



Today's speakers

Today's guest speakers



João Ricardo Vasconcelos

Senior Governance Specialist, GovTech, World Bank



Antoine Cao

Digital Accessibility Programme Manager, French Inter-ministerial Directorate for Digital Affairs (DINUM)



Roberto Polli

API Expert, Digital Transformation Team, Italian Ministry of Innovation and Digitisation

NIFO webinar's team



Miguel Alvarez Rodriguez

NIFO Project Manager, ISA² Programme, European Commission



Federico Chiarelli

Consultant, Wavestone



Solène Vossot

Consultant, Wavestone



Allegra Crahay

Consultant, Wavestone



Esther Bleys

Consultant, Wavestone



Introduction to the European Interoperability Framework (EIF) Monitoring Mechanism



- The EIF monitoring mechanism was developed and is maintained within the remit of the <u>National Interoperability Framework Observatory</u> (NIFO) action, which is part of <u>Interoperable Europe</u>, the successor of the <u>ISA2 programme</u>.
- A public consultation on the EIF evaluation will be launched soon. The initiative will evaluate the current EIF
 and assess the support it gives governments to set up interoperable digital public services.

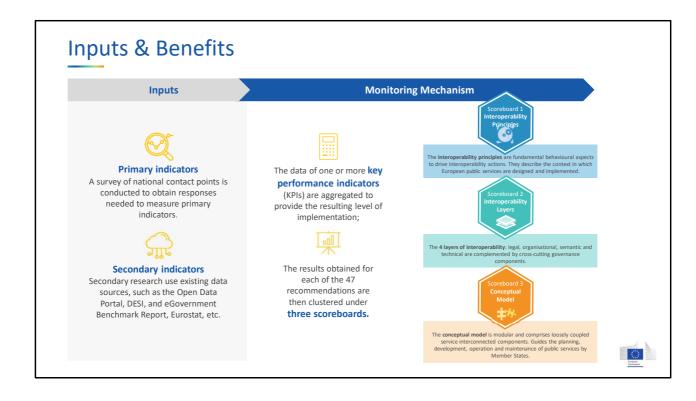


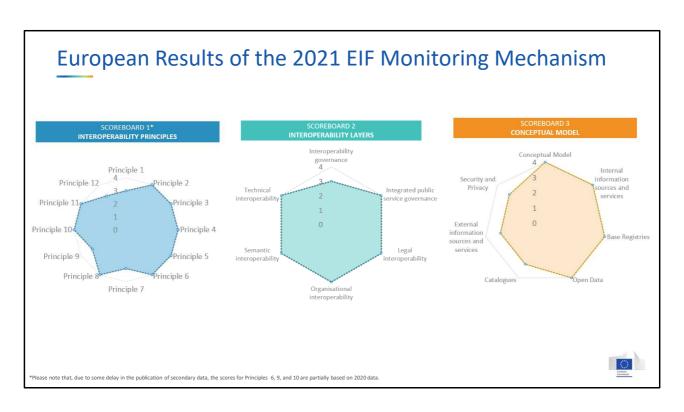
- The EIF is meant to inspire and provide guidance to European public administrations in their efforts to design and deliver seamless European public services.
- Its monitoring ensures that each Member State is provided with its own level of implementation of the EIF based on a recommendation-by-recommendation measurement.



Using a series of KPIs, the EIF Monitoring Mechanism establishes the level of EIF implementation for each
country as part of an annual data collection exercise.

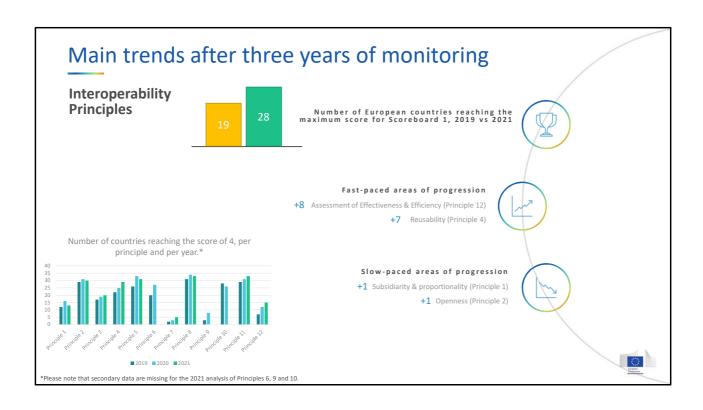


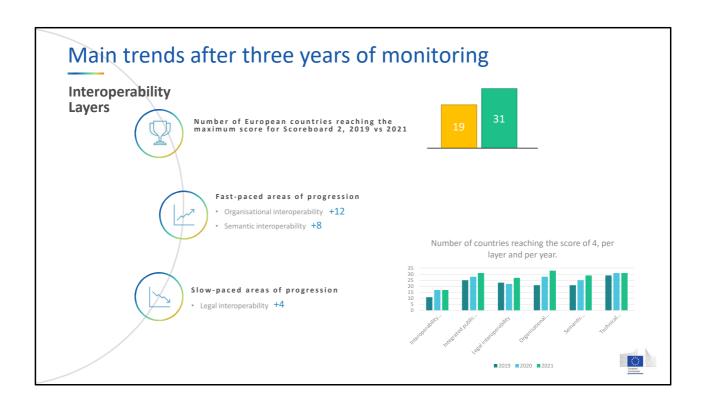


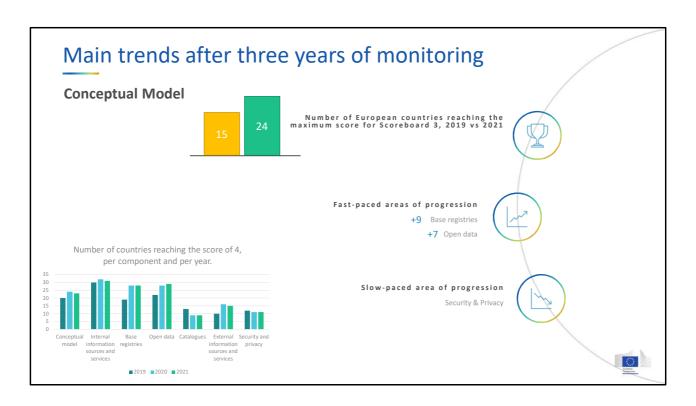


Question from the audience: Is it the average of MS EIF implementation?

Answer: Indeed, these are the EU 27 results.







Question from the audience: In some cases, there is a lowering throughout the years in the number of countries achieving the maximum score for the EIF components. What is the reason for such a situation?

Answer: The reasons behind that fluctuation depend on two main factors:

- 1. Throughout the years, different points of contact are replying to the questionnaire, hence providing different answers (even if we provide the answer sheet of the previous years);
- 2. There has been a slight adjustment of some of the underlying KPIs (as it has been the case for one KPI under 'Catalogues', for instance).

Feedback collection on possible other country intelligence reporting & monitoring activities

Where can you find EIF related data?



The EIF Dashboard

Available on the NIFO Joinup page

This interactive dashboard allows the visualisation of the countries' performance in implementing the EIF recommendations, at different levels of granularity, through numerous types of charts, and by filtering the results per country and year.



The State of Play Report

Available on the NIFO Joinup page

This annual report provides an analysis of the different initiatives carried out by EU public administrations to further enhance their digital transformation and transition. It also presents an analysis of the results of the EIF implementation to provide an overview of the current state-of-play of interoperability across Europe.



Chapter 3.1 of the Digital Public Administration factsheets

Available on the NIFO $\underline{\text{Joinup page}}$

These yearly factsheets present the most recent developments that the public administrations of 35 European countries have undergone in the previous year, including information related to the EIF implementation.

Feedback collection on possible other country intelligence reporting & monitoring activities

What are your needs regarding the EIF data?

Would you find it useful to have more information about the context of each EIF recommendation and how it is evolving overtime (e.g., new legislation, new Commission initiatives, etc.)?

61,5%

30,8%

3,8%

3,8%

Yes, I would like to have this type of intelligence at EU level.

Yes, I would like to have this type of intelligence at country level.

Don't know.

Would you like to have more in-depth insights on the status of the EIF implementation within each National Interoperability Framework and intelligence on the most common gaps among the EU countries?

92,3%

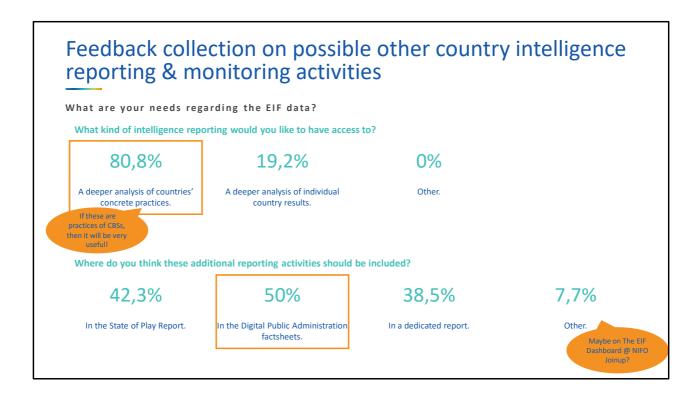
3,8%

No.

3,8%

Yes.

Don't know.

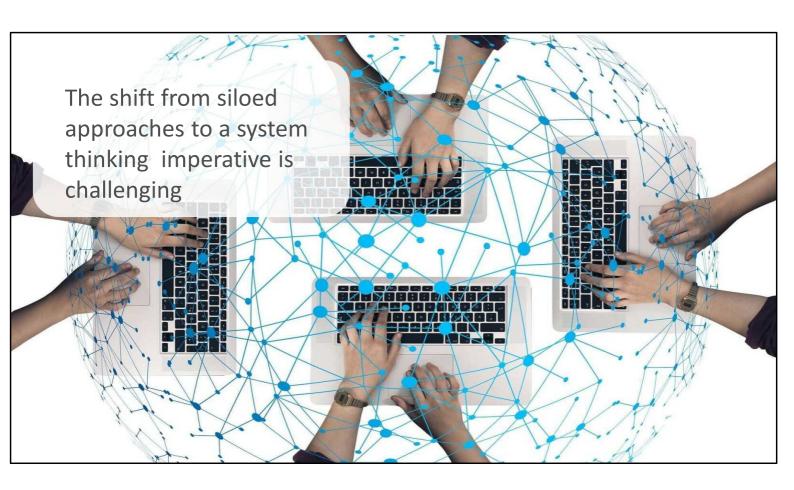




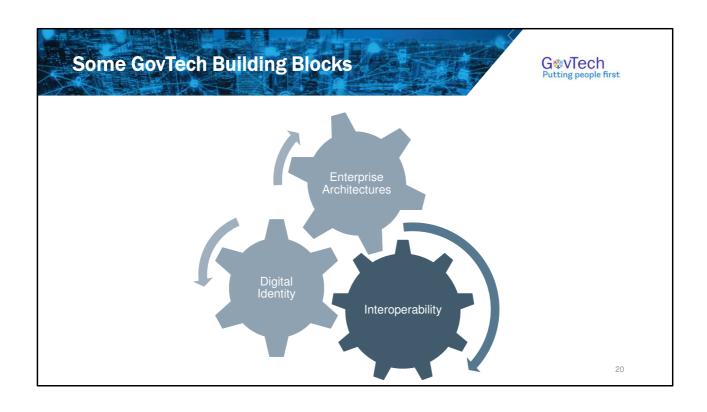












Whole-of-Government Approach is required **G***VTech Leadership to promote systems thinking and Leadership integrated approaches for digital transformation A coherent strategy and action plan to promote Strategy simple, efficient and transparent government. **Entity Leading Digital** A dedicated entity leading GovTech reforms Government / GovTech and transition to whole-of-government approach. A shared vision for effective use of shared digital Shared Key Enablers platforms and data that are interoperable and A conducive legal and regulatory regime to support strong enabling and safeguarding institutions Digital skills and innovation, data-driven public sector, human-centric design, investments, procurement Source: World Bank (2022) TechSavvy: Skills and WoG

What is GovTech Maturity Index (GTMI)

G*VTech

The GovTech Maturity Index (GTMI) measures the state of four GovTech focus areas using 48 key indicators defined to collect data from 198 economies









Core Government Systems Index (CGSI) Delivery Index (PSDI) 15 indicators

Public Service 6 indicators

Citizen Engagement Index (CEI) 12 indicators

GovTech Enablers Index (GTEI) 15 indicators

Interconnectivity and interoperability as key areas where a substantial room for improvement was identified

What's the Panorama on Interoperability





Is there a government service bus or interoperability platform in place?

- 104 of the 198 countries included in the GTMI don't have a service bus or interoperability platform in place.
- In 23 countries it is being planned or in progress.
- 67 countries have it in place, but it's use is not mandatory.
- Only 4 countries require the mandatory use of their interoperability platform or service bus.

Source: World Bank (2021) Govtech Maturity Inc

What's the Panorama on Data Governance



Is there a whole-of-government approach to implement data Governance?

- 114 of the 198 countries included in the GTMI don't have a whole-of-government approach to implement data Governance.
- In 68 countries it is being planned or in progress.
- · Only 16 have it.

Source: World Bank (2021) Govtech Maturity Inc

Some country examples on Interoperability





Korea

eGovFrame, the e-Government Standard Framework, is a platform-specific standardized development framework for public sector IT projects in Korea

Provides increased interoperability as government agencies build applications based on its standards and improves interagency collaboration/connectivity.

More info: https://www.egovframe.go.kr/eng/main.do



Some country examples on Interoperability





Brazil



The architecture of the Interoperability Standards (EPING) defines a minimum set of premises, policies and technical specifications that regulate the use of Information and Communication Technology in the Federal Government.

The bodies and entities that are part of the Information Technology Resource Management System (Sisp) must observe ePing in the planning of contracting, acquiring and updating technology systems and equipment.

More info: <a href="https://www.gov.br/governodigital/pt-br/governanca-de-dados/interoperabilida

Some country examples on Interoperability









The API Store is a one-stop shop for Application Programming Interfaces (APIs). The Government of Canada encourages the use of APIs – which provide a wealth of government data and information – to build new applications and services for Canadians.

API standards govern how APIs are to be developed across the Government of Canada (GC) to better support integrated digital processes across departments and agencies.

More info: https://www.canada.ca/en/government/system/digital-government/digital-government/system/digital-gove



Grant Putting people first

THANK YOU

João Ricardo Vasconcelos

jvasconcelos@worldbank.org

www.worldbank.org/govtech

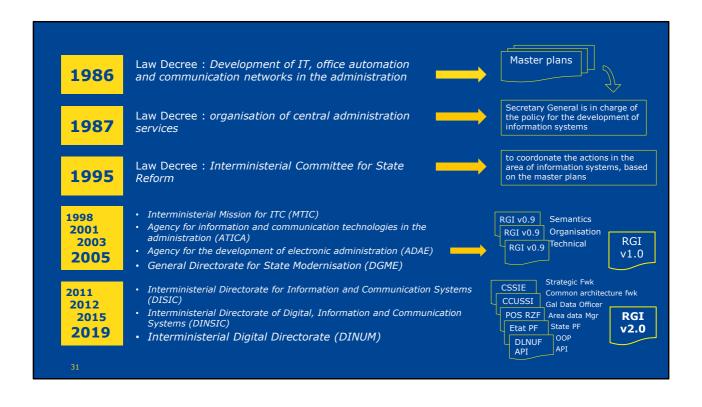


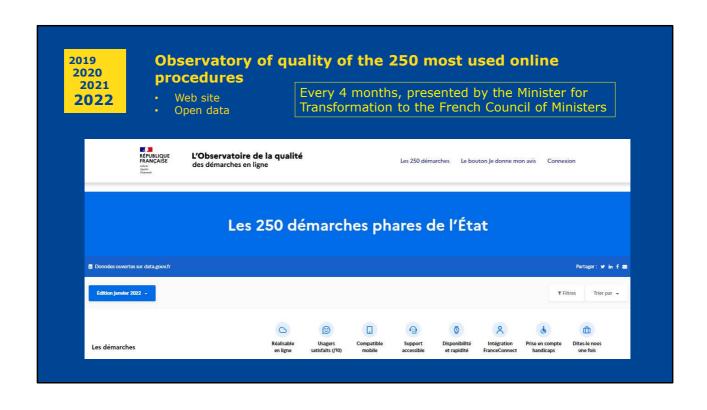


European Interoperability Framework Implementation Webinar

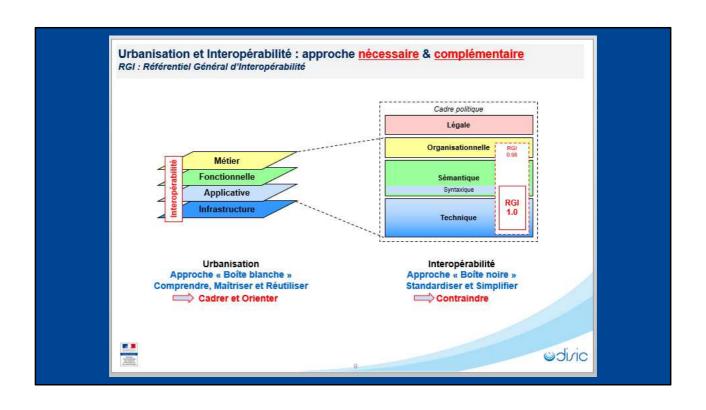
26 April 2022

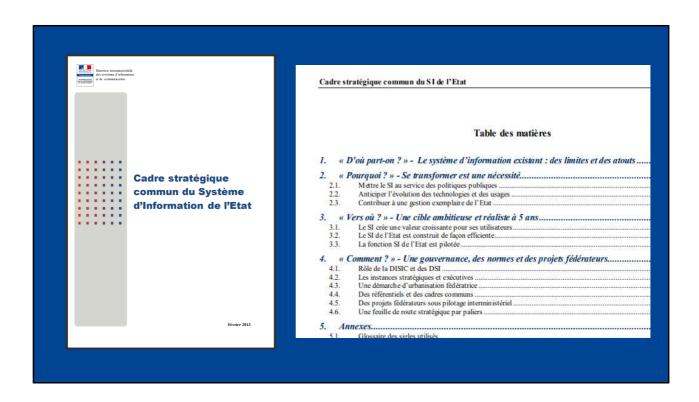
French interoperability governance model & French General Interoperability Repository (RGI)

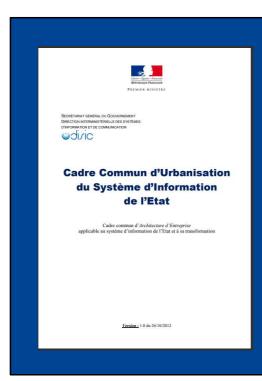


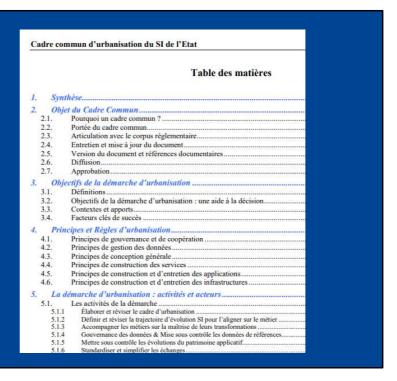




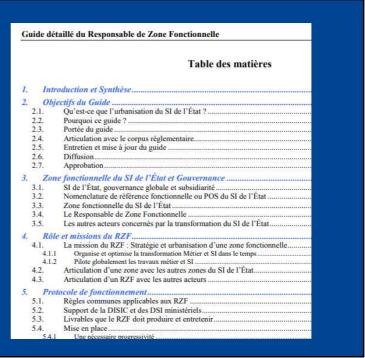




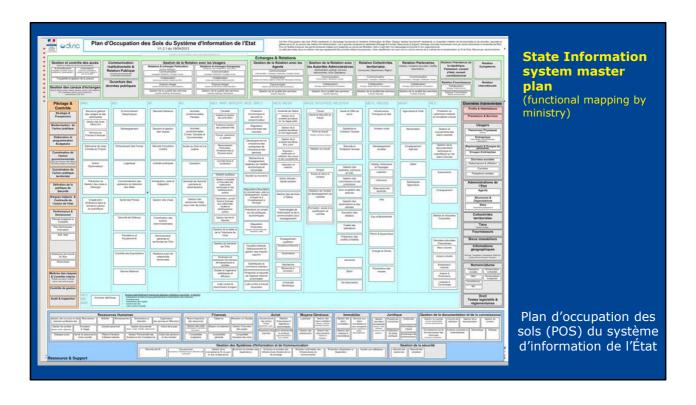


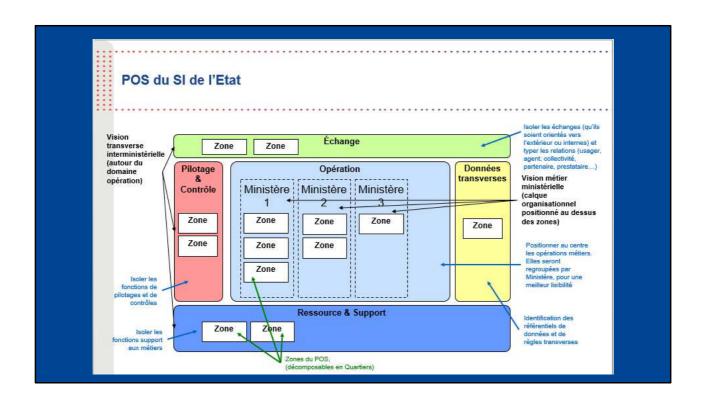






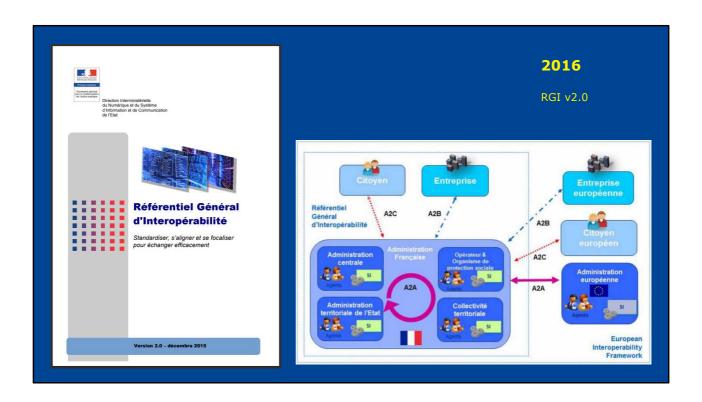


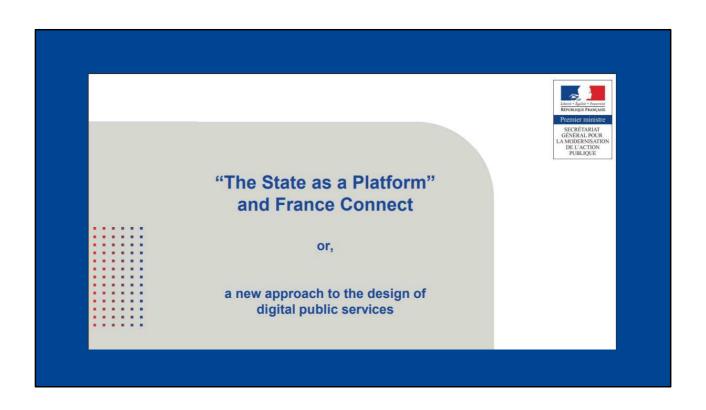




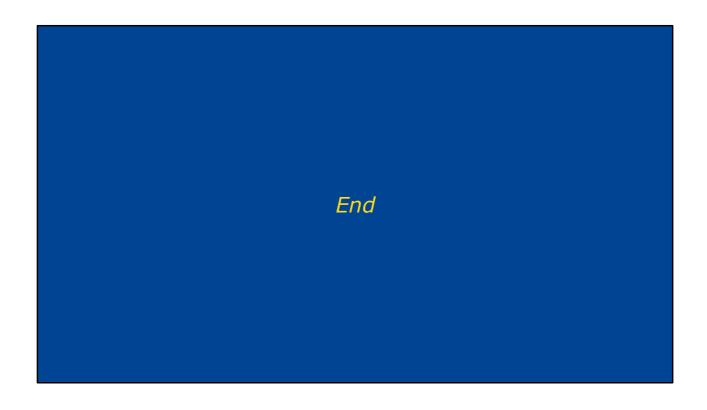




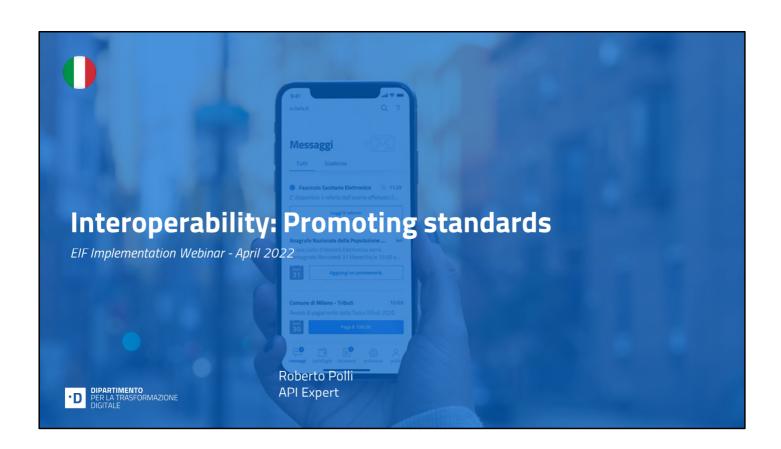












AGENDA



Agenda

How the Italian interoperability framework impacts on global standards

- → The Italian Framework
- → Writing API guidelines
- → Identify standards and communities





THE NATIONAL FRAMEWORK



Standardizing digital services

The legal framework includes mandatory central platforms backed by technical guidelines, as well as user-centric services based on APIs.
Platforms are key building blocks.





ITALIAN FRAMEWORK: REGULATION TO IMPLEMENTATION

			Ш	
Payments	State-owned company PagoPA, Tech guidelines	Agreements with PSP, incentives for e-payments		Central platform, open source tools, starter kits
Population Registry	Registry Platform, Tech guidelines	Training, supplier engagement, events,		Central platforms, open knowledge website,
Interoperability	Tech. Guidelines, API first, API Marketplace	Stakeholder engagement, incentives, communication		Central platforms, global standards, open source tools, dev community
Identity	Electronic ID Card SPID (eID), Tech guidelines	Incentives and bonuses, advertising,		Federated platforms, open source tools, dev. community
	Legal	Organizational		Tech & Semantics



We joined the underlined spec/workgroups



TECHNICAL GUIDELINES



Secure and usable by design with API Guidelines

To achieve **reliable**, **secure** and **consistently designed services** Italy wrote API Guidelines and support tools

Risks

- over-complexity: bureaucratic, non-digital processes are mapped to convoluted APIs without a proper redesign
- time-constrained engineering: a restricted group of people addressing the above usecases within a short deadline

Mitigations

- → Interface Description Languages: a formal description of API interactions, eg: OpenAPI (HTTP) and WSDL (SOAP).
- → API Guidelines: to uniform the design and security of REST and SOAP services between 12k agencies, together with tools to help agencies and their suppliers in checking their design. Engage with IETF communities!





GOALS AND KEY FEATURES



Identify Guideline goals and key features

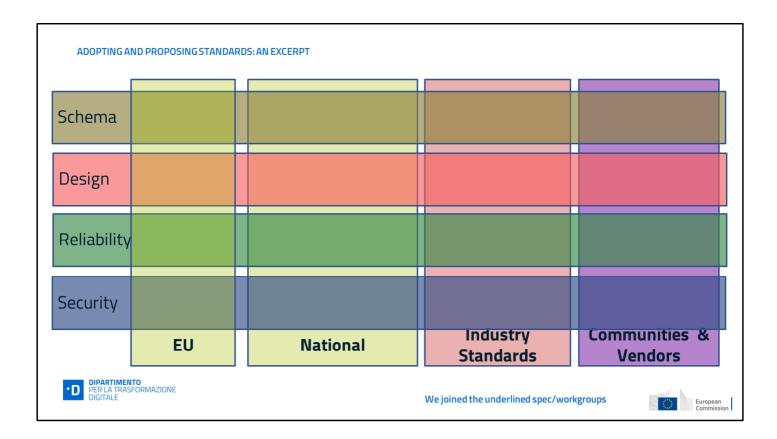
To write a guideline you have to prioritize goals and features: this eases the stakeholder identification and the feature landscaping

- → Consistent Design & Schema standardization: introduce design rules and standard schemas to uniform APIs between different agencies
- → Reliability & Security: enforce a service management model addressing cascading failures and security frameworks lowering legal risks for providers

And always... **engage and create Communities**: government, developers, implementers and standards







ADOPTING AND PROPOSING STANDARDS: AN EXCERPT

Schema	DCAT, pub. office	National ontologies and shared repos	RFC7807, RFC3339, ISO4217, BCP47,	OpenAPI, IETF
Design	EIF	Guidelines, REST	HTTP, OpenAPI 3	OpenAPI, Providers, Vendors
Reliability	EIF	Guidelines provided a basis for IETF contributions	<u>RateLimit Headers,</u> <u>HTTP</u>	IETF, Vendors
Security	EIF, eIDAS	Guidelines provided a basis for IETF contributions	JWT, <u>Digest, HTTP</u> <u>Signatures</u>	IETF, W3C
	EU	National	Industry Standards	Communities & Vendors

DIPARTIMENTO
PER LA TRASFORMAZIONE
DIGITALE

We joined the underlined spec/workgroups

CASE STUDY



Participating to global standards

Engaging the HTTP community while facing data integrity in REST, gave unexpected outcomes.

Our experience with the Digest HTTP Header:

- → draft a standard solution fixing existing loopholes and adding examples
- engage with communities, suppliers and vendors, look for co-editors, get feedback and awareness from implementers
- → get consensus inside IETF, resulting in the adoption of the <u>Digest Internet-Draft</u>
- → contribute: continue working until the Internet-Draft becomes a standard RFC

We joined the community as volunteers for an "housekeeping work".





Contacts

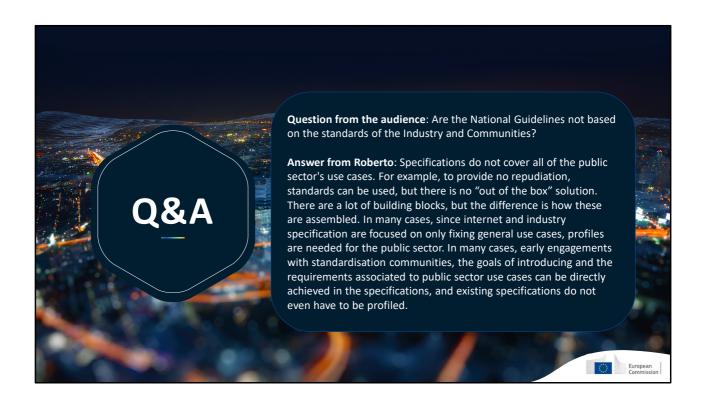
Roberto Polli

- Email: roberto@teamdigitale.governo.it
- GitHub: ioggstream

www:

twitter: @InnovazioneGov

Document released with a CC-BY SA-4.0 license





Answer from João:

One of the main challenges is the different levels of digital development that can be found in different countries. However, despite the level of development that a country is in, the IT basics still need to be in place, so there is a big work to be done there.

Besides this dimension, having a whole-of-governance approach is also essential, meaning that all the different entities of the public sector are on board towards a sound interoperability policy.

Answer from Antoine:

The challenges are the complexity of the chain of stakeholders and giving them a global vision of the strategy layer.

Answer from Roberto:

The main challenges are the lack of knowledge on interoperability and API in the public sector. Interoperability is rarely seen as bringing short-term value and it is something that agencies and politics are looking for. The other challenge is the lack of incentives for the creation of interoperability solutions and a bureaucratic mindset. Agencies want to consume interoperable services but they are less likely to invest in providing them. The bureaucratic mindset is about fear of acting, of data protection management, together with time constraints. The third challenge is wishful thinking about legislative solutions. Making new laws is not enough. There must be a concrete vision of how to achieve the intended goals. Italy planned and delivered a centralised platform to support the delivery of interoperable services. Some have already been

deployed while others are planned for the next few years. Namely, the API catalogue and marketplace will provide a one-stop-shop for searching public sector API but will also streamline the administrative processes required to collect information from different governmental bodies and agencies. The idea is to provide direct benefits for agencies in adopting interoperable solutions.



Answer from Antoine:

The main element needed is to have a legal and regulatory aspect that is validated. Hence the main role and responsibility is to convince politicians to validate the way the regulatory and legal aspects of making the digital transformation are envisioned. Then it is important to delegate and ensure that all the managers of functional areas have all the resources needed to implement and carry out the projects.

Answer from Roberto:

The backbone is the digital Administration Code, the unified law defining interoperability processes. In general, the Cabinet office coordinates digital actions and platforms related to interoperability, while technical guidelines and specific actions are conducted by an Agency named AGID. In the past, defining a specific law on general requirements on interoperability such as a specific API mandate and associating it with concrete actions under the guidance of the Cabinet Office had a positive impact.

Answer from João:

There is the issue of leadership which is crucial, i.e. who is leading really the interoperability policy in the public sector and knowing whether this entity has the right mandate, and resources to put it in place. It should also be explicitly acknowledged by and across the public sector that such entity has this very specific mandate of leading the interoperability policy. There is also the issue of coordination (across ministries, across sectors, and levels of governments) which is

crucial, i.e. other entities should be aligned on the same vision for the interoperability policy/strategy that is put in place. This would allow for joint ownership and responsibility towards this policy. Lastly, it is important to understand what are the policy levers that countries have in place. Typically countries have good strategies and political support, but then it is crucial to also have in place policy mechanism that can really help implement the different standards and architectures that are being put forward.



Outputs of the legal screening exercise



The <u>EIF Toolbox</u> aims to provide guidance to national public administrations on the theoretical background of the EIF, and more importantly, to provide them with **tools and reusable solutions** that can support them in implementing the EIF recommendations.



One of the newest features of the EIF Toolbox is the legal screening of relevant EU pieces of legislation contributing to the implementation of the EIF recommendations.

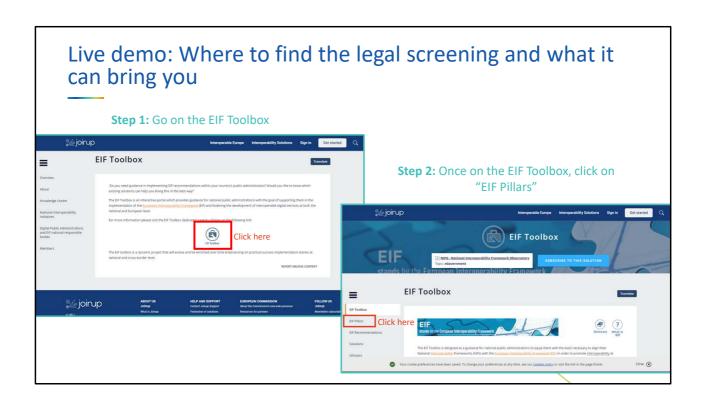


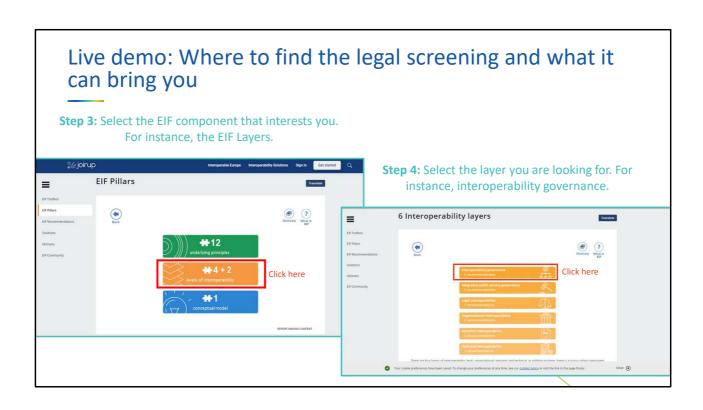
The screening currently includes **21 pieces of legislation** related to interoperability fostering and relies on an analysis of more than 150 legal provisions.

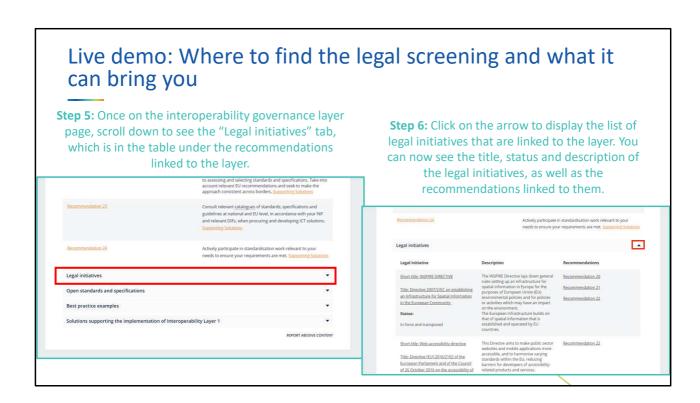


This exercise was performed for **all EIF components**, i.e., the interoperability Principles, Layers, and Conceptual model, and **at recommendations level**.

One EIF component is not yet covered: External information sources and services (Conceptual model).







Feedback collection on the findings and next steps

We recently launched a <u>survey</u> to collect your needs so as to keep shaping this feature around what benefits you most.

So far, the results show the below interests:

- Accessing more information, e.g., a summary of the measures, related court judgments, and examples of domain-specific, national and European implementation.
- **Expanding the screening** to proposed acts (90%), national acts (70%), and domain-specific acts (60%).
- Additional ideas: pointing to specific articles, creating a matrix out of this screening, adding an explanation on how the legal covers specific EIF assets, overlaying it with other IO policies (OECD).
- Making the screening **easier to find** on the Toolbox (under the Recommendations tab or as a self-standing tab).



How the data collection is currently structured

AT THE MOMENT INFORMATION ABOUT THE EIF CAN BE FOUND ON:

- The interactive dashboard on Joinup
- The State-of-Play Report on digital public administration and interoperability
 - The Chapter 3.1 of the Digital Public Administration



CURRENT ACTIONS

- Country response sheets from the previous edition are shared
- Tooltip to guide respondents through the online survey
- Ability to compile the survey offline using a Word version
- Ability to download the results at the end of the survey
- Possibility for respondents to review and validate the data at the end of the data collection exercise



SUPPORT

Countries have our contact details for any support they might need.



Collection of feedback on how to improve the data collection for the 2022 edition

What are your needs regarding the EIF data?

Based on your experience, please rate the current data collection process from a scale from 1 to 5 (5 = Very straightforward, somewhat straightforward, Neutral, somewhat complex, very complex = 1)



In your opinion, how could the data collection method we use for EIF monitoring be simplified? In other words what kind of features or other improvements would you like to see in next year's edition?

50%

Continue to receive my country's responses from the previous year (as a separated PDF document).

83,3% Receive a pre-filled version of the online survey with my responses from the previous year.

33,3% Improve the navigation between questions in the online survey.

0%

Other.

