

Recommendations of the expert group on the Interoperability of European Public Services for the next European interoperability policy

1. INTRODUCTION

Europe has set the goal of 100% key digital public services by 2030¹. All enabled by a strengthened digital sovereignty² and interoperability that foster innovation in line with EU core values and standards. This is one of the four pillars helping to deliver Europe's Digital Decade for 2030.

It means that the pace of implementation and delivery of digital public services needs to increase. The level of digital maturity of Europe's public services needs to increase.

Europe's public sector spends 12,4% of GDP³ (around €1 trillion per year) on the purchase of services, works and supplies. Digitalising Europe's public sector digitalises Europe.

Cooperation at EU level is a must to deliver on this goal. We have seen that very clearly with the COVID-19 pandemic: European solidarity and cooperation have helped us navigate a crisis of unprecedented scale and magnitude⁴. But to deliver on our goals and help build better digital public services for Europe more of this cooperation is needed⁵.

Member States are under a lot of pressure to implement European policies that have an impact on their digital transformation on top of their own national priorities. At central levels there are the Single Digital Gateway Regulation, the Open Data Directive⁶, the NIS directive, GDPR, the upcoming revised eIDAS regulation or the Data Act, just to name a few⁷. There are also the numerous sectoral initiatives: e.g. digitalisation of justice, e-Customs, revised TEN-E regulation, eHealth and many more.

Interoperability of solutions, data, services is not only key for a sound implementation of the above-mentioned policies, but it will also help to reduce efforts and costs. It helps build resilient digital public administrations that can deliver public services that span borders and sectors across the EU, allow us to share data and stay connected. This calls for a paradigm change in how citizens, public administrations and democratic institutions interact.⁸ To make this become a reality we need a clear strategy focused on enabling delivery on the ground and a proper governance at European level, that makes it possible to align and coordinate efforts of this scale.

¹ [Digital Decade](#)

² [Berlin Declaration on Digital Society and Value-based Digital Government](#)

³ [Government expenditure increased again in 2020 \(europa.eu\)](#)

⁴ [Public administrations digital response to COVID-19](#)

⁵ [In sickness and in health: European cooperation during the coronavirus crisis – European Council on Foreign Relations \(ecfr.eu\). Non-paper digitalisation in the EU recovery strategy for COVID-19 | Publication | The Netherlands at International Organisations \(permanentrepresentations.nl\)](#)

⁶ [New rules on Open data and reuse of public sector information start to apply | Shaping Europe's digital future \(europa.eu\)](#)

⁷ [Digital Public Administration Factsheets EU vFINAL.pdf \(europa.eu\)](#)

⁸ see Footnote 1

Purpose and scope of these policy recommendations

The European Commission has announced in the 2020 communication *Shaping's Europe's Digital Future* a “strengthened interoperability strategy”⁹. This is the opportunity to rethink the voluntary efforts of the past 20 plus years on interoperability¹⁰ and establish a more structured and pragmatic cooperation both between Member States at a horizontal level and between different European services and policies at a vertical level. We need an interoperability policy that is focused on enabling smooth, interoperable implementation and delivery of digital public services at European level without adding new obligations on Member States and that helps increase our overall digital maturity.

The expert group on Interoperability of European public services was set up in February 2020 with members representing the national public administrations of the European Member States and observers from EFTA and candidate countries. One of its roles is to provide advice and expertise to the Commission in relation to the preparation of the legislative proposals and policy initiatives¹¹.

The following policy recommendations are expressed by the Member States to the European Commission. They will be one of the cornerstones for the upcoming European Commission policy proposal on the next interoperability policy and will accompany the impact assessment of policy options and evaluation of the European Interoperability Framework.

The recommendations have been co-designed and co-created by the members of the expert group on Interoperability throughout a series of brainstorming sessions, workshops, bilateral discussions with the European Commission and written contributions spanning almost a year.

We share a common vision for the next interoperability policy

We need a visionary and at the same time pragmatic approach to interoperability policy, that builds on all the work done in the past 20 years and takes a bolder stance on European Interoperability. We want to enable a structured cooperation focused on delivery of cross-borders and cross-sectors European digital public services.

The members of the Interoperability expert group recommend a new interoperability policy to:

- Establish a shared governance of interoperability with a stronger, structured involvement of the Member States
- Deepen the synergies with other ongoing EU policies and funding programmes (particularly those with an impact on the digitalisation of the public sector)
- Identify common specifications and encourage their uptake
- Include more operational and pragmatic actions
- Focus on more exchange of best practices between Member States
- Better promote, via external communication and awareness raising, the achievements and benefits of interoperability work by the Member States and the EU.
- Engage with sectoral areas and policies.

To translate this vision into concrete actions, we call on the European Commission to implement the following policy recommendations.

⁹ [Shaping Europe's Digital Future](#)

¹⁰ [Study for ISA2 final evaluation](#)

¹¹ [Interoperability expert group](#)

CHAPTER I: REINFORCE THE EUROPEAN COOPERATION ON INTEROPERABILITY

In this chapter, we focus on the core aspect of a reinforced European interoperability policy: create a structured cooperation with a comprehensive governance to support the implementation of interoperability in the Member States.

Governance is one of the aspects that can trigger the best virtuous effects and where quick progress is the most needed. It will help increase the level of digital maturity of the public sector in the EU and ensure a cohesive digital delivery across organisational boundaries, cross-borders and cross-sectors.

To do so, we articulate our proposal around three topics: (A) Establish a shared strategic governance with a clear mandate, (B) supported by communities of Member States' practitioners and (C) reinforce innovation and international cooperation.

A. Establish a shared strategic EU Interoperability Governance

*Recommendation n°1: **Establish a common EU Interoperability Governance** that will have a legal mandate to set the priorities at EU level and steer the implementation of interoperability actions. This governance structure will act in full respect of subsidiarity and proportionality, while supporting Member States in their implementation efforts and encouraging coordination and exchange. Depending on the specific objective, decisions from the governance structure should be adopted in the appropriate voting system (e.g. consensus, qualified majority). They may be non-binding (e.g. guidelines, opinions) or binding (e.g. European Interoperability Framework updates).*

*Recommendation n°2: This EU Interoperability Governance should have a clear, simple and effective governance. We recommend to structure it into **two layers: a “strategic layer”**, co-led by the Member States governments' leaders of digital transformation with the support the European Commission, and an **“operational layer”** of thematic subgroups, communities of practice (see recommendations 4, 5, 6) supporting the work of the strategic layer.*

*Recommendation n°3: The **mandate** of the EU Interoperability Governance should at least cover the following tasks:*

- (a) **Foster synergies with any existing or new EU policy initiatives** that have an impact on interoperability of European digital public services (e.g. Data Governance Act, Digital Decade) by giving recommendations on interoperability impact of EU policy initiatives (see Recommendations 10, 11, 12);*
- (b) Oversee the evolution of the European Interoperability Framework as a clear reference for related cross-cutting and sectorial policies in the EU, decide on the evolution of its principles and recommendations, and provide for a regular monitoring of progress across Member States (see Recommendations 13, 14, 15);*
- (c) Improve the **coherence between the different EU data policies** that impact the public sector (see Recommendation 18, 19, 20), for instance by liaising with EU governance*

bodies with a broader scope (e.g. Data Innovation Board, Digital Decade governance) to avoid duplication of work;

- (d) Help build a **catalogue of interoperability solutions** and update it based on Member States' needs (see Recommendations 21, 22, 23);*
- (e) Promote **Open Culture, Open-Source Software and Open Standards** in European public administrations (see Recommendations 24, 25);*
- (f) Ensure that adequate funding is provided at EU level to deliver better interoperability solutions (see Recommendation 26, 27, 28);*
- (g) Reinforce innovation, **GovTech and experimentation cooperation** amongst Member States and associated countries, both at national and local levels but also internationally (see Recommendations 7, 8, 9);*
- (h) Provide guidance to the European Commission on **joint reporting of Member States' interoperability implementation progress**, aligned with all relevant reporting tools (e.g. OECD, UN, Digital Decade, etc.), monitoring (see Recommendations 16, 17).*

B. Supported by communities of Member States' practitioners

A strategic governance alone cannot do much: **interoperability implementation requires the involvement of practitioners** from all levels and sectors of EU public administrations that have hands-on expertise and can help build consensus on solutions and technical specifications. This should form the “operational layer” of the EU Interoperability Governance in a way that is consistent, efficient and based on the actual needs and practices of the EU, Member States, regions and local communities.

*Recommendation n°4: **Communities of Practice shall be the operational layer of the EU Interoperability Governance. They can take the form of a temporary Working Group and they must have a clear mandate, a defined list of problems to solve, a deadline and expected outcomes.** They are assisted by the secretariat (European Commission) which ensures alignment with the work of the strategic layer of the governance and with the policy initiatives at EU level. They can include voluntary experts from academia, private sector, civil society, all administrative levels (e.g. local, regional, national) or other domains as needed depending on the subject.*

Recommendation n°5: the strategic EU Interoperability Governance can set-up a Community on practical issues related to, at least, one of the four EIF layers (legal, organisational, semantic and technical) and relevant for the implementation of EU level services (e.g. Data Spaces), while:

- (a) Ensuring that there is no overlap with existing or new created communities/bodies dealing with similar topics (e.g. between the Single Digital Gateway Regulation, Data Governance Act, eGovernment Action Plan, ICT standards, Living-in.eu, etc.);*
- (b) Bringing together the relevant experts in their domains (e.g. from the GovTech sector, academia, NGOs, civil society) to define technical solutions that are interoperable. This involves working closely also with private partners; local entities (e.g. involve regions, municipalities), EU standardisation and other international organisations (OECD, UN, international standardisation bodies, etc.) as well as citizens' representatives depending on the subjects to be handled.*

*Recommendation n°6: These communities can develop cross-border interoperability initiatives, proofs of concept, pilots (e.g. technical guidance, specifications, prototypes, applications, etc.). Initiatives that reach a certain level of maturity and have a large support can be included in the Interoperability catalogue by the strategic level of the EU Interoperability Governance. In any case, we reaffirm that **it is very important to critically evaluate whether a specific standard or specification is relevant and applicable for a specific use case before making it mandatory.***

C. Reinforce innovation and international cooperation

Public sector innovation has now a strong focus on digital technologies as enablers (e.g AI, blockchain). The pandemic has only accelerated and reinforced the need to rapidly innovate and emphasized further the inequalities in preparedness of the public administrations. For this reason there is an urgency to ensure in the EU context that digital innovation can be replicated between the front-runners and laggards, allowing leapfrogging for some of them. This goes with a number of activities such as exchange of best practices, experimentation and close cooperation, including the private (GovTech) sector.

Digitalisation issues (including interoperability) are global by nature, especially since the pandemic - and they are nurtured by innovation and international cooperation with other countries, international organisations like the United Nations, CAF (Development Bank of Latin America), the World Bank or the OECD, but also with private actors and civil society. The EU and its MS should take a coordinated approach towards contributing to these diverse fora to ensure consistency and promote the EU public values of digital public services.

*Recommendation n°7: A future interoperability policy should facilitate early **alignment with the European standardisation efforts and cooperation with international standardisation organisations** to ensure that EU public sector's needs for standards are taken into account in an effective way.*

*Recommendation n°8: Provide opportunities for **international cooperation on interoperability**, outreach, partnerships, exchanges, with relevant international organisations and partners to increase usefulness of international interoperability and complement our digital sovereignty.*

*Recommendation n°9: Provide means to **allow exchange of best practices**, such as the Innovative public Services Observatory to promote sharing and reuse and ensure interoperability by default. Provide for **Open Source, GovTech and experimentation cooperation** amongst Member States and associated countries, both at **national** and **local** levels but also **internationally**. Ensure multiplication through other channels and financing programmes (EIC, Horizon Europe, International Cooperation).*

CHAPTER II: MAKE THE MOST OF INTEROPERABILITY FOR BETTER EU POLICIES

A stronger governance on interoperability is not enough on its own: we must ensure that the policies and European legislation we implement for our citizens and businesses are interoperable and digital-ready¹² “by default”.

Interoperability and (digital) implementation of policies are too rarely considered as a high priority in the European policy-design process, even though it can bring better coherence across sectors, help save time and public money, while increasing the legal robustness of legislative acts and making it easier for policymakers to reuse data.

We reaffirm the call from the Berlin Declaration:

- To ensure through the Better Regulation framework that policies and legislative acts proposed by the European Commission are digital-ready and interoperable by default
- To strengthen Europe’s digital sovereignty and interoperability by fostering interoperability “by design” of policies to enhance cross-border and cross-sector interconnections

Therefore, the next interoperability policy should improve the policy-design at EU level (A) and leverage on a more pragmatic European Interoperability Framework (B) to ensure coherence and better support implementation by the Member States, especially when it comes to data-related policies (C).

A. Introduce new mandatory checks to ensure that EU policies are “digital-ready” and interoperable “by-default”

Public administrations are bound by a specific legal context. The design of such legal provisions influences how technical solutions can be deployed across different public administrations that should be interoperable and allow secure and controlled data flows. The vision of an interoperable public sector can only become a reality if legal provisions are digital-ready.

An increasing number of Member States are developing – or plan to develop – guidelines and mandatory checks to ensure that new legislation is fit for the Digital Age. Because their decisions impact hundreds of millions of citizens and businesses, the EU Institutions should also lead by example and incorporate such checks as early as possible in the decision-making process.

Therefore, recommendations 10, 11 and 12 are mostly oriented towards the European Commission and the modernization of its legal processes, while ensuring proper support and advice-sharing from the Member States.

¹² Policies (and legislative acts) are digital-ready if they enable smooth and digital by default policy implementation and foster digital transformation through best use of digital technologies and data.

*Recommendation n°10: **Introduce mandatory but lightweight “digital checks”¹³ along all steps of EU policymaking** (European Commission, Council and European Parliament) and across policies. This should align with the Better Regulation agenda. Among others, such checks should direct policymakers’ attention towards user-centric implementation, best (re)use of public data, coherence with digital policies and upcoming data initiatives (e.g. Digital Decade/Compass, Data Act or other sectorial policies), and the reuse of existing technical and semantic specifications and interoperable solutions.*

*Recommendation n°11: The EU Interoperability Governance and the European Commission should **create guidelines for such digital checks** (e.g. expected outcome, life cycle, monitoring, etc.). They should establish a clearly defined process, which ensures that:*

- (a) The digital checks are conducted as early as possible in the policy design;*
- (b) Member States’ interoperability experts are timely consulted on EU policy proposals with significant digital impacts;*
- (c) The outcome of the digital checks is transparent and being fed into the inter-institutional decision-making.*

*Recommendation n°12: **Establish a community of practice on “digital-ready” policymaking that provides user-friendly guidelines, tools and best practice examples and that gives advice to national, local and EU policymakers.** This community of practice should support the implementation of Recommendation 10.*

B. Reinforce the European Interoperability Framework

The EIF is the cornerstone of EU interoperability action and it must remain an effective guide for implementation in the EU, Member States and at local levels. Due to its non-technical approach, the EIF has proven to be a useful instrument to raise awareness on interoperability beyond technical audiences. However, the EIF in its current state is not frequently referenced in EU policies. Public administrations across the EU could all benefit from a reinforced EIF that is more closely linked to EU sectorial policies and provides more pragmatic and operational guidance.

*Recommendation n°13: Make the **EIF a clear reference** for related cross-cutting and sectorial policies in the EU to ensure a holistic approach to interoperability.*

*Recommendation n°14: Work on **operationalising the EIF** to make it simpler to implement especially in highly decentralized countries.*

Recommendation n°15: Empower the EU Interoperability Governance to:

¹³ For digital checks and digital-ready policy see the Danish example: “The legislation is digital-ready when it can be administered in whole or in part digitally and supports the use of new technologies. Assessing the availability of legislation is an integral part of the pre-legislative work. This is done through two new steps in the legislative process to ensure that legislators and civil servants think digitalisation into the legislative work.” [Source: Danish government website](#)

- (a) **Assess the implementation** of both, principles and recommendations of the EIF in the Member States, including solutions, standards and technical specifications implemented in the context of the EIF;
- (b) **Update the framework** – both principles and recommendations – based on progress made and take into account the evolution of practices (e.g. move from an approach focusing on digital service delivery to a focus on public sector data flows);
- (c) **Promote the reuse** and take-up of relevant interoperability solutions, standards and specifications for the implementation of relevant EU policies and share best practices and examples of implementation at different levels (e.g. national, local, international).

Recommendation n°16: Establish a more automated monitoring mechanism for the implementation of the EIF and ensure data collected is reused by all Commission services following the “once only principle” (e.g. reuse between the Digital Decade, eGovernment benchmark, NIFO, Berlin Declaration monitoring, etc.). Reuse relevant information and reporting on digital government progress collected by other international organisations (OECD, UN).

Recommendation n°17: Encourage a culture of “interoperable by design”¹⁴ by including more information on the digital maturity of the public sector in Europe in the annual digital public administration factsheets¹⁵.

C. Improve the coherence between EU interoperability, digital and data policies, ensure availability of operational capacities at the EU level

The upcoming reinforced EU interoperability policy is the opportunity to bring more support for the evolving EU data policy landscape, to facilitate building, operation and inter-connection of data spaces.

*Recommendation n°18: Provide **guidance on interoperability of data** through:*

- (a) *The creation, maintenance and promotion of technical specifications on semantic interoperability to facilitate the sharing and re-use of data, taking into account EU values and diversity;*
- (b) *Supporting data use and experimentation, in particular cross sector and cross border, by liaising with relevant data governance bodies.*

A fully interoperable Europe can only be achieved with the political willingness and the operational capacity to execute it. This needs a well-designed organisational set-up that fosters cooperation and coordination across sectors and across borders. Therefore, a reinforced governance structure must be supported by the European Commission with dedicated multidisciplinary teams and the adequate resources to support Member States in the implementation of interoperability.

¹⁴ *Interoperability by default: public services should be designed to work seamlessly across the Single Market and across organisational silos, relying on the free movement of data and digital services in the European Union.” - eGovernment Action Plan 2016–2020*

¹⁵ [Digital Public Administration Factsheets | Joinup \(europa.eu\)](#)

Recommendation n°19: The European Commission services should reduce internal friction and improve the way they cooperate on the design and implementation of policies that have an impact on digital transformation of the public sector.

Recommendation n°20: The European Commission services responsible for public sector interoperability should guarantee an effective support of the EU Interoperability Governance.

CHAPTER III: UPGRADE THE CURRENT EU INTEROPERABLE SOLUTIONS OFFERING

The European Commission has been providing interoperability solutions and technical specifications for over twenty years, under the CEF-Digital and ISA² programmes (and their predecessors). While these products have brought added value to the Member States, we call on the European Commission to improve the governance and offer of EU interoperability solutions and technical specifications. Member States should be more closely involved in planning and priority setting for solutions developed at the EU level (e.g. co-decide on which former “building block” or ISA² solution should be adapted, improved or removed, etc.).

Three actions are proposed to foster the development and uptake of interoperability solutions: set up a catalogue of key interoperability solutions and open standards (A), support the development of an open source ecosystem for the public sector (B) and provide adequate funding to deliver better interoperability solutions (C).

A. Enrich the EU catalogue of interoperability solutions and open standards

EU public administrations need a federalised, one-stop-shop of interoperable solutions, technical specifications and open standards, where they could easily find free-to-use products provided by European public administrations or other stakeholders. Such a catalogue could help EU public administrations save time and resources.

The European Commission has been developing such a catalogue, however it is not systematically used by public administrations and its content should be enriched.

Recommendation n°21: Encourage EU and non-EU public administrations to consult, use and actively participate in the JoinUp platform. Participating in these communities will not only benefit the administrations, but also other re-users like companies and citizens.

*Recommendation n°22: The European Commission should foster the transformation of this catalogue into a **federalised one-stop-shop managed by the EU Interoperability Governance**. Its content should be based on:*

(a) A systematic collection of Member States’, agencies’ and local administrations’ assessments, to keep the catalogue up to date with actual needs

(b) A thorough process (e.g. proportion of reusability in a minimum of Member States, Open Source, sustainability, “future-proofness”, security, privacy etc.).

B. Make the best use of Open Source products for the common good

A recent study¹⁶ showed that Open Source Software and infrastructure are key for the digital transformation of the public sector and can be a major boost to the EU's GDP. A future interoperability policy should be the occasion to support open source functions in public administrations, the use of open source products to provide public value and foster the participation of EU public administration in the open source communities.

*Recommendation n°23: Better **support Open Source Software** as a means to foster EU digital sovereignty and prevent vendor lock-in situations, for example by encouraging administrations to actively participate in existing international communities working on open source projects and open specifications;*

*Recommendation n°24: Provide a **catalogue of Open Source solutions** for the public sector. Such catalogue should be integrated in the catalogue of interoperability solutions and open standards.*

C. Provide adequate funding to deliver better interoperability solutions

IT solutions are often developed based on the ad-hoc needs of the requesting sector but would benefit from a shared commitment across countries or sector. The EU should look into ways to ensure funding for interoperability solutions by creating more incentives to ensure interoperability when spending public money for the purpose of digital transformation of the public sector.

Existing EU funding opportunities for interoperability projects are not always aligned and are complex for Member States to navigate.

*Recommendation n°25: Mandate the EU Interoperability Governance to **issue opinions on funding priorities** (e.g. for Digital Europe Programme, building on former ISA2 committee practice).*

*Recommendation n°26: Publish **regular guidance on the relevant European funding** available to promote interoperability in the scope of the digital transformation of European public administrations.*

*Recommendation n°27: Ensure that **EU funding** for the digital transformation of public sector is guaranteed to produce **solutions that are interoperable by default**.*

¹⁶ [Study about the impact of open source software and hardware on technological independence, competitiveness and innovation in the EU economy](#)