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A Framework for Integrated Public Services, Co-Creation and Sustainability

Workshop DGO 2022, 16 June 2022

- Noella Edelmann (University for Continuing Education Krems)
- Efthimios Tambouris (University of Macedonia)
- A.Paula Rodriguez Müller (KU Leuven)
- Anita Cioffi (Deloitte)

Workshop "A Framework for Integrated Public Services Co-Creation and Sustainability"

- Fotos & Recording: dissemination, expert feedback, analysis for inGOV
- Comments in chat/Mural: https://app.mural.co/t/depfegovernanceinwirtschaftu8216/m/depfegovernanceinwirtschaftu8216/1655281432389/fa851eecc80455083e5a0e8140df8c00e2b6b18d?sender=noellaedelmann8712
- Data collected: confidentiality, anonymity, security
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- Workshop organiser: Noella Edelmann, noella.edelmann@donau-uni.ac.at
- inGOV Ethics Manager: Ms Georgia Livieri, livierig@unisystems.gr
- Any questions?

- Thank you, Yi-Fan Wang, University of Nebraska at Omaha

Image: https://www.amazon.com/Warning-Video-Audio-Recording-Progress/dp/B0788H45PD

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Part I: The H2020 inGov project: project, topics, context of the packages

Efthimios Tambouris, UoM

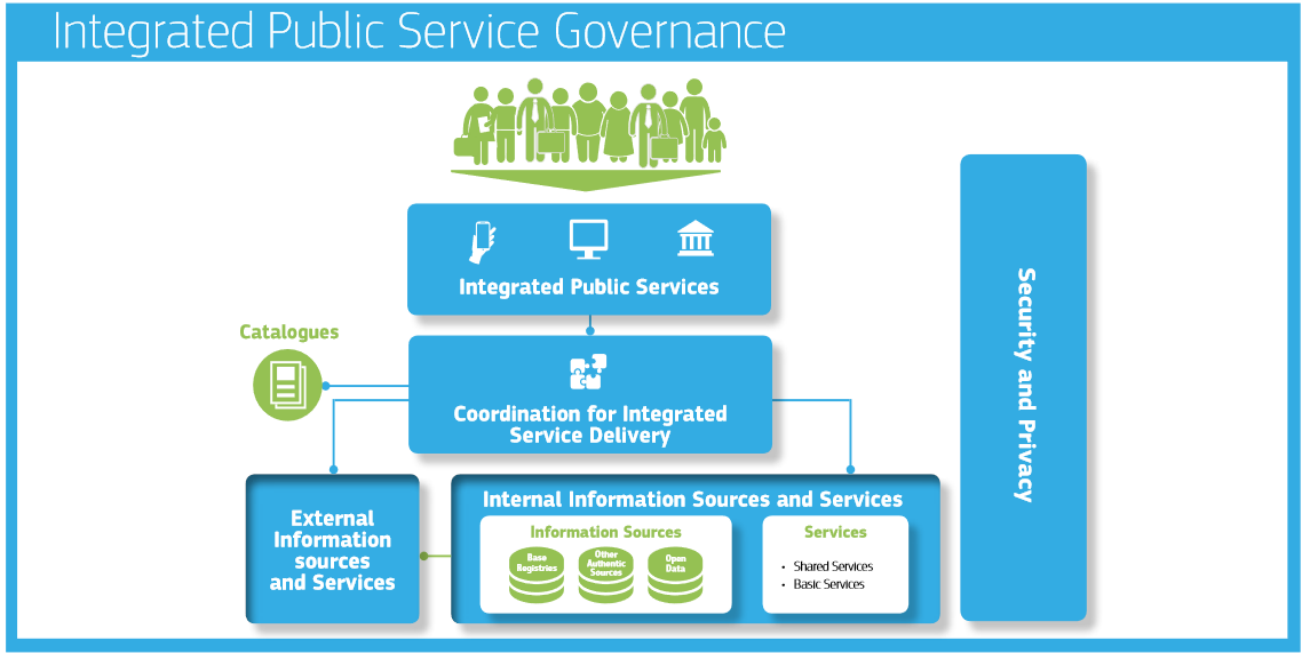
Integrated Public Service (IPS) Delivery

- ***Integrated Public Service (IPS)***: consists of public services by one or more Public Authorities provided together to meet end users' needs , e.g. for setting up a new business, getting married etc.

- The ***European Interoperability Framework (EIF)*** includes principles, recommendations, and a conceptual model

- EIF does not account for active stakeholders involvement (***co-creation***)

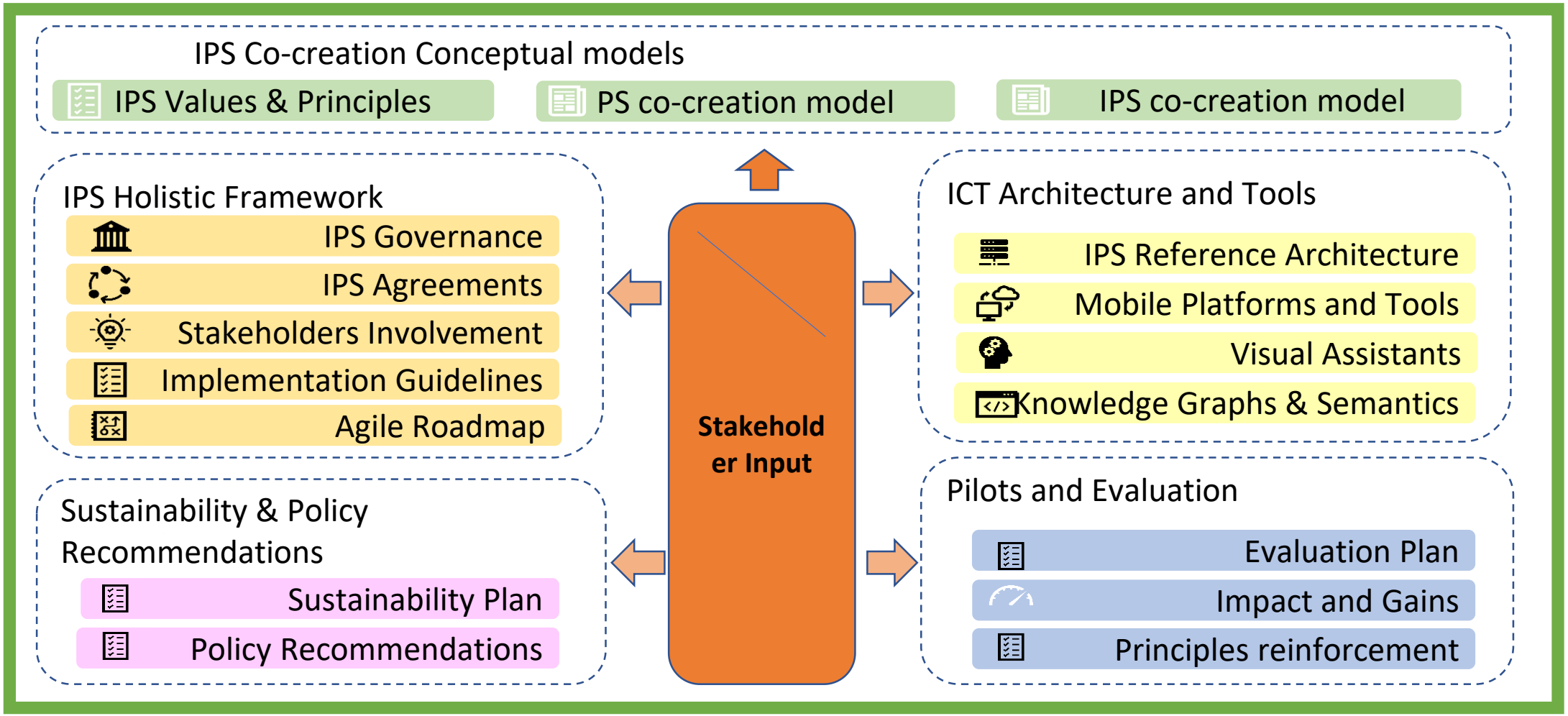
- In addition, guidelines for stakeholders need to be more specific and widely-used ***technologies*** (e.g. ***smartphones***) need to be explicitly supported



The H2020 inGov project

- inGov is a 3-year (1/1/2021-31/12/2023) Research and Innovation action funded by EU H2020 programme
- inGov aims to enhance existing and device new ***Policies, Methods and ICT Tools*** for ***inclusive Integrated Public Service (IPS) Co-creation and Provision***
- inGov will capitalize on ***existing*** (mainly EU) relevant policies and initiatives, ***academic*** literature and practitioners ***good practices***

inGov Conceptual Approach



Efthimios Tambouris and Konstantinos Tarabanis (2021) "Inclusive Governance Models and ICT Tools for Integrated Public Service Co-Creation and Provision: The inGov project", *22nd Annual International Conference on Digital Government* Research (dg.o 2021), ACM, pp. 538-539.

inGov Pilots

- inGov results will be ***deployed*** and ***evaluated*** in ***four pilots***.
- Pilot #1: Modernisation and integration of the digital common family ***household*** public service in ***Malta***.
  - Combine data in different databases to provide benefits to low-income households
- Pilot #2: Creating an AI-driven mobile ***virtual assistant*** and a common PS platform for citizens of the City of Bjelovar, ***Croatia***.
  - Provide chatbots for citizens to obtain info on public services
- Pilot #3: Reengineering and digitalization of the issuing and renewal procedure of the disabled citizens ***discount cards*** for public ***transportation*** in the Greek Region of Thessaly, ***Greece***.
  - Automate the process to obtain a transport card for disabled, low-income citizens
- Pilot #4: Digitalisation and simplification of the ***tourism overnight stay tax*** collection in Lower Austria, ***Austria***.
  - Streamline the process of collecting tourism tax

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Part II
Background of the IPS-Co: Co-creation within the EIF

A. Paula Rodríguez Müller

KU Leuven, Public Governance Institute, Belgium

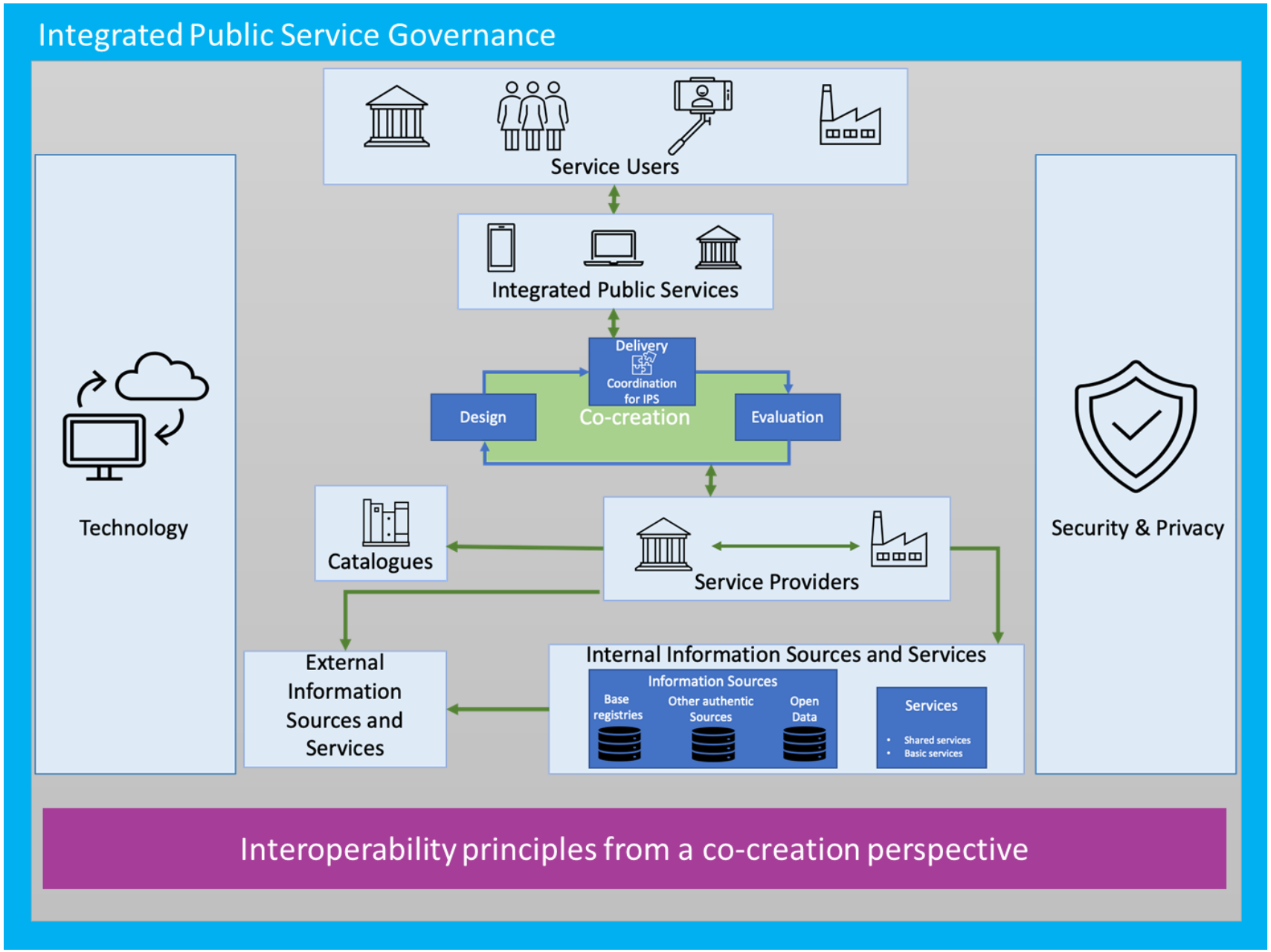
June 16th, 2022

Background

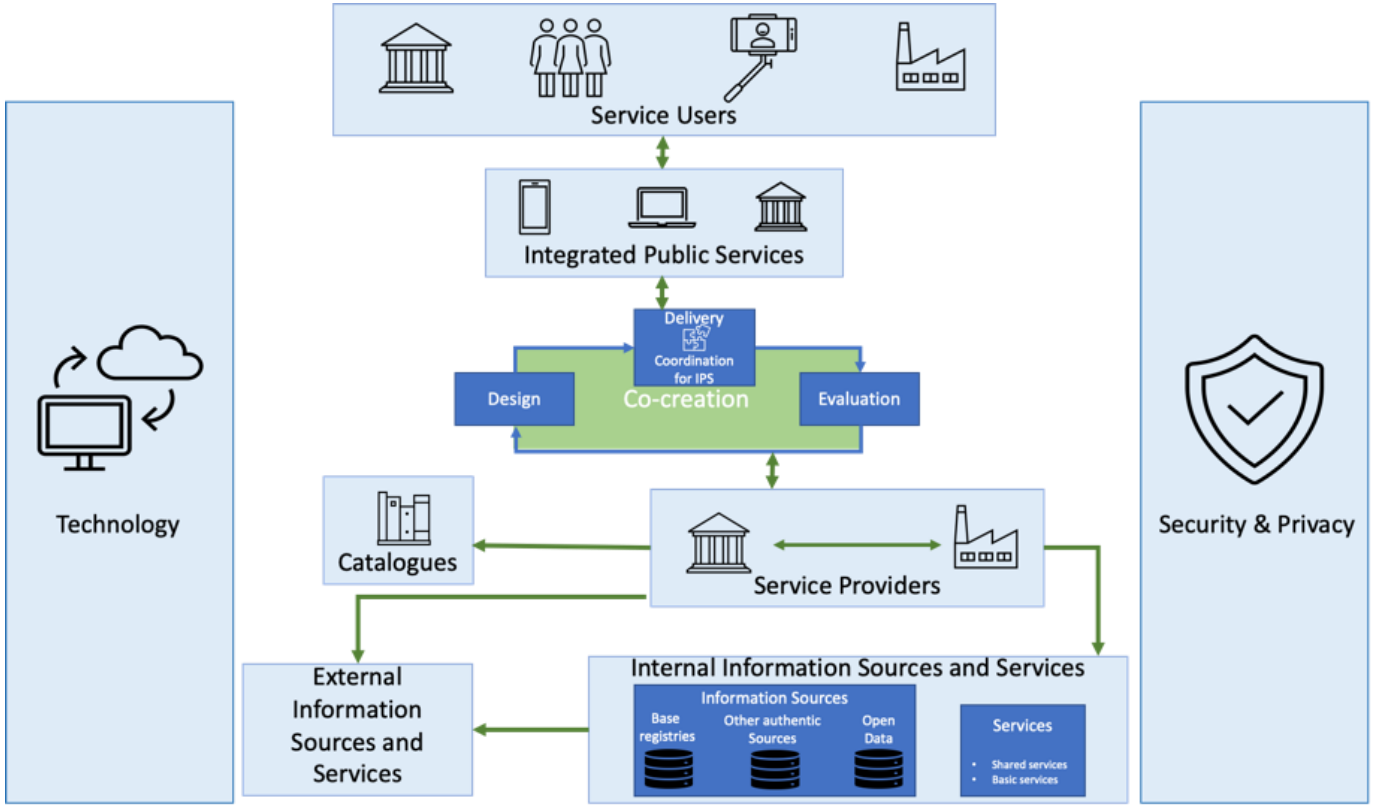
- Interoperability is key for the digitalization of public administrations
- Yet interoperability is complex, and its implementation can face various challenges
- European Commission has developed the European Interoperability Framework (EIF) to provide guidance to public administrations
- The EIF has become a relevant policy advice and it has been playing a key role to support interoperability implementation and the development of integrated public services

IPS-Co

Principles



IPS Co-creation Conceptual Model (IPS-Co)



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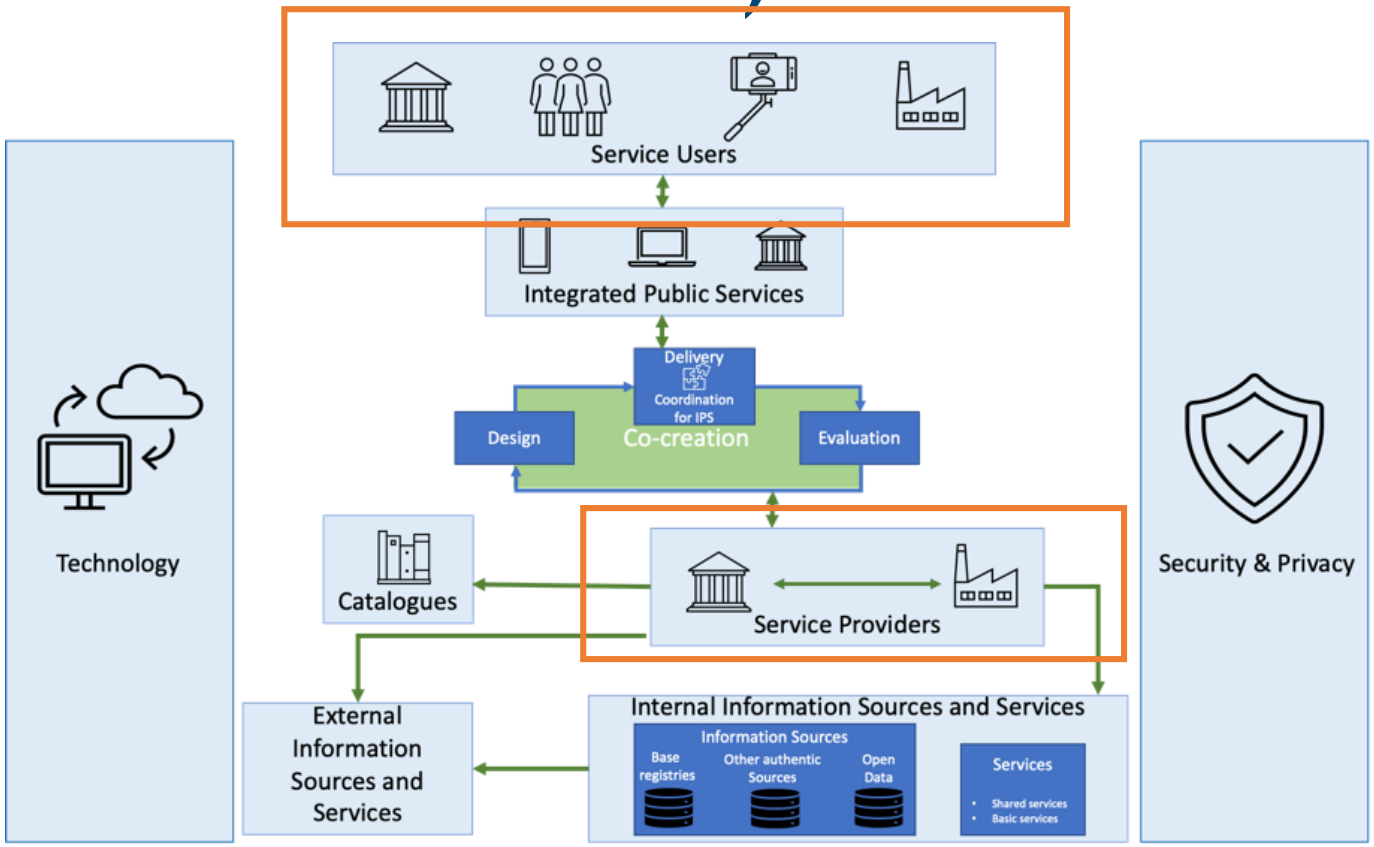
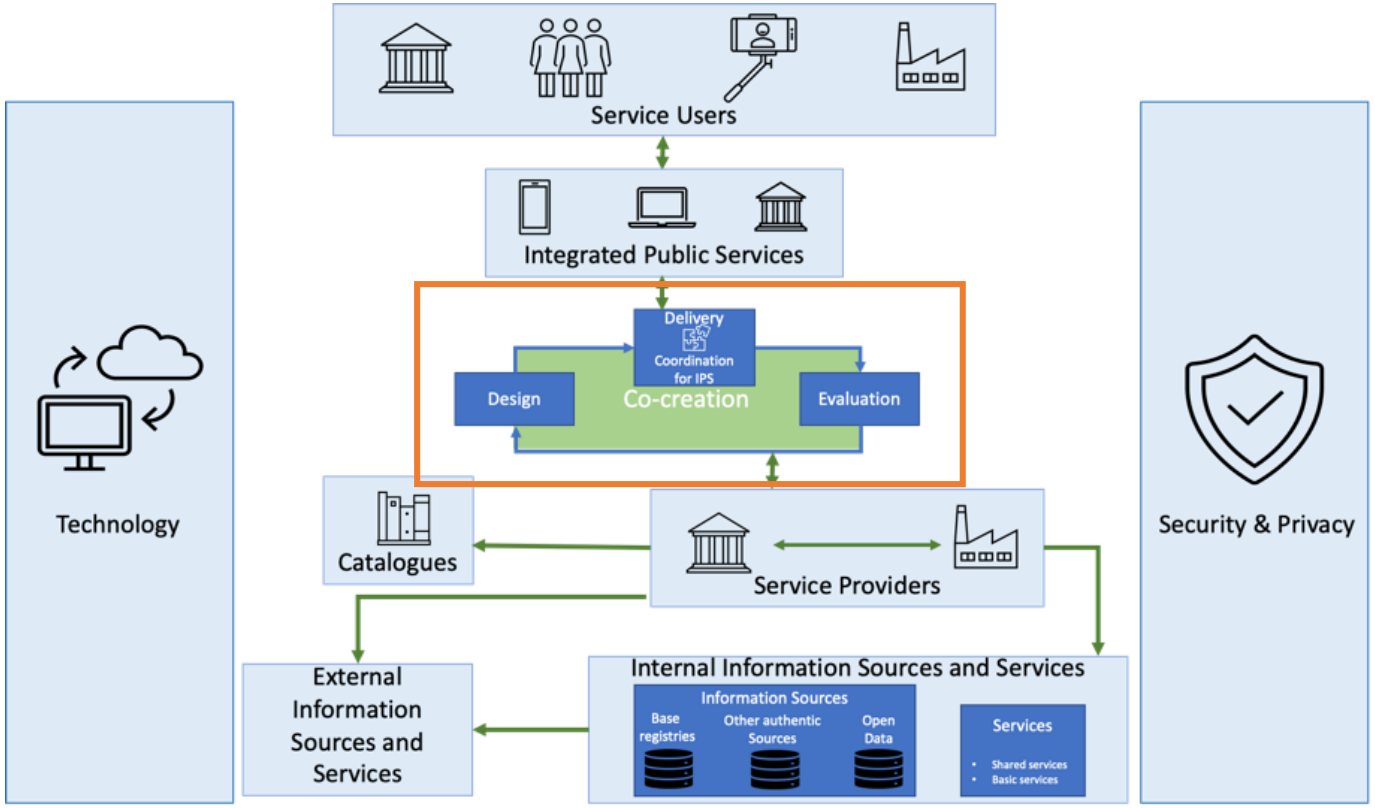


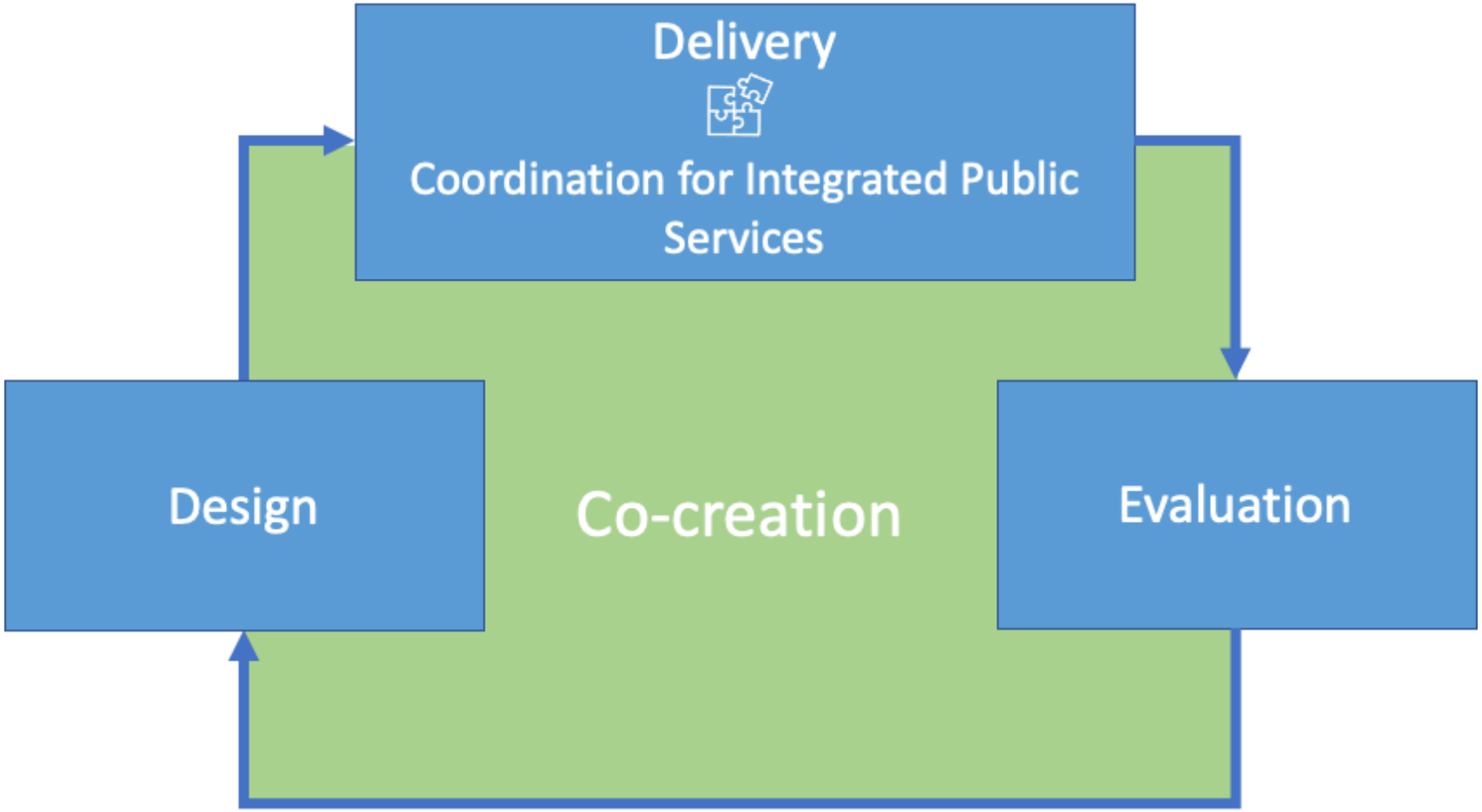
IPS users & providers concepts

- Transition from users to potentially active co-creators
- User involvement in the design, deliver and/or evaluation of IPS
- Two-way process vs. unidirectional interaction
- Continuous vs. one-time involvement

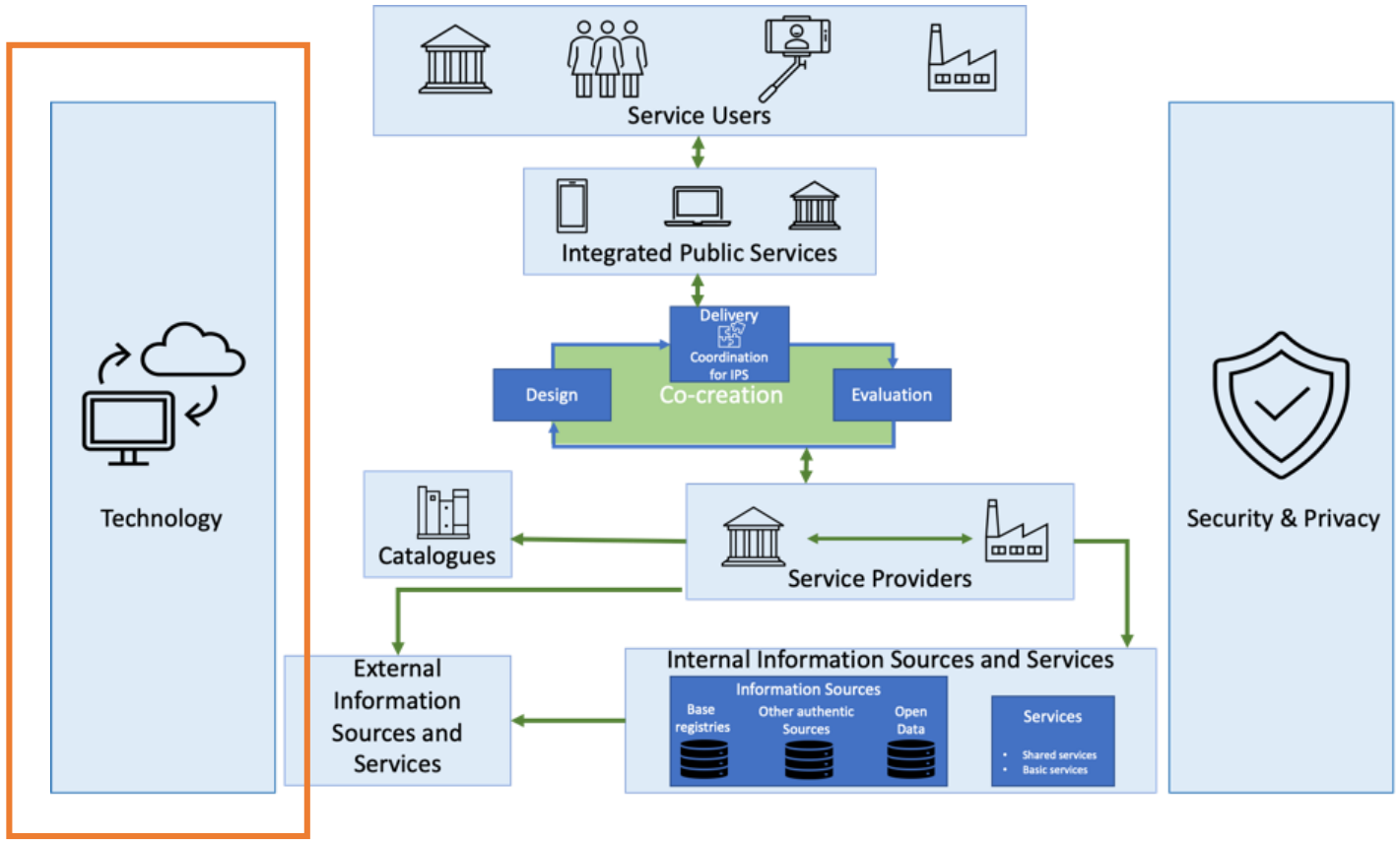
IPS-Co


Service Users
Integrated Public Services
Delivery
Coordination for IPS
Design
Co-creation
Evaluation
Technology
Catalogues
Service Providers
Security & Privacy
External Information Sources and Services
Internal Information Sources and Services
Information Sources
Base registries
Other authentic Sources
Open Data
Services
Shared services
Basic services

The co-creation concept and the IPS cycle



IPS-Co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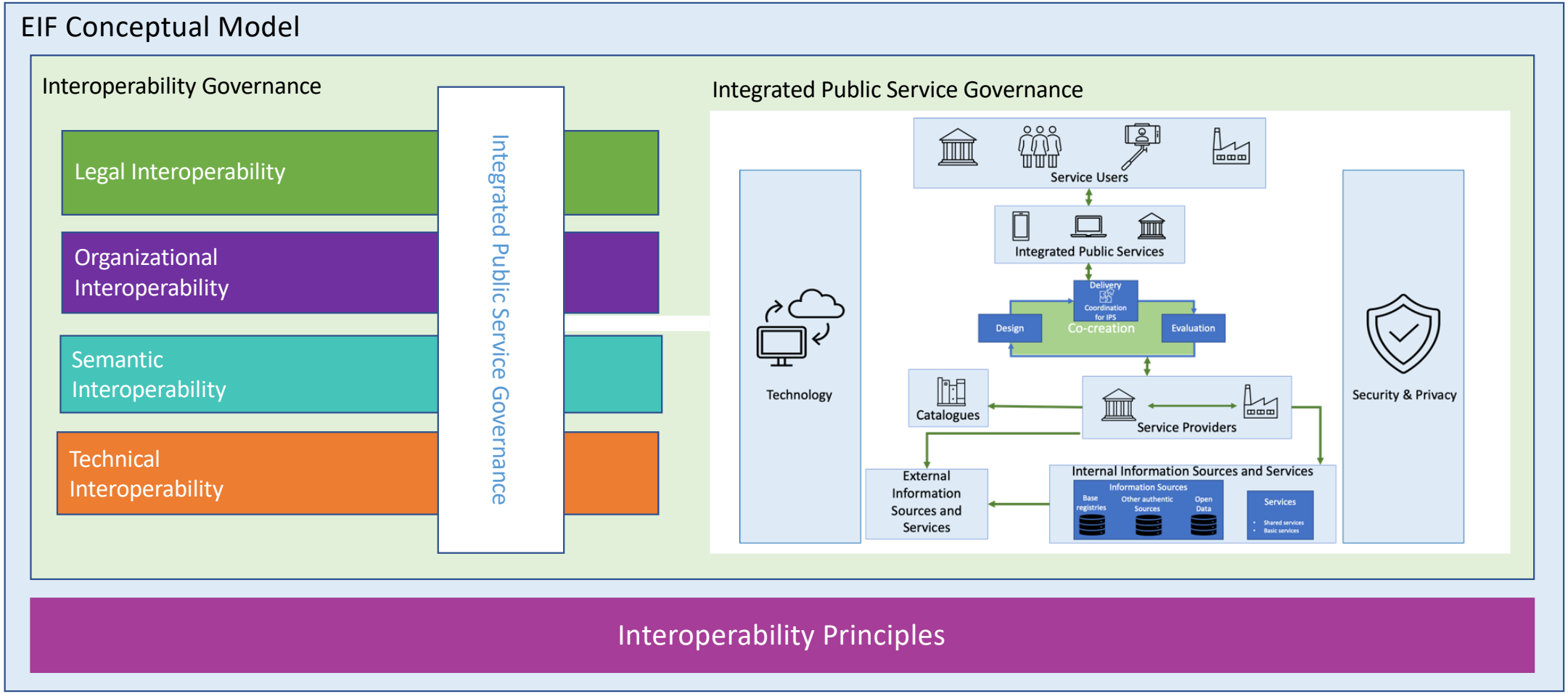
Information Sources
Base registries
Other authentic Sources
Open Data
Services
Shared services
Basic services

Emerging technologies

- E.g., Blockchain, mobile applications, knowledge graphs and linked open data, IoT…
- **Technology neutrality?**

Towards an IPS Co-creation Conceptual



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Part III

A Framework for Integrated Public Services Co-Creation and Sustainability

June 16th, 2022

Anita Cioffi

Deloitte.

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Contents

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Focus of the workshop

Coordination mechanisms to support **stakeholders' and service users' active engagement** in the implementation of **Integrated Public Services (IPS)**

Key dimensions of analysis/Pillars

IPS co-creation governance

How should **governance be revisited to enable stakeholders' contribution** during the key phases of IPS provision?

Stakeholder engagement mechanisms

What **means should be adopted to leverage on stakeholders' expertise** throughout the whole IPS life-cycle?

Challenges of the design & Implementation

What mechanisms can help **govern the challenges** related to political, legal, technical and organisational aspects?

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Methodology

1. Literature analysis

Review of academic literature on:
- IPS governance
- Stakeholder engagement mechanisms
- Challenges of the design and implementation (political, legal, technical and organizational)

2. Analysis of best practices

Analysis and comparison of 5 European real-life cases through:
- IPS governance
- Stakeholder engagement mechanisms
- Challenges of the design and implementation (political, legal, technical and organizational)

3. Formulation of recommendations

Preparation of recommendations to:
- Review the governance to enable stakeholders' contribution
- How to leverage on stakeholders' expertise
- Govern the challenges related to political, legal, technical and organisational aspects

Norway: Digisos
Modernise and simplify the application process to receive welfare benefits

Hungary: Municipal ASP 2.0
Provide all municipalities with a single model of portal to access online public services

Italy: App IO Italia
Provide a single access point to a wide variety of different public services

Finland & Estonia: X-Road
Reuse X-Road data exchange infrastructure to enable automated bilateral exchange of business register data between Finland and Estonia

Latvia: Portal "Latvia.lv"
Provide a single portal to Latvian citizens through the development of a digital one-stop shop

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Your input is precious

We would like to hear your opinion, please use the chat or the link to Mural…

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IPS co-creation governance:

Main outcomes from the literature

Three main modes of governance

Hierarchy mode: the **government has a dominant role**, the power derives from formal positions in hierarchy, and **non-governmental actors are seen as subjects**. **Steering, control and decision-making are based on authority. Users/citizens have few opportunities to participate in the different phase of IPS lifecycle**

Market mode: non-state actors are the dominant actor type (e.g., business, companies) while the **government role is based on the delivery of services to society**. The unit of decision-making is individual and the **steering and control are based on price and economic motives. Users/customers have few opportunities to participate in the different phase of IPS lifecycle**

Network mode: is mostly governed by **informal institutions based on reciprocity**, with the involvement of **both governmental and non-governmental actors** who are considered partners. It is also characterized by a **higher degree of informality and flexibility with limited rules and regulations**. It relies on the **cooperation between actors** built on shared values and interests. **Users/citizens can actively participate in the different phase of IPS lifecycle**

In the case of digital IPS Co-creation, *the* ***combination of the strengths of different governance modes (hybrid mode) can enhance accessibility and quality of services****. For instance,* ***digital literacy can be an obstacle to meaningfully contribute to IPS co-delivery, this is why traditional approaches should be combined with collaborative processes****, such as co-creation,* ***to ensure satisfaction of service users****.*

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IPS co-creation governance:

Main outcomes from the best practices

HIERARCHICAL MODE: Two analysed cases (ASP2 and X-Road BR), **the demand for the service was determined by organizational/department objectives** and professional/expert judgement following a more **hierarchical mode**

MIXED APPROACH: For 2 cases (latvija.lv portal and DIGISOS) **a mixed approach** has been used, whereby some **form of market or hierarchical model** of needs identification was **enriched with the participation of service users**. For example in DIGISOS **research methodology** (e.g. cost-effectiveness analysis, profiling of target users) was **complemented with the involvement of actual service users** sharing their needs and subsequently involved as co-designers at the next step of the project's lifecycle (also for legitimization purposes).

NETWORK MODE: One case (App IO) is the one that more closely adheres to the **network style** of identifying needs and framing the future solution, by **recognizing different perspectives and collecting available knowledge from different groups of stakeholders.**

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IPS co-creation governance:

It is your time!

1. Based on your experience, which mode of governance prevails in the provision of IPS?

a) Hierarchy
b) Market
c) Network
d) Hybrid

2. If you didn't have this kind of experience, do you think that the hybrid mode can be considered effective?

a) YES
b) NO
c) I DON'T KNOW

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Stakeholder engagement mechanisms:

Main outcomes from the literature

The correct **identification of stakeholder groups in e-government projects, is key to ensure long-term success**. For a successful and effective e-government initiative it is important not only to identify stakeholders but to **align their needs and interests to the e-government objectives**.

Co-design

The **inclusion of stakeholders in this step not only helps create mutual trust between the authorities and stakeholders, but also helps provide a more user-centric experience.** The involvement of users in this stage is relevant to **identify their needs** in order to **align the future service provisioning to them** and to **design and prototype together with users.**

Methods: One to one interviews, Focus groups, Surveys, Brainstorming , Idea gathering, Public consultation, Face to face workshops/meetings, Scenario building

Co-delivery

Including stakeholders in the service delivery phase, such as **users and expert professionals** is relevant for the success and effectiveness of service co-delivery.
The users are key stakeholders as they **help determine if the service delivery is complying with the specifications agreed upon in the co-design phase**.

Methods: Living labs, beta testing, face to face workshops/meetings

Co-evaluation

The co-evaluation phase has the objective to **evaluate and learn from the service delivered,** in order to **improve and consider feedback from respective stakeholders**. Therefore, the **experience of stakeholders,** may they be businesses, citizens, SMEs or the service providers themselves, **is key to be able to have a broader view of the service provided**.

Methods: public consultation and panel discussion/delphi

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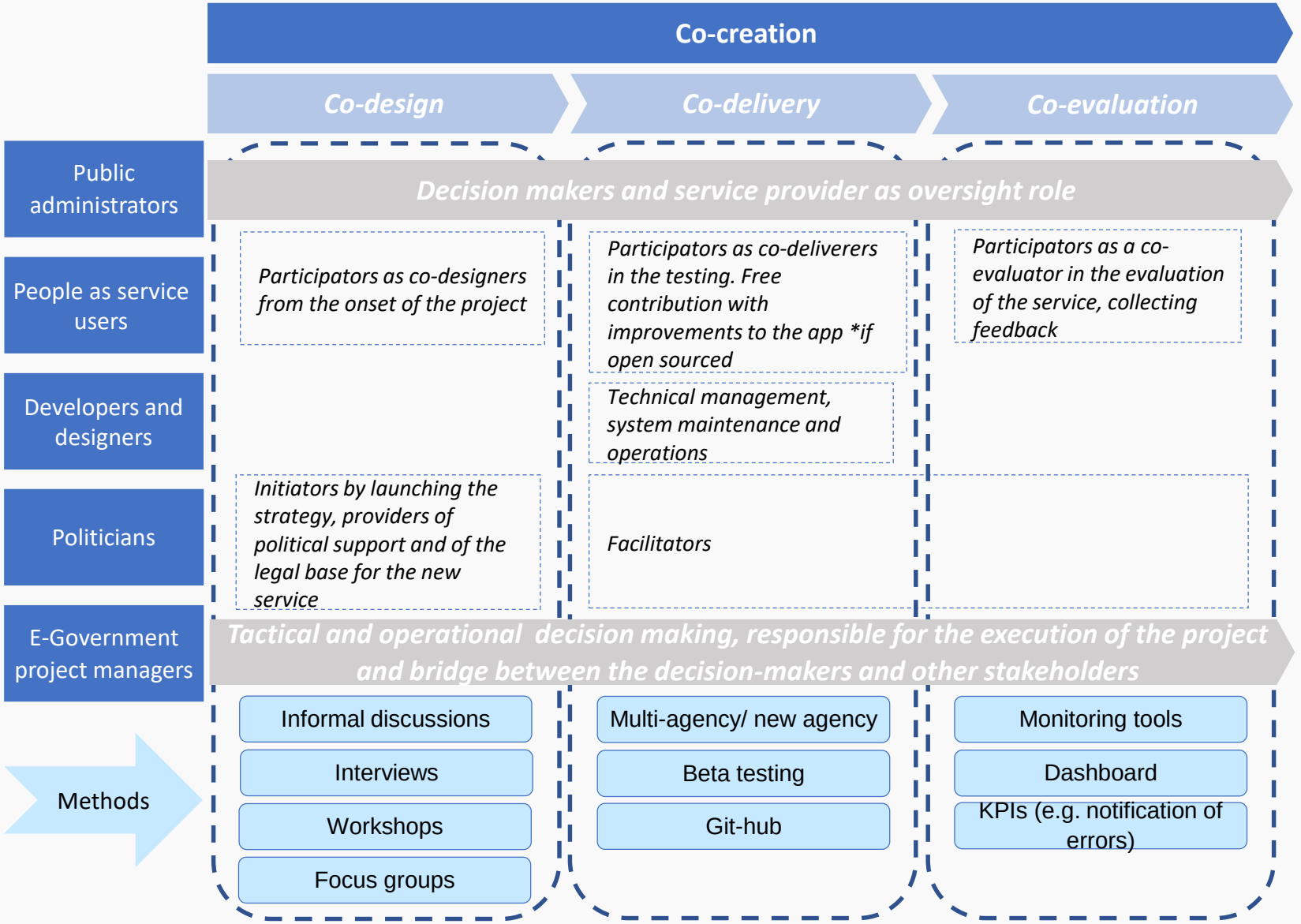
Stakeholder engagement mechanisms:

Main outcomes from best practices

Observed trend: **involvement of a wide array of stakeholders** in the phases of **project planning/ execution** or later in the service provision. This stands in contrast to previous arrangements in which **government was the dominant or even the single actor during the whole cycle of service provision**.



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Stakeholder engagement: It is your time!

Based on your experience, did you see different stakeholders engaged in any phase of IPS?

a) YES
b) NO
c) MAYBE
d) I DON'T KNOW

If yes, which stakeholders?

a) Public administrators
b) Citizens/Users
c) Politicians
d) Developers
e) E-government project manager

Do you think stakeholder engagement can provide a valuable contribution to service implementation?

a) YES
b) NO
c) MAYBE
d) I DON'T KNOW

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Challenges of the design & Implementation: Main outcomes from the literature

Four main challenges of IPS implementation

Political challenges:

- Political will
- Political capacity
- Commitment of Public Actors to Public Values
- Nature and Degree of Community Participation in Public Service Provision

Technical and interoperability challenges:

- Security and privacy of the e-government services
- Differences in local or national approaches to handling specific types of data
- Barriers for data exchange (different data models, Limited possibilities to develop common access tools)
- Semantic barriers

Organisational & Managerial challenges:

- Training to build digital skills and competences
- Development of digital managerial skills
- Ability of citizens to manage their personal data (Data sovereignty and management)
- Capabilities of IPS users to take part in co-creation processes

Legal challenges:

- Regulations and policies for promoting data/services availability and use
- Regulations and policies dealing with the underlying relationships between the stakeholders (e.g. public organizations and businesses for the case of IPS)
- Regulations and policies dealing with the cross-border public service interactions

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Challenges of the design & Implementation:

Main outcomes from the best practices

Findings across the cases

	Political	*Legal*	Technical	Organisational
X-Road	Necessity to ensure **total support from decision-makers**	Necessity to ensure **compliance with personal data protection laws**. Necessity to ensure free-of-charge data exchange between the two countries	Necessity to **ensure total interoperability** between the systems of the two countries	Necessity to **mitigate the gap between the two countries** regarding the level of government digitalization
Digisos		Necessity to ensure **compliance with personal data protection laws** in co-creation activities and the portal's operation.	Each partaking organisation had their **own requirements that they sought to impose** on the entire project	
ASP		Necessity to adapt to the **existing legislation on the repartition of competences between the central government and local authorities**.	Necessity to **integrate pre-existing municipal IT infrastructure** with the new, generalised architecture	Necessity to **normalise ASP as a regular public service**
Io app		Necessity to **ensure compliance with personal data protection laws** in co-creation activities and the app's operation	Necessity to integrate very **different services to a single platform**	Necessity to **make timely progress with a very small team**
Latvija.lv	Necessity to **keep up with changes in Government** priorities and orientations	Necessity to be provided with **a clear and comprehensive regulatory environment**	Necessity to **integrate different services to a single platform**	Necessity to deal with a **limited budget.** Necessity to **hold on to qualified and experienced staff** in an environment of high **turnover**

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Challenges of the design & Implementation:

It is your time!

Based on your experience, do you see any other relevant political, legal, organisational and technical issues during the implementation of IPS?

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Recommendations for practitioners: **Governance**

From the results operationalised recommendations have been prepared to guide practictioners

Governance

*How should **governance be revisited to enable stakeholders' contribution** during the key phases of IPS provision?*

Use a mixed governance approach of **market research** or **translation of political decisions** with the **engagement of various stakeholders**, including at the definitional/diagnosing stage, **to recognize users' service needs**, **scan problems perceived by the community and identify specific aspects for the development of the public service**.

*Bringing in stakeholder knowledge in the definition of services is seen as a **departure from traditional hierarchical and market-based models** of organization and it **contributes to reach a common understanding of the problem and grounding the service offer in real needs instead of assumptions.***

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Recommendations for practitioners: **Stakeholder engagement**

From the results operationalised recommendations have been prepared to guide practictioners

Stakeholder engagement

*What **means should be adopted to leverage on stakeholders' expertise** throughout the whole IPS life-cycle?*

Co-design	*Co-delivery*	*Co-evaluation*
Prefer a pluralistic approach at the design stage by **bringing in diverse skills and perspectives** from the different actors	**Develop digital competences and train service users**	**Devise specific channels** and opportunities for service users and other stakeholders to **significantly contribute to IPS evaluation** to obtain: **validation for the product, evaluation of service accessibility (access, responsiveness, ease of use), identification of flaws and bugs and potential areas of improvement**
Use a stakeholder map	Provide **different channels and opportunities for users to significantly contribute** to service delivery	Channels could be: **forums, customer support points, emails, dedicated sections in the portal/app to signal flaws or offer suggestions**. Use results and input to optimise the solution and its delivery
Make sure that every identified stakeholder is contacted, informed, and given the opportunity to contribute to the co-design	In case of **open-source code,** available on public repositories (such as GitHub), **anyone, including users, can contribute to its maintenance, development, or improvement**	
Create and maintain **spaces in which various stakeholders and service users can interact** to express and align their interests and needs		
Formalise communications with stakeholders to instil a sense of transparency		

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Recommendations for practitioners: **Challenges of design and implementation**

From the results operationalised recommendations have been prepared to guide practictioners

Challenges of design and implementation

*What mechanisms can help **govern the challenges** related to political and technical aspects?*

Political challenges

Secure political commitment by **engaging policy makers at the earliest stage of IPS project.** This will ensure their support, which is crucial during the next phases of IPS implementation.

Technical challenges

Use **pre-existing technical solutions** (overarching infrastructures such as national service buses, national cloud platform, public API catalogues) to **save development costs and reduce risks**. Ensure the solution adopts **common standards and vocabularies**, as well as **open specifications and prefer open-source**

Organisational challenges

Ensure the IPS project plan for implementation is structured reasonably, spreading it across **well-defined work packages**, aiming at reasonable **deadlines,** and by assigning **clear responsibilities to each contributing stakeholder.** Organise training to **build digital skills** and competences and **digital managerial skills**

Legal challenges

Make sure **every aspect of the co-creation process is legally compliant** (e.g. use of personal data). Where the **pre-existing relevant legal framework does not set out sufficient provisions** to cover all aspects of the IPS project, **ensure the legal framework is complemented by formal agreements signed between the parties involved.** In the case of **cross-border IPS projects**, **ensure that political decisions between governments are grounded in a written agreement**

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Part IV: Sustainable co-creation in the public sector and policy development

Noella Edelmann

University for Continuing Education

Part III: Sustainability of co-creation

Sustainability: “the ability … to uphold or support, i.e. sustain something considered valuable”

[Ralf-Eckhard Türke 2012]

Co-creation of sustainable outcomes: whether and how co-creation enables the creation of effects that endure, even after the co-creation activity itself has come to an end

- Co-creation can lead to a higher level of user acceptance and plausibility of services and technologies, leading to more **sustainable public service provision**
- Through co-creation, the **sustainability of collaborative practices** can be strengthened

[Jaspers & Steen 2021]

Sustainability in the context of the public sector and digital public services

Sustainability in the European public sector is aligned with digital transformation

Berlin Declaration (2020)

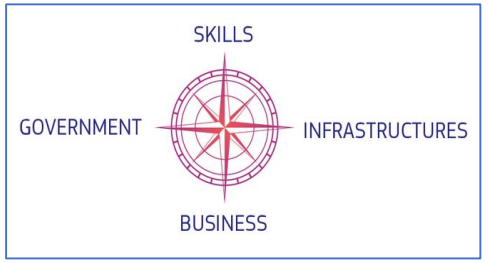
- Developing relevant policies that support a workplace culture, appropriate use of digital technologies and work-life balance through co-creation and collaboration with the civil society;

Digital Compass: the European way for the Digital Decade (2021)

- Digital policies that empower people and businesses;

Shaping Europe's digital future (2020)

- Digital solutions and data are to enable a fully integrated life-cycle approach that supports an open, democratic and sustainable society



Sustainability in the context of the public sector and digital public services

How should digital technologies be used to make government more efficient and effective?

- Digital transformation includes **collaborative tools for innovation – these support** user-centric approach and inclusive services,
- Has increased complexity,
- **Co-creation in the public sector as a starting point for digital transformation and innovation**,
- Helps develop an appropriate strategy for transforming services based on the incorporation of digital technologies.

Part IV: Sustainability of co-creation

- *How can we ensure that the co-created outcomes and capacity building are sustained beyond a specific project and can even have multiplier effects?*

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Thank you for joining us!

More information on inGov
www.ingov-project.eu

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