

HEADING 1A: Competitiveness for growth and jobs**Interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA²)**

Lead DG: DIGIT

I. Overview***What the programme is about?***

The ISA² Programme (spelled ‘ISA square’), is aimed at facilitating efficient and effective electronic interactions, cross-border or cross-sector, between European public administrations and between them, and citizens and businesses, in order to enable the delivery of electronic public services and to support the implementation of EU policies and activities. The Programme shall develop interoperability solutions autonomously or complement and support other Union initiatives.

EU added value of the programme

ISA² continues and capitalises on the results of the previous ISA programme, broadening its scope to the interactions between public administrations, citizens and businesses.

Important contributions of the ISA² programme are to:

- the Public Sector Modernisation: Interoperability is a necessary condition for the modernisation of public administrations, in particular for ‘one-stop-shop’, ‘once only principle’ or ‘end-to-end services’;
- the Digital Single Market (DSM): Actions identified as fundamental to the DSM initiative, such as the revised European Interoperability Framework and the European Catalogue, are supported by ISA² programme preventing the emergence of electronic barriers;
- other EU policies: Almost all EU policies depend for their implementation on the availability of ICT systems that support the interconnection between Member State administrations. The ISA² programme supports the implementation of such interoperable systems either by funding or by providing tools to help the interconnection and implementation of these systems.

Implementation mode

Directorate-General for Informatics (DG DIGIT) is the lead DG for the programme implementation. The programme is implemented through direct management mainly through public procurement.

II. Programme Implementation Update***Implementation status (2017-2019)***

The programme has so far been implemented efficiently with 87.42 % of the execution of the actions during 2019 ⁽¹⁾. The 2019 work programme, like all 2016 – 2018 work programmes of ISA², was performed as envisaged without delays or unforeseen events impacting the objectives stated in the legal decision of the programme. The two biggest packages in terms of funding are the:

- Supporting instruments for public administrations (EUR 6.03 million) – as the new Interoperability Academy action is proposed to enter in this category and is containing action with a high priority that would give more impact to Public Administration and Citizen.
- Supporting instrument for EU Policies (EUR 7.99 million) mostly due to the Common Information Sharing Environment for the Maritime Domain action (CISE) and support to the systems for the implementation of the Single Digital Gateway Regulation.

Key achievements

The intermediary targets have been met, with eleven key interoperability enablers and twelve supporting instruments for public administrations in use by European public administrations. For example, by systematically supporting Member States in the implementation and monitoring of the European Interoperability Framework (EIF) and the state-of-the-art of Digital Public Administration, ISA² programme has effectively delivered on its objective to develop, maintain and promote a holistic approach to interoperability in the Union in order to eliminate fragmentation in the Union’s interoperability landscape. It is expected that timely monitoring of the EIF will help Member States to identify efficiency gains for public service delivery. In 2019, the National Interoperability Framework Observatory defined and tested with some Member States a comprehensive methodology to assess the level of implementation of the EIF across the EU and collected the first results that will be published in the first half of 2020. Some

⁽¹⁾ Update of the programme’s dashboard <https://ec.europa.eu/isa2/dashboard/programme/efficiency>

of the indicators used in the methodology will also be used as of 2020 for EU semester monitoring and will be part of Digital Europe Programme (DEP) indicators. Several studies and digital government factsheets ⁽²⁾ were produced compiling interesting findings on the state-of-the-art and major trends regarding interoperability and digital transformation in public administration over the last 10 years right until today, like the adoption of ICT-friendly laws. The 2019 EU semester report shows how the European Structural and Investment funds are addressing the main trends in this area, such as the development of electronic skills, the implementation of eJustice measures or eProcurement.

There has been a very active engagement with stakeholders from all levels of public administrations, central, regional and local, businesses, SMEs and start-ups in numerous events like: Smart Cities, Regions Week, Start Up Europe, WebSummit, GovTech Summit. The programme was represented in more than 29 events during 2019. The increased awareness of the benefits of interoperability has been confirmed by the success of the SEMIC Conference and the Sharing & Reuse Conference. The interest of Member States has also increased via, inter alia, the active participation to the CIO meetings and workshops during the year. The latter have received very positive feedback and there is demand for continued organisation of such events.

Through the ELISE action, which aims at supporting the implementation of INSPIRE Directive, there have been activities: to develop geospatial interoperability tools (such as the ARE3NA platform, the Re3gistry and web-search tools); to pilot new activities on energy efficiency and marine spatial data sharing; to launch a pilot for an EU gazetteer service; and to propose the Geo-Knowledge Base service.

Developing common vocabularies and data models (semantic interoperability), delivers on its objective to facilitate efficient and effective electronic cross-border or cross-sector interaction between European public administrations on the one hand, and between European public administrations and businesses and citizens on the other. It also contributes to the development of a more effective, simplified and user-friendly e-administration at the national, regional and local levels of public administration. Member States are keen to share their experience on how solutions such as Interoperability Maturity Assessment of a Public Service, European Interoperability Reference Architecture, and European Legislation Identifier are helping them in the digitalisation of their public administrations and ensuring interoperability. Core vocabularies provided by ISA² programme support a wide number of European Commission's policies and their implementation in the Member States.

EU Open Data Portal as well as National Portals benefit from Asset Description Metadata Schema (ADMS) in describing in a uniform way their assets (i.e., their name, their status, theme, version, etc.) and where they can be found on the Web.

ISA² programme also supports major policy domains like the Single Digital Gateway Regulation providing expertise to DG GROW, as well as technical solutions and frameworks to the Member States to meet the legal and technical requirements, and foster the interoperability of the IT systems to be rolled-out by the Commission and Member States.

In addition, the success of ISA² can be illustrated by an intensive cooperation with other programmes and projects of the EU, such as Connecting Europe Facility (CEF), Structural Reforms Programme (SRSP), projects from Horizon 2020. Some of ISA² actions and pilot solutions have proved to be so successful and impactful, that CEF Telecom programme has proposed to finance them as building blocks: TESTA (Trans European Services for Telematics between Administrations) secure network service and Big Data test infrastructure. Horizon 2020 projects are reusing ISA² created solutions such as European Single Procurement Document, EU Public License and others.

By systematically screening new EU legislation – under preparation by the Commission – for possible ICT and interoperability impacts –, and by following them up with the lead DG when needed, the ISA² programme effectively delivers on its objective 'to identify, create and operate interoperability solutions supporting the implementation of Union policies and activities.' In 2019, the programme's legal interoperability team screened 203 initiatives – announced on the '[Have your say](#)' Europa webpage –, and pre-assessed 103 out of them using its new 'legal interoperability screening methodology'. Preparations also started to update Tool #27 of the Commission's Better Regulation Toolbox, which points towards support sources available for policymakers and ICT specialists, such as the 'ICT Impact Assessment Guidelines'. These guidelines stress the importance of timely assessing ICT impacts in order to identify and deploy reusable components, thus saving the efforts linked to new developments, and to ensure thorough planning of IT implementation.

Evaluation/studies conducted

In line with article 13 of the programme's [legal basis](#), the Commission finalised the interim evaluation of the ISA² programme in 2019. The [evaluation study supporting the interim evaluation](#) was published in June 2019, and the Commission adopted its report on the 'Results of the interim evaluation of the ISA² programme' ([COM\(2019\) 615 final](#)) on 23 September 2019.

The interim evaluation confirms that ISA² performs well in all evaluation criteria (relevance, effectiveness, efficiency, coherence, EU added value, utility and sustainability):

- The objectives pursued by ISA² are still pertinent, and the results achieved so far are aligned with these objectives.
- The programme's implementation is progressing as planned, with strong internal coherence among the various ISA² actions.

⁽²⁾ <https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/digital-government-factsheets-2019>

- User satisfaction with the ISA² solutions – like EUSurvey, Joinup or the European Interoperability Reference Architecture – is positive.
- The programme has reinforced its links with other EU programmes, such as the Connecting Europe Facility (CEF), Horizon 2020 or the Structural Reform Support Programme, which often reuse or promote the take-up of the ISA² solutions.
- ISA² also interacts with initiatives such as the Single Digital Gateway, the Digital Single Market Strategy, the eGovernment Action Plan, the Tallinn Declaration on eGovernment, and the rolling plan for ICT standardisation.
- Stakeholders in particular agree on the EU added value of the programme: ISA² plays a central role in improving the interoperability landscape in the EU and its absence would jeopardise the efforts of European public administrations to improve interoperability and to foster the ICT-based modernisation of the public sector in Europe.

The main areas for possible improvement that the report mentions are:

- Awareness-raising: The interim evaluation underlines the importance of reaching out beyond national administrations and targeting regional and local administrations too.
- When assessing the programme’s relevance, several stakeholders pointed out the additional need to ensure more collaboration and exchanges with regional and local administrations in order to increase awareness of interoperability and the take-up of ISA² solutions at the subnational level. Since 2016, the ISA² programme has been actively working on raising public administrations’ awareness on interoperability in general: it adopted its communication strategy and engagement plan in 2017 and organised 10 major events between 2016 and 2018, with an average of 211 participants per event. Based on the feedback received during the interim evaluation, it is time to design some promotional activities targeted to regional and local administrations. A recent example is the ISA² programme’s support to the Join, Boost, Sustain initiative ⁽³⁾, paving the way for the digital transformation in cities and communities.
- User centricity: The results of the evaluation suggest that the programme’s utility could be increased by better considering user needs. Notably, some users signalled the following specific areas for improvement: a) providing (more) support to users of ISA² solutions; b) improving the quality of existing solutions by addressing users’ feedback; c) involving users not only in the testing phase of solutions, but also in the design phase.
- To this end, the ISA² programme’s communication team and action owners already make an effort to capture users’ feedback and information on additional needs related to existing solutions. Their outreach activities made it possible to put together a number of user testimonials ⁽⁴⁾, which support the promotion of the solutions. Also, action owners’ attention was drawn to the need of demonstrating user-centricity when compiling the last iteration of the ISA² rolling work programme.
- That said, according to the results of the stakeholder consultation activities led during the interim evaluation, the user satisfaction with the ISA² solutions tends to be positive with only 7 out of 110 stakeholders reporting ‘limited satisfaction’. As the programme is ongoing the interim evaluation gives still a partial view; it is expected that the take-up and completion of ISA² solutions will increase, thus improving the way that solutions meet user needs and, in turn, increasing overall user satisfaction.
 - Sustainability: The evaluation found that it is vital to preserve and increase the ability of European public administrations to work together towards attaining mutually beneficial goals after the ISA² programme ends.
- When assessing the EU added value of the ISA² programme, the interim evaluation found that the programme plays an essential role in setting up a uniform interoperability landscape in the European public sector. ISA² also helps to develop and deploy cross-border and cross-sector digital solutions among Member States’ administrations, and to advance common policies as they greatly rely on these interconnected and interoperable networks and systems.

In order to maintain the above-listed benefits, the following actions have been taken or are underway:

- Action owners were asked to address the sustainability of their actions and related solutions in the last iteration of the ISA² Work Programme. They had to assess whether their solution/action should qualify for funding under the upcoming Digital Europe programme or could be taken over by other programmes or open source communities, for example.
- Ongoing efforts are made to reinforce the synergies between ISA² and other EU programmes to promote the EIF and interoperability in general and to facilitate the broad reuse of the ISA² solutions. For example, the ISA² team provided extensive feedback on and follows closely the Member States’ funding requests and execution under the Structural Reform Support Programme (SRSP).

⁽³⁾ <https://ec.europa.eu/digital-single-market/en/news/join-boost-sustain-european-way-digital-transformation-cities-and-communities>

⁽⁴⁾ https://ec.europa.eu/isa2/home_en

- Interoperability forms part of the proposed Digital Europe Programme in the next Multiannual Financial Framework (2021-2027) and the ISA² team is closely associated to the ongoing work preparing the take-off of this instrument.

The work to improve the highlighted areas has already started in 2019, as indicated in the programme performance section.

Forthcoming implementation

The upcoming ISA² work programme will support activities to maximise interoperability impact at national and Union levels. These two coming years will be transition years, closing the ISA² programme and launching the activities under the new Digital Europe Programme. With regard to the closing of the ISA² programme, in 2020, special emphasis will be given to:

- Support Open Source Software and Sharing & Reuse framework
- JOINUP evolution and continuation of federation with other repositories as it has been done with Spain. Increase the publication of Linked Open Data;
- Intensify the support to policies such as Single Digital Gateway with the modernisation of the eGov Core Vocabularies and APIs Chatbots;
- The interoperability academy launch has been a success and in 2020 will be populated with eLearning for EIF and for different solutions supporting the digital transformation. It will create the ground of the network of national (and some international) initiatives;
- Monitor and evaluate the European interoperability framework with the developed integrated mechanism. The factsheets will be published as Linked Open Data (LOD) and the mechanism will support also the EU Semester;
- Through the Legal interoperability action continue the support to the initiatives related to making better legislation (better regulation and assessment of digital impact);
- Evolution of the legislative tools (LEGIT) being adopted by several Member States.
- Continue to engage with interoperability stakeholders including capturing their needs for the future (this includes the closing event, cooperation with CEF telecom and the work on the interoperability action under the Commission's 'Europe fit for the digital age' strategy);
- Continue work on data management and their semantics (this includes support to the implementation of the Single Digital Gateway regulation);
- Continue the support to the implementation of the INSPIRE Directive on the creation of a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment, through actions targeting interoperability of location data.

Outlook for the 2021 – 2027 period

The Proposal for a Regulation COM(2018) 434, repeals the Decision (EU) 2015/2240 of the European Parliament and of the Council of 25 November 2015 establishing a programme on interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA² Programme), as of the January 1st, 2021.

Subject to the negotiations in the adoption process, the Proposal for Regulation COM(2018) 434, establishing the Digital Europe programme for the period 2021-2027, covers the scope of the ISA² Programme mainly in the provisions of the Specific Objective 5, 'Deployment, best use of digital capacity and interoperability'. Consequently, it also addresses the sustainability of the interoperability agenda, identified as an area for improvement in the interim evaluation of the ISA² programme.

In this context, the main activities foreseen are:

- Contribution to the Open Data platform: take up of the semantic interoperability activities (standards DCAT-AP, core-vocabularies and governance guidelines);
- Contribution to the Digital Transformation Platform Eco-System, which will support the digital transformation of public administrations across Europe and the interoperable cross-border digital government;
- Implementation of the interoperability incubator to ensure cross-border collaboration between different Member States digitalisation agencies as well as involving actors in the GovTech sector from the private sector. This will foster the development and rapid uptake of new digital services and will put in place the right mechanism to ensure Interoperability by default;
- Continue the support to the implementation of the INSPIRE Directive on the creation of a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment, through actions targeting interoperability of location data;
- Ensure respect of core interoperability principles across the programme, and monitor and evaluate the European interoperability framework.

III. Programme key facts and performance framework

1. Financial programming

Legal Basis	Period of application	Reference Amount (EUR million)
Decision (EU) of the European Parliament and of the Council No 2015/2240 of 25 November 2015 establishing a programme on interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA ² programme) as a means for modernising the public sector	2016 – 2020	130,9

	Financial Programming (EUR million)							Total Programme
	2014	2015	2016	2017	2018	2019	2020	
Administrative support			0,4	0,4	0,4	0,4	0,4	2,0
Operational appropriations			24,4	25,1	25,8	26,7	27,1	129,2
Total			24,8	25,5	26,2	27,1	27,5	131,2

2. Implementation rates

	2019				2020			
	CA	Impl. Rate	PA	Impl. Rate	CA	Impl. Rate	PA	Impl. Rate
Voted appropriations	27,092	100,00 %	24,934	98,71 %	27,530	7,73 %	25,400	23,32 %
Authorised appropriations (*)	27,995	99,14 %	26,161	98,49 %	28,435	8,00 %	26,395	24,98 %

(*) Authorised appropriations include voted appropriations, appropriations originating from assigned revenues (internal and external) as well as carried-over and reconstituted appropriations; the execution rate is calculated on 15 April 2020

3. Performance information

Programme performance

As elaborated under section II.2, the Commission's report on the 'Results of the interim evaluation of the ISA² programme' – [COM\(2019\) 615 final](#), adopted on 23 September 2019 –, confirms that ISA² performs well in all evaluation criteria (relevance, effectiveness, efficiency, coherence, EU added value, utility and sustainability). The objectives pursued by ISA² are still pertinent, and the results achieved so far are aligned with these objectives. Stakeholders in particular agree that ISA² plays a central role in improving the interoperability landscape in the EU and its absence would jeopardise the efforts of European public administrations to improve interoperability and to foster the ICT-based modernisation of the public sector in Europe.

The key performance indicators associated to the programme's general objective – see below – confirm the good performance of the programme. Concerning the key interoperability enablers, the programme even over-performed compared to plans. This is explained by better than expected government interoperability acceptance and by faster than expected technological progress. Indeed, Member States positions have evolved from hesitantly to very actively involved and requesting intensified common investment in interoperability enablers. (see also above under II.2)

The areas identified for possible improvement include a) awareness raising, b) user-centricity and c) sustainability. As suggested by the key achievements of the programme under section II.2, in 2019 significant efforts were made to address these areas, as follows:

- Awareness-raising:** The ISA² team actively engaged with stakeholders across 11 countries from all levels of public administrations, central, regional and local, businesses, SMEs and start-ups in numerous events like: Smart Cities, Regions Week, Start Up Europe or the WebSummit. The team's involvement in the [Join, Boost, Sustain initiative](#) merits special attention as through this channel the programme can get in touch with stakeholders in cities and communities directly. The ISA² programme also intensified its cooperation with other programmes and projects of the EU, such as Connecting Europe Facility (CEF), Structural Reforms Programme (SRSP) and Horizon 2020 thus reaching a broader audience. The cooperation has been increased via joint organisation of the events, sharing of the results and relevant content, provision of advice and support.
- User-centricity:** [The ISA² solutions](#) support the work of many different users ⁽⁵⁾. Member States shared their experience on how ISA² solutions (such as the Interoperability Maturity Assessment of a Public Service) are helping them in facilitating digitalisation in national public administrations. Several Commission's initiatives, like the Single Digital Gateway, the EU Business Registers Interconnection System (BRIS) or the TOOP project are benefitting from ISA² solutions as well. Some solutions (including the EU Survey) are available for businesses and citizens too. To better satisfy existing and future users' needs, user-centricity was a key aspect, which was considered at the submission and assessment of proposals for the last (2020) ISA² Work Programme. In practice, this means that action owners of existing solutions may consider providing more support to their users, address users' needs in an agile manner. JoinUp is a leading example for such efforts. There are some

⁽⁵⁾ Further information can be found on the ISA² solutions usage map, available at https://ec.europa.eu/isa2/solutions_en

actions, which invite the potential users of their future solution to participate in its design phase. For example, the Legal interoperability ISA² action builds its Better legislation for smoother implementation community in such an open, collaborative way.

- c) Sustainability: To maintain the uptake of existing ISA² solutions, the programme works closely with other EU funding instruments. By having provided detailed feedback on the Member States' requests under the SRSP 2020 work programme, the ISA² team identified synergies with various national initiatives. Subject to the negotiations in the adoption process, the Proposal for Regulation COM(2018) 434, establishing the Digital Europe programme for the period 2021-2027, covers the scope of the ISA2 Programme mainly in the provisions of the Specific Objective 5, 'Deployment, best use of digital capacity and interoperability'. The content of the Digital Europe programme takes into account the findings of the interim evaluation, such as putting together CEF building blocks and ISA² solutions under the same digital transformation platform. This means that the funding of the afore-mentioned ISA² solutions will be maintained after 2020.

Specific objectives

Specific Objective 1: to facilitate efficient and effective electronic cross-border or cross-sector interaction between European public administrations and between them and citizens and businesses, in order to enable the delivery of electronic public services supporting the implementation of Union policies and activities

Performance

Refer to Programme performance as there is only one objective.

Indicator 1: the number of key interoperability enablers								
Baseline	2014	2015	2016	2017	2018	2019	2020	Target
	Milestones foreseen							2020
3			9	9	9	10	10	10
	Actual results							
			9	9	11	11		

Comment: The number mentioned in the baseline for both indicators for the years 2017-2020 could only be estimated. This is because the number of solutions produced by the ISA2 actions depends on the number and the type of proposals submitted by the Member States and Commission services and accepted for implementation in each annual work programme. As a result of the actions proposed in 2016 and 2018, the number of key interoperability enablers produced in 2018 was already higher than estimated in 2015 when the first programme statement was being prepared.

Indicator 2: the number of supporting instruments for public administrations delivered to and used by European public administrations								
Baseline	2014	2015	2016	2017	2018	2019	2020	Target
	Milestones foreseen							2020
4			9	9	11	13	13	13
	Actual results							
			9	9	12	13		

Comment: The number mentioned in the baseline for both indicators corresponds to the major actions that were carried over to the new programme ISA2 and should not be confused with the amount of outputs created by the previous ISA programme.

Expenditure related outputs

Outputs	Budget line	Budget 2020	
		Number	EUR million
Key interoperability enablers	26 03 01	11	5,8
Support the effective implementation of EU legislation	26 03 01	14	9,3
Supporting instruments for European public administrations	26 03 01	13	6,3
Accompanying measures	26 03 01	6	4,4
Monitoring activities	26 03 01	4	1,3
Total		48	27,1

Outputs		Number of outputs foreseen (F) and produced (P)				
		2016	2017	2018	2019	2020
Key interoperability enablers	F	9	9	11	11	11
	P	9	8	11	11	
Support the effective implementation of EU legislation	F	13	13	14	14	14
	P	13	13	14	14	
Supporting instruments for European public administrations	F	9	9	12	12	13
	P	9	8	12	13	
Accompanying measures	F	4	4	6	6	6
	P	4	4	6	6	
Monitoring activities	F	4	4	3	3	4
	P	4	3	3	3	

4. Programme contribution to the Sustainable Development Goals

SDG 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

In particular SDG 8.2, related to economic productivity through technological upgrading and innovation. The programme’s main target group is the public sector, which contributes by 20 % to the EU GDP through procurement thus making it a key factor of the European and global economy. A modernised digital public sector means better public services, less bureaucracy and consequently more time for citizens and businesses to be productive in their core professional activities. In addition, the public sector holds and manages public data which if published as ‘open’ can create new innovative business thus increasing the market growth potential. It is estimated that full exploitation of open data can bring an overall market value of EUR 40 billion per year in the Union. The ISA² programme contributes to this objective with each of its actions, among which Application Profile for Data Portals in Europe (DCAT-AP), Core Public Service Vocabulary (CPSV) and European Single Procurement Document (ESPD). Said actions contribute to implementing open data portals, e-procurement and the Single Digital Gateway Regulation, each thus resulting in cost cuts and improved services for business and citizens. ESPD is a perfect example of how ISA² is helping to reduce bureaucracy – it serves as the one self-declaration form for all public procurement procedures in the EU. It makes it much easier to compete in the procurement process because bidders who have self-declared that they meet the criteria will only need to provide supporting evidence if they win the contract. The planned Govtech incubator under the DEP, based on the Innovative Public Service action, brings together public administrations and private sector players to experiment and bring towards maturity innovative tech applications.

SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The programme produces and sustains interoperable digital solutions, which are open and free to be reused and shared by everyone. This results in putting in place digital infrastructures of cross-border nature, which can enhance collaboration between countries and within them at regional or local levels. [TESTA](#) is an example of such cross-border infrastructure, which stands for Trans European Services for Telematics between Administrations – provides a European backbone network for data exchange between wide varieties of public administrations. It is used by all Member states of the EU and by candidate countries. It provides guaranteed performance and a high level of security and has connections with all the EU Institutions and national networks. It caters for the exchange of both unclassified and classified information. In general, all ISA² funded models and solutions are publicly and openly available for reuse and additional development on the Joinup platform ⁽⁶⁾. A dedicated licensing assistant supports administrations and business users in identifying the most appropriate public licence type ⁽⁷⁾. To promote further the usage of the open and free solutions and frameworks, the programme participated to the European Region’s Week 2019, putting together different regions, Digital Innovation Hubs and potential future users from other public administrations.

SDG 17 Strengthen the means of implementation and revitalize the global partnership

In particular to SDG 17.6 by promoting collaboration with third countries, international organisations or bodies, and pursuing the reuse of ISA² solutions thereof. The programme has already set up international cooperation with third countries such as the Uruguay, Ukraine, Western Balkans, Japan, Australia, Vietnam, etc. in the areas of semantic interoperability and solutions’ reuse. During 2019, 8 workshops and webinars were organised with the contribution of these different countries. These exchanges allowed to improve our frameworks and specifications with their experience and they benefit of all our work in this domain of data exchanges. The active participation in our events and webinars combined with an interest to collaborate is a key indicator showing the relevance of ISA² solutions for these countries. For example, in 2019 Ukraine followed the EIF and put in place a good base registry strategy, which has been key in their journey of digital transformation.

⁽⁶⁾ <https://joinup.ec.europa.eu/>

⁽⁷⁾ <https://joinup.ec.europa.eu/collection/joinup/news/joinup-licensing-assistant>