DE4A Digital Europe For All

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DE4A Support European Public Administrations in the Implementation of the SDGR

DE4A inaugural project meeting in Madrid, Spain

Digital Europe for All (DE4A) is a major three-year project, launched on January 1st 2020, to support the implementation of the Single Digital Gateway Regulation (SDGR) across Europe ((EU) 2018/1724) and make the digital single market a reality. The three-year, large scale pilot has received funding from the European Union's Horizon 2020 research and innovation program under G.A. No. 870 635, and is being driven by 10 Member States and a consortium of 23 partner organisations.

This initiative will facilitate migration towards European Digital Public Services co-delivered across borders, across sectors and with different participants reinforcing trust in public institutions and unleashing multiple measurable positive impacts on efficiency gains and reductions in administrative burden and costs.

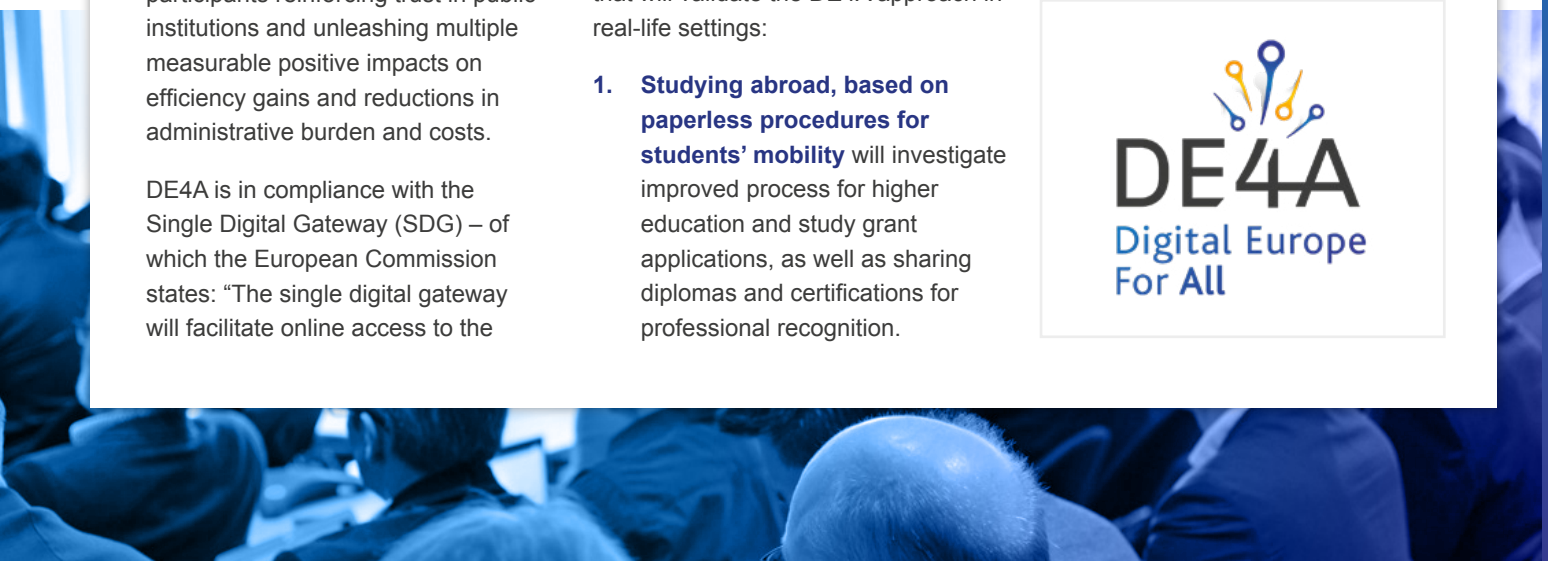
DE4A is in compliance with the Single Digital Gateway (SDG) – of which the European Commission states: "The single digital gateway will facilitate online access to the information, administrative procedures and assistance services that citizens and businesses need to get active in another EU country. By the end of 2020, citizens and companies moving across EU borders will easily be able to find out what rules and assistance services apply in their new residency. By the end of 2023 at the latest, they will be able to perform a number of procedures in all EU member states without any physical paperwork, like registering a car or claiming pension benefits."

Achieving these objectives will be realised through three real-life cross-border pilots, chosen from the SDGR fully online administrative procedures, that will validate the DE4A approach in real-life settings:

1. **Studying abroad, based on paperless procedures for students' mobility** will investigate improved process for higher education and study grant applications, as well as sharing diplomas and certifications for professional recognition.
2. **Doing business abroad will meet business needs, retrieving and keeping up-to-date company data from authentic sources.** It will also test more efficient ways of starting a business and creating and sharing digital annual reports.
3. **Enabling Citizens' Mobility across the EU** will look at the process of registering a change of address, civil status certificates and retirement such as pension and claims information.

DE4A is being coordinated by ATOS Spain SA and Ana María Piñuela Marcos, Head of the Secure Societies and Societal Transformations Unit at its Research & Innovation department states: "DE4A will contribute towards the implementation of common solutions for the digitalisation of public services in cross-border situations". Ana continues: "We will create a breakthrough in validating across borders once only principle and SDG procedures with real citizens."

DE4A Digital Europe For All



DE4A Can be a Turning Point in the EU's Digital Transformation

Author: Sofia Paredes, AMA, Portugal

DE4A is about more than technology. When we say digital we normally think about technology. But when we refer to digital across Europe we cannot limit our thinking to technological issues. We must think with a broader more comprehensive perspective. We must think how multiple autonomous heterogeneous self-sovereign states can fully cooperate to provide cross-border life-event services to their citizens, despite cultural and linguistical semantic differences, unique political and organizational processes, governance and legislation idiosyncrasies and besides technology gaps.

DE4A is collaborating and co-creating. It takes a joint effort to make an inventory of the current eGovernment landscape. Also, it takes a common interest in defining the catalog of building blocks and patterns addressing all business needs. And this co-creation isn't limited to public administrations but also includes private entities.

DE4A thinks about leveling the playing field. There are huge differences in players. Some are mature, others have just started. Some have huge amounts of money at their disposal for technological and processes improvement and others don't. Some have high complexity to tackle even in their own state, such as multiple languages or multiple autonomous administrative regions. Some have subject-matter experts to rely on and others don't. There is such a mental energy waste when designing a system from scratch. Building blocks preclude such a waste and leverage on the law of large numbers, enabling us to find the required expertise among the larger pool of European citizens. It relies on scale economies, on once only research, design and build. And then on having a catalog of building blocks, patterns and assembly instructions, from where to pick a more affordable tested ready-to-assemble takeaway solution.

DE4A can be a turning point. Gutenberg's printing press "facilitated the wide circulation of information and ideas"(1) by making documents available to a broader audience than the privileged audience hand-copied manuscripts had. The internet made accessible content previously available only in university classrooms, in books which not everyone could afford, or in libraries not everyone had physical access to. And just as Gutenberg's printing press was instrumental in the expansion and democratization of knowledge, building blocks play a central role in extending the Digital Single Market (DSM) in a truly democratic and accessible way to all. DE4A can increase data flow rate by defining semantically compatible structured data flows. DE4A can make obsolete physical presence and paper-based documents transfer by enabling the connection of European wide life-event services.

Will we be ready? Imagine the Coronavirus COVID-19 had hit Europe after DE4A. Would we have been able to request any life-event service home-based or using our mobile? Would we have been able to use zero knowledge proof to evidence share, without disclosing personal medical records when using services and transportation? Would we have trusted distributed data sources on intel? Would data have flowed fast enough to enlarged scientific communities enabling for better forecasting, provision and further drug advancement? Will we be equipped for adapting, implementing and changing fast enough for the next challenge?

(1) Elizabeth Lewisohn Eisenstein

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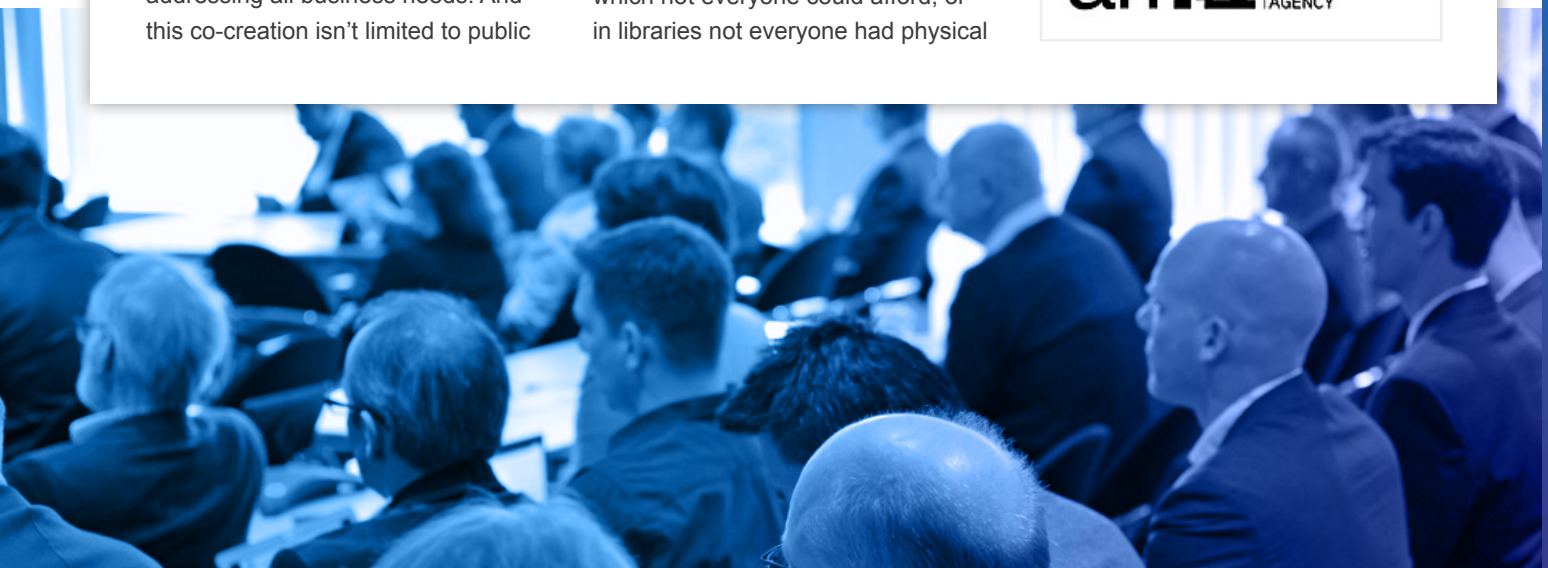

Pilot Introduction: Studying Abroad

Author: Tomaž Klobučar, Jožef Stefan Institute, Slovenia

The Studying Abroad pilot of the DE4A project aims at demonstrating in practice the benefits for different European higher education area stakeholders of realizing across borders the principles of once only and digital-by-default. By the combination of three use cases (application to public higher education, applying for study grant, and diploma recognition) it will prove the optimal process/procedure for students of the participating three Member States (Belgium, Slovenia, and Spain) for registration and eventually applying for a student grant as well as for studies recognition.

The first deliverable relating to the Studying Abroad pilot, defines its scope, establishes its functional boundaries, includes pilot main objectives, sets specific pilot technical and business goals, and presents a preliminary identification of corresponding pilot success criteria suitable to assess them. A detailed specification of the three use cases and corresponding (functional and non-functional) requirements has been defined. Additionally, an overview of the infrastructures and initiatives relevant for the pilot, e.g. the eIDAS infrastructure, European digital credentials infrastructure, or European Blockchain Services infrastructure (EBSI), showed what already exists in the participating Member States and which building blocks and other initiatives' results will be explored for reuse by the pilot. For each use case, the relevant actors have been identified and the required and available data for evidence exchange has been analysed.

Apart from the project partners from the three participating countries, the procedures require other data consumers and data providers to be involved, for example regional governments, ministries, regional agencies, institutions involved in the diploma recognition procedure, etc. Analysis also shows little overlapping of the mandatory and optional data required by the procedures between the participating Member States and even between different regions in one Member State. Ministries and higher educational institutions are the main sources of identification and academic data of the students, while examples of evidence necessary for the three procedures include diploma and diploma supplement, data on completion of secondary education, certificate of language proficiency, and data on income and household situation.

The use cases are described through (a) user journeys presented from a student point of view, (b) preconditions, main-flow steps, and postconditions, and (c) a list of functional and non-functional requirements. Specifics of the existing procedures in Belgium, Slovenian, and Spain are also provided. The three use cases have different levels of complexity and can be implemented by various communication patterns. While the selection of the appropriate patterns for applications to higher education and applications for study grants will be decided later in collaboration with "Work Package 2 – Architecture vision and framework", it is currently envisioned that self-sovereign identities, preferably based on EBSI, will be validated in the diploma recognition use case. As recognized diplomas and other credentials for qualification recognition are required evidence for the other two procedures, linkage of the use cases will also be explored.

Several political, legal, technical, and organizational issues still need to be resolved before the three procedures can be validated in production environment. Examples of such challenges include lack of notified identification schemes in Slovenia, required changes of operation of institutions that are not part of the DE4A project, maturity of the building blocks and relevant infrastructures, such as EBSI, and necessary changes in national legislations.

The results constitute the basis for the next Studying Abroad pilot planning phase, providing information relevant for a pilot management plan and coordination of the different pilot partners involved in each use case. They will also serve as major input to other DE4A activities, in particular Work Package 2 – Architecture vision and framework (requirements are a starting point for joint development of project start architecture, underlying blockchain support framework and later towards technical architectures and interoperability solutions toolbox), Work Package 3 – Semantic interoperability solutions (requirements feeding semantic interoperability framework and corresponding semantic solutions - components/tools-needed to support the pilot), and Work Package 5 – Common component design & development (requirements relevant for identification of features for products and components and later for their technical design and common specifications). The identified legal and organisational barriers are also relevant to Work Package 7 - Legal and ethical compliance and consensus building and Work Package 6 - Sustainable impact and new governance models.

Information regarding the project deliverable is available at:
www.de4a.eu/project-deliverables

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Pilot Introduction: Doing Business Abroad

Author: Hans van der Burght, Netherlands Enterprise Agency

One of the pilots within DE4A is Doing Business Abroad and its main objective is to lower barriers for companies starting a business or doing business in another EU Member State.

In order to meet the needs of both company and data consumers, the pilot participants will retrieve company data from (authentic) sources and keep this data up to date by connecting to new or existing data subscriptions (notification services). This will be achieved in the Doing Business Abroad pilot by (amongst others): specifying the pilot's use cases; defining requirements for the OOP technical system; validating the OOP technical system in real pilots; promoting the once only principle within the Member States to public administration and companies.

In April 2020 the Netherlands Enterprise Agency (RVO) produced the first deliverable related to this pilot, in close collaboration with Member States and specific organisations participating in this pilot: Austria's Federal Ministry for Digital and Economic Affairs and the Austrian Federal Computing Center; Belgium's Federal Public Service Policy and Support; Sweden's Agency for Digital Government, the Swedish Companies Registration Office, and the Swedish Tax Agency; and Romania's National Trade Register Office. The deliverable identifies the use cases to be tackled and defines the requirements to the OOP technical system:

1. Starting a business in another Member State

This use case deals with the initial registration of the company and the assessment of the right to do business and of obligations to file tax in the Member State the company wants to do business in. At the core of this use case is the fulfilment of procedural obligations to start doing business in another EU Member State.

2. Doing business in another Member State

This use case looks at applying for specific services in the Member State the company is operating in. This case is centred on retrieving and updating company information by the service provider. This use case may include fulfilling corporate tax duties or getting access to other relevant services as well.

The process of co-creation with the partners was a good beginning of the Pilot Doing Business Abroad. It started with bilateral workshops and conference calls with the Member States and participating organisations. Together they analysed the specific situation per Member State. The next step was to translate this information into generic uses cases, process flows, and requirements. The final content of the deliverable was agreed on in one joint teleconference workshop.

Information regarding the project deliverable is available at:
www.de4a.eu/project-deliverables

Government of the Netherlands

Pilot Introduction: Moving Abroad

Author: Michel Luypaert, BOSA, Belgium

The main goal of the Moving Abroad pilot is to facilitate the evidence exchange when citizens are moving abroad with a series of three use cases (address change, a request for a birth, marriage or death certificate, and a request for pension information and/or a pension claim). The benefits of this will be fewer physical movements of citizens to fetch the evidence and less interventions of civil servants resulting in a faster evidence exchange.

In general terms the requirement of the pilot is to deliver evidence online, in real-time, in a structured (data) format to the citizen as part of a procedure that is related to an address change, a request for a birth, marriage or death certificate or a request for pension information and/or a pension claim when moving abroad. As a prerequisite of this, the citizen will have to be authenticated via eIDAS and linked to the evidence via a national registration number of the foreign country. In some cases, civil servants will intervene to link the citizen - based on this eIDAS identification - to the national number.

The main actor will be the citizen requesting information for himself or on behalf of the persons for whom he is legally authorised to do so.

The existing infrastructure in the Member States depends on whether the Napoleonic Code was instituted or not. Member States that follow the Napoleonic law have a civil state register that holds legal certificates of birth, marriage, and death. In the other Member States only a population register is present holding the information for all citizens that can reside in the country for a longer period. The latter is the case in the Scandinavian countries. These registers can be central registers or locally managed registers.

Regarding the evidence, for the use cases one and two we have opted to follow the EC regulation 2016/1191. In this regulation it is foreseen that each EU country must be able to exchange evidence on the life, birth, marriage and death events in a multilingual (data) form. The Life Event encompasses most of the evidence that is needed to register in a foreign country, a procedure of which “Change of address” is part off.

By doing so, the DE4A pilot and framework will support/enforce the awareness and practical implementation of this regulation which has been applicable to all EU Member States since February 2019.

Depending on the country, the evidence will be available in a structured multilingual form and/or as structured data. The fact that this evidence exchange is foreseen in an active regulation makes the adoption by the Member State explicit.

The main barriers the pilot will have to face are that some participating Member States…

- Are not yet eIDAS notified. This is the preferred solution to authenticate the citizen requesting evidence. Other solutions exist but require a physical movement of the citizen to the consulate or involved service in the country providing the evidence and do not offer online in real time access to the evidence.
- Have no mechanism today to link the eIDAS information to the authentic source that contains the evidence (by a national registration number).
- Only allow the exchange of evidence with other Member States in case the evidence is requested by/for the citizen himself.
- Request that the citizen is physically present to initiate the procedure. In this case the pilot will help (only) to fetch the evidence electronically at that moment.
- Have the requested evidence not in an electronic format immediately available and cannot provide the evidence online in real time. Although several Member States have a mechanism to migrate the requested evidence on demand. If it can temporarily put the procedure on hold, this will have an impact on the volume of evidence that can be exchanged with the pilot.

Further, the evidence exchanges in the DE4A project, which is based on the regulation 2016/1191 for the use cases one and two - address change, a request for a birth, marriage or death certificate – might conflict with the definitions of the Deloitte study which was elaborated as part of the SDGR project.

For the third use case – request pension information and/or claim pension – there might be an overlap with the EESSI project (which is another European project in the social security sector) where this information is already exchanged. Further investigation and discussions are needed to determine how the DE4A initiative can be integrated with EESSI initiative.

Information regarding the project deliverable is available at:
www.de4a.eu/project-deliverables

BOSA Federal Public Service Policy and Support

The Legal Fog Around the Once-Only Principle, and How DE4A Clears Up the Skies

Author: Hans Graux, Timelex, Belgium

One of the central objectives of the DE4A project is to ensure that the once-only principle can be piloted in full compliance with the EU's legal requirements. The main regulatory framework for the project is the Single Digital Gateway Regulation (SDGR). The SDGR defines the obligations of the Member States and of any public administrations who seek to exchange information under the once-only principle, and stipulates the rights of citizens and businesses.

Complying with these requirements seems simple on the surface. The principal provision in the SDGR (article 14) is only just over a page in length, and mainly focuses on defining simple and intuitive safeguards. It states that no information can in principle be exchanged between administrations except at the request of a user, and that the user must be allowed to preview the information before deciding whether to permit the exchange. Data protection rules must be observed, and use of the once-only principle is voluntary for the user – if they don't want it, they have the right not to use it. Compliance seems simple enough.

But the devil, as always, is in the details. When should the preview occur, and who is responsible? What happens when information must be collected in multiple countries? How do you comply with data protection laws when the information may contain data on third parties who don't even know that their data is being exchanged?

In order to be successful, Member States need to take the same position on all of these topics. For that reason, DE4A has a specific work package dedicated to consensus building on legal topics. Through a series of iteratively developed white papers, the legal team in DE4A tries to get everyone on the same page, keeping in mind the triple objective of piloting the SDGR, seeking an optimal application of the once-only principle, and building world class e-government services in Europe. The final outcomes will be bundled in a deliverable which will be published over the summer.

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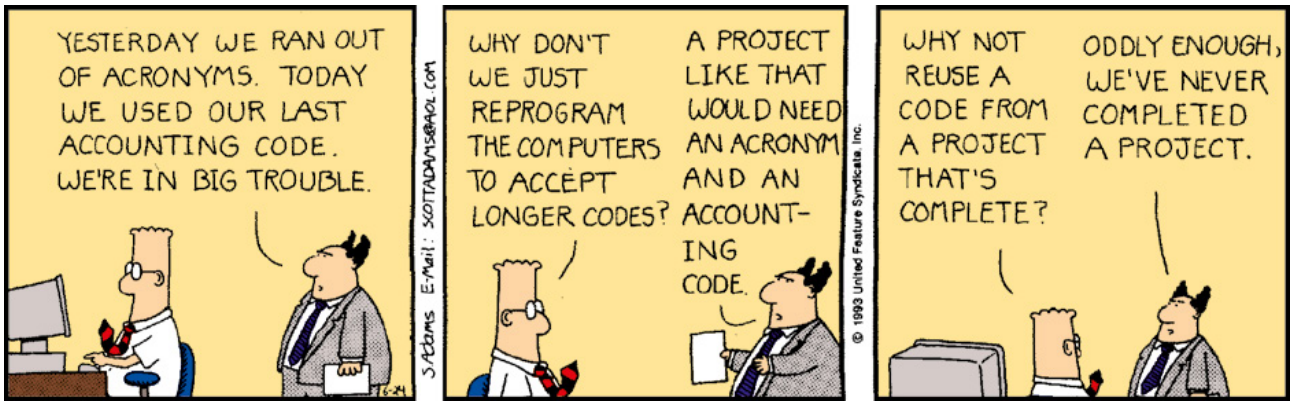

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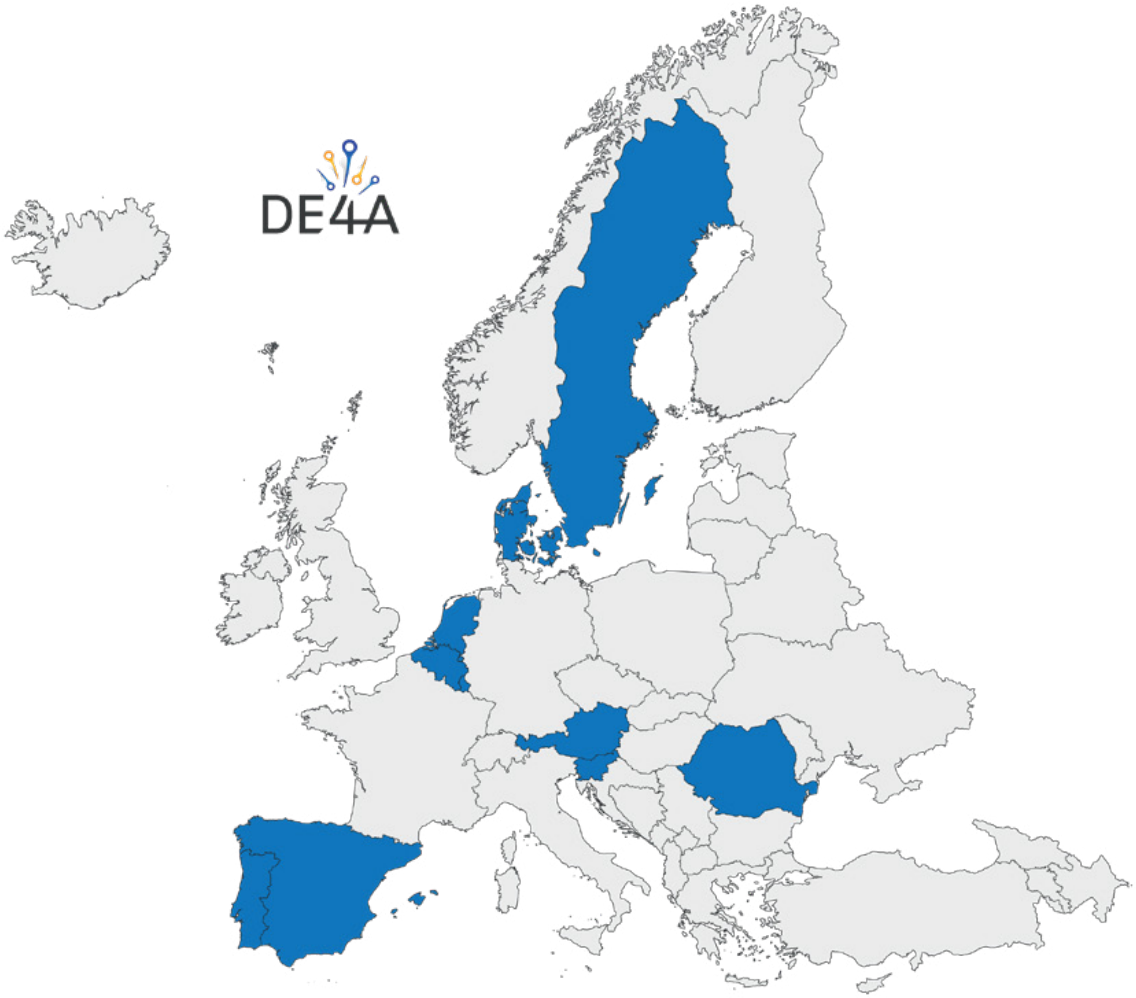

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