3.2 FISMA: FINANCIAL DATA STANDARDISATION (2016.15)

3.2.1 IDENTIFICATION OF THE ACTION

Type of Activity	Common frameworks
Service in charge	FISMA B2
Associated Services	DG CONNECT, DG DIGIT, DG ECFIN, EUROSTAT

3.2.2 EXECUTIVE SUMMARY

Many stakeholders from the financial sector including private companies like banks or public administrations and National and European Regulatory/Supervisory Agencies, need to report or act on financial data as requested by EU law in force.

The huge amount of financial legislative acts and level 2 measures (implemented and expected), together with a call launched by financial industry for further data reporting standardisation and the Call for Evidence (CfE) undertaken in 2016 by DG FISMA to analyse and review the EU regulatory framework for financial services under the Better Regulation agenda and REFIT exercise, are among the driving factors for further standardisation in financial data reporting.

The main issues pointed out are related to the difference in data formats and the lack of modelling and reporting standards allowing the tracing of financial risk on an instrument-by-instrument and transaction-by-transaction basis in the financial system. The lack of a common financial language and the lack of inter-operability between public risk data infrastructures increase on one side the costs related to legal reporting requirements while making it difficult on the other side to aggregate risk data and to ensure a complete market monitoring.

The FDS project will address these issues by applying, amongst others, the ISA² Core Vocabularies Methodology and the European Interoperability Framework (EIF) recommendations.

3.2.3 OBJECTIVES

The high-level objectives of the FDS project are to propose a framework of interoperable financial data reporting standards and enhance the interoperability of relevant data infrastructures, in order to enable a more (cost-)efficient reporting of financial data and monitoring of the financial system (banks, insurance companies, and financial markets) as well as to enhance the risk assessment capabilities of the EU and the national supervision authorities, and thus contributing to the safeguarding of the stability of the EU's financial system.

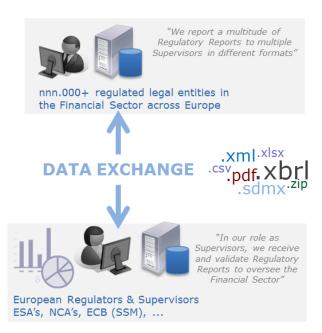
3.2.4 SCOPE

The scope of the FDS project is the analysis of existing data reporting requirements enshrined in the EU financial acquis and to work towards a framework of standards capable of enhancing interoperability and reusability of reporting data.

The diagram below clarifies the different roles in the regulatory scene: the EU, European regulatory and supervisory bodies, and reporting entities. Currently, there is no common financial language.

Diagram 1: The regulatory scene





Based on the analysis of the EU financial acquis, the FDS project delivered already a shortlist of 22 reporting frameworks containing structured data that will be subject to a detailed analysis in terms of gaps, overlaps, redundancies and inconsistencies of reporting requirements. The stakeholders that are practically implementing the reporting frameworks and other involved stakeholders have been identified.

The FDS project covers all areas necessary to achieve the objectives: financial legislation, standardisation, stakeholder requirements, governance, security and data protection, and innovative technologies to comply with regulation (RegTech).

Table 1: Shortlist of structured reporting frameworks & stakeholders

Shortlist of 22 "Structured Data" Reporting Frameworks

Ran	Reporting Framework	Structured data?	Active?	EC	EBA	Member States	EIOPA	ECB	ESMA	ESCB	CEAOB	SRB
1	CRR/CRD IV	Yes	Yes	Х	P		Х	X	Х			
2	Solvency II	Yes	Yes	X			P					
3	MIFID II/MIFIR	Yes	No	X	X				P			
4	IORP	Yes	Yes				P					
5	EMIR	Yes	Yes		X				P			
6	MIFID I	Partially	Yes						P			
7	AIFMD	Yes	Yes						P			
8	CSDR	Yes	Yes	X	X	X			P			
9	Transparency Directive	Partially	Partially						P			
10	Statutory Audit Regulation (SAR)	Partially	Yes	X	X	P	X				X	
11	SRM	Yes	Yes	X	X			X				P
12	SFTR	Yes	Partially						P	Х		
13	NEW DGS Directive	Yes	Yes	X	X	P						
14	AoIU	Partially	Yes				P					
15	PRIIPs Regulation	Partially	Partially		X		P		X			
16	Short Selling Regulation (SSR)	Yes	Yes	X					P			
17	BRRD	Yes	Yes	X	P	X			X			
18	UCITS (IV) Directive	Partially	Partially	X					Р			
19	MCD	Partially	Partially	X	P	X						
20	Credit Rating Agencies Regulation/Directive CRAR/CRAD	Yes	Yes	Х					P			
21	UCITs (V) Directive	Partially	Partially	Х	X				P			
22	Market Abuse Directive/Regulation (MAD/MAR)	Yes	Partially			X			P			

the EU body is involved as stakeholder in the Reporting Framework
the EU body is practically implementing the Reporting Framework

3.2.5 ACTION PRIORITY

3.2.5.1 Contribution to the interoperability landscape

Question Answer How does the proposal contribute to improving develop project will a framework interoperability among public administrations interoperable financial data reporting standards and and with their citizens and businesses across targets the interoperability for exchange of borders or policy sectors in Europe? information between administrations on business In particular, how does it contribute to the requests (scenario 2 from EIF) as well as the information implementation of: exchange between of national administrations and EU institutions (scenario 3 from the new European Interoperability EIF). Framework (EIF), A roadmap for standardisation will be proposed the Interoperability Action Plan and/or implementing the 4 interoperability layers of the EIF the Connecting European Facility conceptual model for cross-border/ cross-sectoral (CEF) Telecom guidelines any other EU policy/initiative having EIF services and promote many of the interoperability requirements? recommendations. In addition, the FDS project will re-use the ISA2 Core Vocabularies Methodology in order to create a harmonized financial language. The FDS project will also analyse financial data

identifiers and reference data models (including business registers) used across the industries and propose ways to harmonise the models. Does the proposal fulfil an interoperability The innovative aspect of the FDS approach is that it need for which no other alternative brings together analysis from several stakeholder action/solution is available? viewpoints and from different financial sectors operating cross-border (banks, insurance companies, and financial markets). Per sector, information is already available but has never been put together. The main actors in the financial data reporting domain (ESMA, EIOPA, EBA, ECB, Eurofiling, and the Frankfurt Group) strongly believe that the involvement of the European Commission is required to define a common vision and strategy to address the current financial data reporting issues. The financial actors tried for many years to solve the inconsistencies but failed because no actor had sufficient authority to set cross-sector standards on its own. As a result, for example, a single taxonomy for the financial sector is still missing today.

3.2.5.2 Cross-sector

Question	Answer
Will the proposal, once completed be useful,	The FDS project is cross sector and involving
from the interoperability point of view and	legislation from different financial policy areas
utilised in two (2) or more EU policy sectors?	(banks, insurance companies, financial markets).
Detail your answer for each of the concerned	This is demonstrated by Table 1 (see above).
sectors.	The stakeholders requested the Commission to
	address the reporting burden in a holistic (cross-
	sector) manner in one go to avoid a further
	increase of the burden as a result of piecemeal
	adjustments.
For proposals completely or largely already in	N/A
operational phase, indicate whether and how	
they have been utilised in two (2) or more EU	
policy sectors.	

3.2.5.3 Cross-border

Question	Answer
Will the proposal, once completed, be useful	Financial transactions don't stop at national
from the interoperability point of view and used	borders. The FDS proposal will therefore need to
by public administrations of three (3) or more	take the EU/global dimension of the financial
EU Members States? Detail your answer for	sector into account. The FDS project results will
each of the concerned Member State.	be instrumental for public and private
	stakeholders in all EU Member States and in non-
	EU countries covered by equivalence decisions
	for EU legislation.
For proposals completely or largely already in	N/A
operational phase, indicate whether and how	
they have been utilised by public	
administrations of three (3) or more EU	
Members States.	

3.2.5.4 **Urgency**

Question	Answer
Is your action urgent? Is its implementation foreseen in an EU policy as priority, or in EU legislation?	The FDS project has meanwhile been proposed by the Commission as a concrete follow-up action of REFIT exercise under the Better Regulation Commission Agenda. The first concrete deliverables are now expected as soon as possible since the project complements the Better Regulation actions by providing a "deeper" and more technical perspective on reporting. Completing the detailed analysis of the reporting frameworks is a prerequisite for a comprehensive assessment of the coherence and efficiency of the existing reporting frameworks and for the formulation of specific recommendations for future action.
How does the ISA ² scope and financial capacity better fit for the implementation of the proposal as opposed to other identified and currently available sources?	The DG FISMA budget is limited and, on the short term, no other funding sources than those received from the ISA ² Programme have been identified. Future standardisation actions may be funded by the Rolling Plan for ICT standardisation (DG GROW).

3.2.5.5 Reusability of action's outputs

Name of reusable solution to be	Methodology for Data Reporting Requirements (DRR)
produced (for new proposals) or	analysis
produced (for existing actions)	
	A validated methodology for the analysis of detailed reporting requirements embedded in the EU financial acquis. The methodology will combine a top-down (EU
Description	viewpoint) and bottom-up (industry stakeholder viewpoint) approach and combine both in order to find overlaps, redundancies, inconsistencies and gaps in the reporting requirements.
Reference	
Target release date / Status	Q3 2017
Critical part of target user base	Methodology can be reused for the analysis of structured reporting frameworks in other areas of the EU acquis.
For solutions already in operational	N/A
phase - actual reuse level (as	
compared to the defined critical part)	

Name of reusable solution to be	Financial Core Vocabulary
produced (for new proposals) or	
produced (for existing actions)	
	The FDS project aims to lay the foundation for a
Description	Common Financial Data Language which will address,
Description	inter alia, the issue of unclear definitions which is a main
	cause of the current reporting burden.
Reference	
Target release date / Status	Q3 2018
	The current scope of the Financial Core Vocabulary will
	be supervisory reporting but this vocabulary can be
	extended/reused to other domains such as financial
	reporting, non-financial reporting (on environment and
Critical part of target user base	social and governance (ESG) impacts), financial
	disclosure for consumer and investor protection
	purposes, market integrity measures, post-trade
	activities, statistical reporting, anti-money laundering,
	measures to counter terrorist financing, etc.
For solutions already in operational	N/A
phase - actual reuse level (as	
compared to the defined critical part)	

Name of reusable solution to be	Business Process Modelling
produced (for new proposals) or	
produced (for existing actions)	
	The analysis of the relations between reporting
	frameworks throughout the life cycle of the financial
	products is a prerequisite for optimizing and re-
	engineering these reporting frameworks. Innovative
	technology (RegTech) solutions can re-use this
Description	information to enable more effective compliance with
	regulation at lower cost; a positive feedback on FinTech
	can be expected as well since the latter's main focus is
	on new business models enabled by technology where
	in many cases harmonized data formats and
	interoperability are considered prerequisites.
Reference	
Target release date / Status	Q4 2018
	All financial actors will better understand the impact of
	new regulations and changes to regulations on data
Critical part of target user base	flows and be able to identify opportunities to increase
	the effectiveness of regulation while lowering
	compliance cost and reporting burden.
For solutions already in operational	N/A
phase - actual reuse level (as	
compared to the defined critical part)	

3.2.5.6 Level of reuse of existing solutions

Question	Answer
Does the proposal intend to make use of any ISA ² , ISA or other relevant interoperability solution(s)? Which ones?	The FDS project will re-use the ISA ² Core Vocabularies Methodology the European Interoperability Framework (EIF). In addition, the FDS project will investigate possible reuse of other ISA solutions, e.g. in the legislative domain (data automation tools for lawyers).
	Different standards already exist for reporting - issued by European and International Standardisation Organisations. During the analysis, the FDS project will create an inventory of existing standards and map these standards to reporting requirements. The project aims to deliver a framework of (existing) interoperable financial data reporting standards.
For proposals completely or largely	N/A

already in operational phase: has			
the	action	reused	existing
interoperability solutions? If yes, which			
ones and how?			

3.2.5.7 Interlinked

Question	Answer
Does the proposal directly contribute	Digital Single Market (DSM): The legacy data and
to at least one of the Union's high	systems in the financial sector are costly to maintain and
political priorities such as the DSM? If	create barriers to competition; in the absence of fully
yes, which ones? What is the level of	machine readable financial data (including contractual
contribution?	information) the sector will not realise the full potential
	contained in interoperability and data sharing solutions
	and is falling behind. The FDS project intends to address
	these interoperability issues with concrete actions in the
	domain of ICT standardisation and the once-only
	principle.
	The Commission's Better Regulation / REFIT agenda
	has identified financial services as a focus area where
	stakeholders have indicated their concerns regarding the
	administrative burden. The FDS project is a concrete
	follow-up action proposed by Commission
	(Communication of 23 November 2016) and will address
	many of the reported issues.

3.2.6 PROBLEM STATEMENT

The problem of	supervisory reporting obligations are perceived as too burdensome because of duplicative, overlapping and inconsistent reporting requirements
affects	EU and national supervisory and regulatory authorities, and reporting entities (financial institutions in the banking, insurance, asset management, pension funds sectors, operators of financial market infrastructure, etc., including SMEs)
the impact of which is	that (i) implementing legal reporting requirements is excessively complex and costly; (ii) it is difficult to share efficiently reporting data, including between national authorities and EU and national authorities, or between EU authorities, because of lacking interoperability; (iii) it is excessively difficult to monitor financial risk in the EU's financial system;
a successful solution would be	to reduce the administrative burden and compliance costs for industry and provide supervisory authorities with high quality data on market players and their activities; access to such data is essential to perform supervision of financial institutions, monitoring of systemic risk, market oversight and ensure orderly markets, financial stability, investor protection and fair competition.

3.2.7 IMPACT OF THE ACTION

3.2.7.1 Main impact list

Impact	Why will this impact occur?	By when?	Beneficiaries
(+) Savings in money	A common financial language will	Planning will be	Supervisory
(+) Savings in time	address the issue of unclear definitions	based on the	Authorities,
	which is emerging as the main cause	problem definition	Industry
	of the reporting burden.	provided by the	
		detailed analysis.	
(+) Better	A framework for interoperable financial	See above.	Supervisory

interoperability and	data reporting standards will be		Authorities,
quality of digital public	developed based on the project		Industry
service	findings.		
	An assessment will be done of		
	innovative technologies to optimise		
	supervisory reporting requirements		
(+) Improve the quality	The FDS project deliverables will be	See above.	Supervisory
and accessibility of	the culmination of the most extensive		Authorities,
data	and comprehensive assessment of		Industry
	financial reporting requirements		
	undertaken to date at the EU level,		
	and will lay a very solid groundwork for		
	the Commission to launch co-ordinated		
	future action which could help		
	revolutionise reporting and significantly		
	improve the quality and accessibility of		
	data, not just within the EU but		
	internationally.		
(-) Integration or	Cost/benefit assessment of proposed	See above.	Supervisory
usage cost	solution will be done at a later stage.		Authorities,
			Industry

3.2.7.2 User-centricity

A Stakeholder Expert Group on reporting will be established. This group would primarily be formed by experts from the European Supervisory Agencies (ESMA, EBA, EIOPA), the European Systematic Risk Board (ESRB), the European Central Bank (ECB)/Single Supervision Mechanism (SSM), and the Single Resolution Board (SRB), but may also include National Authorities and Industry stakeholders that have relevant experience in this field. The experts will provide valuable practical knowledge and experience, and can also be an important source of data and information on work ongoing in various international fora.

3.2.8 EXPECTED MAJOR OUTPUTS

Output Name	Framework of interoperable financial data reporting standards and roadmap for standardisation		
Output Name			
	This output will provide regulators with an interoperable set of		
	open standards facilitating efficient data exchange and		
	processing and establish a common understanding of technological interoperability between electronic data standards operated by the banking, insurance and capital markets entities and supervisors in the European Union.		
Description			
	A roadmap identifying priority areas for financial data		
	standardisation will also be delivered. This roadmap will need to		
	take into account the need for a general financial data reporting		

	framework and specialised reporting in sectors.
Reference	
Target release date / Status	2019

3.2.9 ORGANISATIONAL APPROACH

3.2.9.1 Expected stakeholders and their representatives

Stakeholders	Representatives	Involvement in the action
European Commission	DG FISMA units (internal stakeholders)	
European Central Bank (ECB)	Statistical Reporting	
European Supervisory Agencies	ESMA, EBA, EIOPA	
Single Resolution		
Board (SRB)		
The Frankfurt Group		
Eurofiling		
European Systemic Risk Board		
(ESRB)		
Industry	Banks, insurance companies, listed	
	companies	

3.2.9.2 Identified user groups

The identified users of the FDS project results are the same as identified in §3.2.9.1.

3.2.9.3 Communication and dissemination plan

A website has been set up as a central point to collect and share information on the FDS project. The information is updated on a regular basis. Access has been provided to relevant internal and external stakeholders such as financial agencies and to the external contractor performing the studies. For discussions, emails and video-conferencing will (continue to) be used. In the case of stakeholder's consultation, the EU Survey tool will be used when appropriate. In addition, the ISA² join-up platform will be used to communicate the main project outcomes.

3.2.9.4 Key Performance indicators

Provide a list of KPIs allowing the measurement of the progress and completions of milestones and the action. In case of an on-going action with already identified metrics indicate the current values.

Description of the KPI	Target to achieve	Expected time for target
Overview of the relevant reporting frameworks	100% completed in time	Target reached
Methodology for detailed analysis validated	100% completed in time	Target reached
Detailed Analysis of 22 reporting frameworks	100% completed in time	12 months
Other KPIs will be defined once the problem		
definition (based on the detailed analysis) has		
been completed		

3.2.9.5 Governance approach

The governance of the project is a key factor for the effective delivery of its objectives and is expected to improve the quality of the services provided, guarantee the alignment of its deliverables with the strategic objectives, ensure the proper allocation of roles and responsibilities and clearly identify the timeframes for a manageable and transparent execution of projects.

DG FISMA Unit B2 is the Business Owner, provides the Project Manager and is responsible for the coordination inside the DG. As part of the Better Regulation Call for Evidence follow up, the FDS project has become an essential and integral part of the supervisory reporting project in DG FISMA. Its deliverables will directly feed into the REFIT Fitness Check. The DG FISMA project team on supervisory reporting, staffed by all units handling one or several reporting frameworks, is indeed now the main vehicle that is ensuring that all work streams are well integrated and connected with the policy making in DG FISMA.

3.2.10 TECHNICAL APPROACH AND CURRENT STATUS

Achievements so far

With the ISA² funding received in 2016, the FDS project procured all planned actions and produced the first concrete deliverables. These deliverables will be the basis for the further actions in 2017 and onwards:

- a) a structured overview of the relevant reporting frameworks in DG FISMA;
- b) a proposal for the relative ranking (by importance) of these frameworks based on objective criteria:
- c) a robust methodology for a detailed analysis of the reporting frameworks; and
- d) a Regulatory Distributed Ledger Technology (DLT) feasibility study.

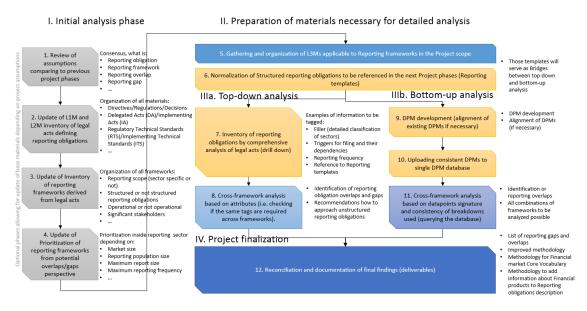
Situation now

The detailed analysis of the Data Reporting Requirements (DRR Analysis) in terms of overlaps, gaps, duplications and inconsistencies in the regulatory frameworks will be the most urgent and important FDS project deliverable for the revised ISA² Work Programme.

Completing the analysis is indeed a prerequisite for a comprehensive assessment of the efficiency and coherence of the existing reporting frameworks and for the formulation of specific recommendations for future action. This detailed analysis will be carried out at the data element level according to the validated methodology.

Diagram 2: DRR analysis methodology

Methodology for FDS project



The FDS project's present priority is thus the DRR Analysis, for which most of 2017 funding is allocated (apart from the developer and business analyst/system architect). From the original actions planned for 2017, the Financial Standards Map and Final Methodology will be integrated within the DRR Analysis because these actions logically fit together. The Business Process Modelling and Roadmap for Standardisation will be postponed to 2018, awaiting the exact problem definition provided by the DRR Analysis.

Next steps

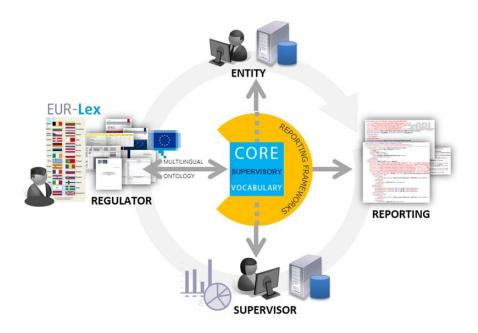
The future project deliverables beyond 2018 will address areas where further standardisation could bring benefits and identify concrete proposals for streamlining and simplifying reporting requirements without compromising their objectives, with the long-term objective of having all reporting entities to report their data only once ("report once principle"), including via the use of innovative technology (e.g., DLT RegTech).

The FDS project will deal with the reporting issues in a holistic way and two initiatives have already been identified that represent the essential building blocks for any future RegTech solution:

- i) **Development of a Common Financial Data Language**, which will build on the detailed analysis of the FDS project and the ISA² Core Vocabularies methodology. A common language will address the issue of unclear definitions which is one of the main causes of the reporting burden.
- ii) Feasibility study for a European Reference Data Repository. The study will analyse financial data identifiers and reference data models used across the industries and propose ways to harmonise the models through direct harmonisation approaches and application of common identifiers across regulations.

Currently, there is no common financial language, and the FDS project proposes to put a common supervisory reporting data dictionary in place in the centre of the regulatory scene to connect the different roles which is illustrated in the diagram below. The regulators, while developing new legislation or amending the existing legislation, will need to make use of common definitions and vocabulary in order to implement the "define once" principle:

Diagram 3: Regulatory scene and Core Supervisory Vocabulary



It is anticipated that a tool will be developed allowing regulators to use the definitions from the Core Supervisory Vocabulary while drafting new legislation. This approach would effectively implement the "define-once" principle during the initiation phase of new legislation and thus avoids the current issue of overlapping inconsistent definitions which is the largest source of costs and reporting burden.

The Business Process Modelling action will focus on the establishment of a clear understanding of information flows from the creation of a financial product until the stages where regulators request data about the product and further when they propose policies and actions based on such data sets. This knowledge is a prerequisite for (e.g.) a future cost-benefit analysis and RegTech solutions (new business models enabled by technology).

A framework of interoperable financial data reporting standards together with a roadmap for standardisation will be elaborated, taking into account the need for a general financial data reporting framework and specialised reporting in sectors. This action will provide a set of open standards facilitating efficient data exchange and processing, based on the Common Financial Data Language and transparent financial business processes.

Later actions may cover pilot projects in priority areas to test the feasibility and measure the impact of interoperability, standardisation and new technology, and a cost/benefit assessment of financial data standardisation with the costs of "standardisation" versus the costs for "non-standardisation".

3.2.11 COSTS AND MILESTONES

3.2.11.1 Breakdown of anticipated costs and related milestones

Phase: Initiation Planning Execution Closing/Final evaluation	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Initiation	Methodology validation for DRR analysis	80	ISA ²	Q3 2016	Q4 2016
Initiation	High-level DRR analysis of selected frameworks	50	ISA ²	Q3 2016	Q1 2017
Initiation	Detailed DRR analysis of 4 selected financial frameworks	150	ISA ²	Q4 2016	Q1 2017
Initiation	Feasibility study Distributed Ledger Technology	200	ISA ²	Q4 2016	Q2 2017
Execution	Tool development supporting efficient DRR analysis and reporting	220	ISA ²	Q2 2016	Q1 2018
Execution	Definition of functional requirements and system architecture of solution	265	ISA ²	Q2 2016	Q1 2018
Execution	Detailed DRR analysis, Final Methodology, and Financial standards Map	1050	ISA ²	Q2 2017	Q3 2018
Execution	Common Financial Data Language technical preparation	250	ISA ²	2018	2019
Execution	Feasibility study for a European Reference Data Repository	250	ISA ²	2018	2019
Execution	Business Process Modelling	250	ISA ²	2018	2019
Execution	Enterprise Architect	340	ISA ²	2018	2020
Execution	Framework for interoperable financial data reporting standards and Roadmap for standardisation	150	ISA ²	2018	2020
Execution	Assessment of innovative technologies to optimise supervisory reporting	200	ISA ²	2019	2020
Execution	Cost/benefit assessment of proposed innovative solutions	300	ISA ²	2019	2020
Execution	Pilot in priority area to test feasibility and measure the impact of innovative solutions	300	ISA ²	2019	2020
Execution	Technology for regulators drafting	500	ISA ²	2019	2020

future legislation			
Total FDS project	4605		

3.2.11.2 Breakdown of ISA² funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Initiation & Execution	700	700
2017	Execution	1170	1170
2018	Execution	1265	
2019	Execution	1470	
2020	Closing/Final Evaluation		

3.2.12 Planning for the tendering procedures to be launched for the action

Call for tenders foreseen	Call for Tenders	Indicative planning of publication
Global amount in KEUR	Duration in years	(QX/YYYY)
477k€	1 year	Q3/2017
550k€	1 year	Q2/2018