infrastructure and plant in the field of energy, water, waste water, telecommunications, transport, health and education, (ii) the provision of temporary accommodation and rescue services, (iii) the securing of preventive infrastructure and the protection of cultural heritage, as well as (iv) the organisation of cleaning-up operations. The cost of eligible operations is used to determine the maximum amount of EUSF support that can be proposed.

Source: Guidance note for application, online at:

https://ec.europa.eu/regional_policy/en/funding/solidarity-fund/#4

ANNEX 5: DESCRIPTIVE STATISTICS FOR DATA PRESENTED IN THE TEXT

EUSF Aid Intensity (Figure 5.1.3 in text)									
Number cases Mean Median StdDev Min Max									
84 0.17 0.09 0.21 0.02 1									

Summary statistics for data in F	igure 5.1.4 in te	xt						
Number cases Mean Median StdDev Min Max								
Share of public damage (%)	24	43	46	25	4	90		
EUSF aid intensity (%) 24 16 8 19 4								

Summary statistics for data in Figure 5.1.9 in text						
Number cases Mean			Median	StdDev	Min	Max
Time EUSF payment (months)	21	13.7	2.11	14.2	9.2	17.5
Eligibility period (months)	21	33.6	2.42	34.2	28.6	37.3

Summary statistics for data on applications in Figure 5.2.1 in text						
Number cases Mean Median StdDev					Min	Max
Pre-reform (weeks)	51	15.5	11	8.5	7.9	40.6
Post-reform (weeks)						41.7

Summary statistics for data on COM assessment in Figure 5.2.1 in text						
Number cases Mean Median StdDev					Min	Max
Pre-reform (weeks)	51	13.8	13	6.7	1.14	35.1
Post-reform (weeks) 15 12.5 11.1 6.5 3.86 27.4						27.4

Summary statistics for data on EP and Council decisions in Figure 5.2.1 in text						
Number cases Mean Median StdDev Min					Max	
Pre-reform (weeks)	51	11.2	12.1	5.7	1.14	26.9
Post-reform (weeks)	15	11.6	12	1.9	8.7	16

Summary statistics for data on adoption implementing act(s) in Figure 5.2.1 in text						
Number cases Mean Median StdDev Min					Max	
Pre-reform (weeks)	51	13.5	13.3	7.2	2.1	30
Post-reform (weeks)	15	7.3	5.1	4.4	1.9	13.7

Summary statistics for data on time for EUSF transfer in Figure 5.2.1 in text						
Number cases Mean Median StdDev Min					Max	
Pre-reform (weeks)	51	5.1	4.7	3.4	0.71	17.3
Post-reform (weeks)	15	2.7	2.3	0.69	1.9	4.6

ANNEX 6: ARTICLES USED FOR THE FRAMING ANALYSIS OF THE MEDIA SURVEY

Table A6.1 Summary articles used for analysis in the media survey

Country	Number articles	Period	Sources
Austria	21	June 2013 - March 2014	Die Presse, oe24.at, oe1.orf.at, news.ORF.at, krone.at, nachrichten, kurier.at, science2.orf.at, kleinezeitum.at, noe.orf.at
Bulgaria	13	February - September 2015	dariknews.bg, 24chasa.bg, news.bg, vesti.bg, novini.bg
Greece	62	April 2007 - November 2008	ingr, kathimerini, tovima, rizospastis
Italy	22	May 2012 - October 2013	Il Giornale, La Reppublica, Corriere della Sera, ANSA, Il Fatto Quotidiano, La Stampa
Portugal	13	February 2010 - February 2012	JN, DN, Jornal Expresso, cmjornal.pt, Publico
Romania	8	July 2014 - July 2015	Gandul, Adevarul, HotNewsRo, eazi.ro, EurActiv, Romania Libera
Serbia	23	May 2014 - January 2016	Telegraf, kurir.rs, Blic.rs, B92.net, Mondo Portal, novosti.rs

Note: Full references to the articles analysed are included in ERPC(2018j).

ANNEX 7: TARGETED CONSULTATIONS FOR THE EVALUATION

In order elicit stakeholders' perceptions of the experience with the application for and use of the EUSF support, targeted consultations were conducted for the seven case studies carried out for the evaluation. In this annex we present the methodology applied for these consultations, as well as the summaries of the replies provided by topic⁴⁸. Details on the qualitative information elicited through these consultations are provided also in the main text.

The interviews conducted for these targeted consultations include following:

- Authority interviews interviews with officials contributing to the application for support from the EUSF, the implementation of the projects supported and the closure process, such as national, regional or local administrators and executive politicians (such as local mayors or their equivalents), and specialists in the disaster relief effort. As far as possible, the interviews with representatives of public authorities were conducted in person, but also by phone or Skype.
- Stakeholder interviews stakeholders included representatives of humanitarian organizations who assisted after the disaster, business and social interests, and journalists or advocacy groups. A mix of person-to-person, skype or phone interviews was envisaged, with the aim of achieving at least five.
- **Focus group meeting** small groups of citizens and/or citizens' representatives organised to discuss their perceptions of the EUSF support and views of the EU's solidarity with their country/regions.

The list of stakeholders interviewed for each case studies are presented in the reports EPRC (2018 b-i). As regards the focus groups, the summaries of discussions are also included in the reports for the case studies.

The main questions and results from the consultations are summarized by topic in the following subsections.

A7.1 Questions on experience of EUSF

Interviewees were asked to assess the different stages in the EUSF process in terms of:

- Submission of applications: ease or complexity of the application process and reasons; requirement for help and guidance on the application process, and utility of the guidance; ease of understanding the regulations and the eligibility thresholds for the application requirements; whether the needs stemming from the disaster were appropriately represented in the application requirements.
- Assessment and approval: whether the applicant organisation received any requests from the Commission for additional information; what these requests related to; any obstacles to agreeing the intervention; the time taken for Commission approval to be received and whether it is considered reasonable; the applicant organisation's opinion on the time taken for Commission evaluation and approval.
- Implementation: the extent to which the applicant authority was satisfied or dissatisfied with the speed of EUSF payment; any problems in receiving payment; whether operations were funded retrospectively or while they were ongoing.
- Closure: whether closure of the operations was easy or complicated and why; the amount of time taken to complete the implementation report; the causes of any delays and who was responsible for them; whether revisions were required, and what these related to the results of the audit process.

This annex is based on the data collection guidance elaborated by the authors of the external study EPRC(2018 b-i).

The number of interviewees and the average score by item are provided in Table A7.1.

Table A7.1 Number interviewees and average scores for experience of EUSF

Item	Number	Average
item	interviewees	score
Submission of application	45	1.73
(1=straighforward to 4=excessively complex)	45	1.75
Assessment and approval	42	1.79
(1=straighforward to 4=excessively complex)	42	1.79
Implementation phase	49	2.14
(1=minimal burden to 4=excessive burden)	49	2.14
Closure - bureaucracy	42	1.62
(1= minimal burden to 3= excessive burden)	43	1.63
Closure - complexity	42	2.16
(1= minimal burden to 3= excessive burden)	43	2.16
Closure - time constraints	43 2.44	
(1= minimal burden to 3= excessive burden)	43	2.44

A7.2 Factors influencing implementation of EUSF

Interviewees were asked to assess the following factors:

- Governance political leadership, political differences/consensus, politicisation, corruption.
- Institutional factors organisation of institutional responsibilities, inter-organisational relationships (mechanisms for cooperation/collaboration and partnership working both within government and external bodies such as NGOs).
- Economic resources availability of national/sub-regional funds for disaster response/management budgets among relevant institutions.
- Accountability transparency and openness, reporting and assessment mechanisms.
- Other factors: procurement, local competences.

Table A7.2 Number interviewees and average scores for factors influencing implementation

	Number	Average score
	interviewees	(0=no influence to 4=most influence)
Governance	61	3.11
Institutional	61	2.82
Economic Resources	61	2.52
Accountability	61	1.56
Procurement	61	2.07
Time	61	1.73
Local competences	61	1.61

A7.3 Administrative burden and cost

Table A7.3 Number interviewees and average scores for administrative burden and cost

	Number	Average score
	interviewees	(1=limited to 4=excessive)
Administrative burden	58	2.19
Administrative cost	58	1.86

A7.4 Assessment of achievements

Table A7.4 Number interviewees and average scores assessment of achievements by type of eligible operation

	Number interviewees	Average score (0=no significance to 4=most significance)
Restoration of infrastructure	59	3.56
Temporary accommodation and rescue	59	1.66
Preventative infrastructure and protection cultural heritage	59	2.59
Immediate clean-up of disaster areas	59	1.98

A7.5 Assessment of added value

Interviewees were asked to rate the following aspects of added value:

- economic added value additionality, enabling a disaster response that would not otherwise have taken place, or at a different scale, in a different form or over a different timescale; cash flow constraints or not.
- political added value enhanced visibility of the EU; cooperation between political levels at EU and in Member State (at different levels).
- policy added value additional profile or spending on disaster management / prevention policies, innovation / changes to domestic policies.
- operational added value changes to planning, management, implementation, monitoring and evaluation of disaster management operations; institutional collaboration (vertical between levels of government, horizontal between agencies/departments and NGO / international donor community).
- learning added value acquisition of new knowledge, dissemination of good practice.

Table A7.5 Number interviewees and average scores assessment of added value

	Number interviewees	Average score (0=no significance to 4=most significance)
Economic	55	3.33
Political	55	2
Policy	55	1.80
Operational	55	2.22
Learning	55	2.38