Draft Sustainability Strategy

Deliverable 4.1

Work Package 4

Road Mapping and Sustainability

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Author(s) name(s)	Olivier Delteil
Contributing partners	IA LT, DIGICAMPUS,
Reviewer(s)	Alex Borg, David Osimo
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Deliverable abstract

This document, Deliverable D4.1, serves as the Draft Sustainability Strategy for the GovTech incubator project "GovTech4All-beta." It outlines the initial strategy for ensuring the long-term viability and impact of the incubator's activities beyond the four-year Framework Partnership Agreement (FPA). The document details the development of a vision and strategy for sustainability, including the partnership structure, governance model, and funding mechanisms. Additionally, it highlights the efforts to raise awareness among policymakers about the value of GovTech and its role in achieving Europe's strategic goals. As a collaborative and living document, it marks the starting point for continuous refinement and improvement, with the final strategy scheduled for completion by the end of October 2024.

Table of contents

List of figures and tables

Table of Participants

Acronym	Name of Organisation
LISBONCO	The Lisbon Council for Economic Competiveness
BETAI	Wildtriumphs LDA
GRNET	National infrastructures for research and technology
LANTIK	Lantik S.A.M.P
AYTO	Ayuntamiento de Madrid
BRON	Bron Innovation
ICTU	Stichting ICTU
GOBE	Oda Ventures SL
DAOL	Biedriba Latvijas Digitalais Akselerators
GOVMIND	Govmind GMBH
AMTEGA	Agencia para la Modernization Tecnologica de Galicia
MAETD	Ministerio de asuntos economicos y transformacion digital
IALT	Viesoju Istaiga Inovciju Agentura
DIMUM	Direction interministérielle du numréique

Table of abbreviations

FPA	Framework Partnership Agreement
KPI	Key Performance Index
GDPR	General Data Protection Regulation
PoC	Proof-of-Concept
R&D	Research and Development
SME	Small and Medium Sized Enterprise
SGA	Specific Grant Agreement
TBD	To Be Defined
TL	Task Leader
WP	Work Package
WPL	Work Package Leader

1. Introduction

This document serves as Deliverable D4.1, the Draft Sustainability Strategy for the GovTech incubator project "GovTech4All-beta." This initial strategy is part of Work Package 4 (WP4) – Road Mapping and Sustainability. The overarching objective of WP4 is to lay the foundations to ensure that the activities of the incubator remain viable and impactful beyond the end of the four-year Framework Partnership Agreement (FPA).

WP4 has two primary objectives:

1. First, it aims to iteratively and collaboratively develop a vision and strategy for the sustainability of the GovTech incubator. This includes defining the partnership structure, governance model, and funding mechanisms, while ensuring synergy with existing policies and funding instruments. The strategy also outlines the practical steps necessary to achieve sustainability.
2. Second, WP4 seeks to raise awareness among policymakers about the value of GovTech and its relevance to achieving Europe's strategic goals.

Task T4.1, Roadmapping Sustainability, is a critical component of WP4. Led by DINUM, with contributions from all partners, this task focuses on developing a comprehensive sustainability strategy for the project that extends beyond 2026. This includes formulating the partnership framework, business model, governance structure, and identifying synergies with other policy and funding instruments.

Deliverable D4.1, the Draft Sustainability Strategy, is a collaborative effort to gather input from the Consortium's members and to publish the initial draft of the sustainability strategy. As a living document, it marks the starting point for continuous refinement and improvement. The final version of the sustainability strategy is scheduled for completion by the end of October 2024 (Month 16 of the project).

1.1 Structure of the Document

The following section presents the structure of Deliverable D4.1, the Draft Sustainability Strategy for the GovTech4All project. The document is divided into the following chapters:

- **Chapter 2** provides an important overview of public procurement, addressing traditional issues and examining joint procurement within the EU. It then contextualises GovTech within this framework and sets the stage for understanding the GovTech incubator.

- **Chapter 3** specifically focuses on the GovTech4All project, detailing its objectives, pilots, legal structure, expected outcomes, and intended impact. This chapter also explains sustainability within the context of the GovTech4All project.

- **Chapter 4** explores the methodologies employed, including the literature review, survey methodology, continuous improvement strategies for sustainability, incubation processes, the French case study for running an EU GovTech programme, as well as stakeholder mapping.

- **Chapter 5** provides an analysis of sustainability, presenting survey results and a comprehensive list of challenges and lessons learned based on the literature review, survey responses, and evaluation of the current status of the project.

- **Chapter 6** lays the foundations of the sustainability strategy, linking it to all the WP and illustrating how these will support the sustainability of the project, ensuring the intended outcomes and impact.

- Chapter 7 outlines the upcoming activities to refine the foundations of this strategy. It also discusses elements beyond the scope of the project that are essential for promoting the sustainability of the intended outcomes and impact, particularly focusing on the consolidation and strengthening of the nascent European GovTech community and ecosystem.

By outlining this strategy, the aim is to ensure the long-term success and sustainability of the GovTech incubator, fostering innovation and delivering value to the public sector across Europe.

1.2 Understanding Sustainability: An Overarching Perspective

Sustainability is the ability to sustain something, to keep it going over a long period. In the context of a project, sustainability means the capacity to continue its existence and functioning beyond its end. This involves ensuring that project results are used and exploited continuously, not only during the project's lifetime but also after its completion. A project can be considered sustainable if its outcomes continue after the end of funding, meaning that relevant results are pursued and the intended impact maintained. It may also speak to the ability of a project to maintain funding to ensure it continuation or provide the means to ensure the proliferation and reuse the outcomes.

The definition of sustainability can vary depending on the context, business, area of study, or research. For example, in Horizon Europe projects, sustainability is typically defined as the project continuing to deliver benefits to its beneficiaries and other constituencies for an extended period after the Commission's financial assistance has ended. Understanding full breath of what the concept means in terms of the GovTech4All project will be further elaborated in more detail throughout the document. However, it is fundamental to underscore that there is no clear definition and that the definition and how it is understood is relative and contextual.

2.What GovTech and why implement it?

The following section offers an overview of GovTech, with a focus on the European context. It explores the challenges of traditional procurement, particularly regarding the procurement of innovation in the public sector, and highlights how GovTech can address these issues. Additionally, it examines the legislative and normative frameworks that led to the creation of the GovTech4All project, setting the stage to explain the project's objectives and the role of sustainability within this context.

2.1 What is Public Procurement?

Public procurement is a complex agenda that encompasses legal, economic, and political aspects. Due to the substantial volume of funds that public authorities spend to meet their needs, public procurement serves as a tool through which policymakers can also achieve secondary benefits, such as environmental or social gains (Malatinec, 2018).

Public procurement is a crucial pillar for the delivery of services, goods, and works for public authorities. It ensures that the public sector can effectively and efficiently acquire the necessary resources to function and serve the community (Malatinec, 2018). Every year, public authorities in the EU spend around 14% of GDP on public procurement (European Commission, 2017).

Public procurement also has the potential to contribute to innovation. Increasingly, it is used as a lever to drive economic growth and achieve objectives such as unlocking innovation, promoting SME participation, and delivering sustainable outcomes (Malatinec, 2018).

2.1.1 Problems with Traditional Procurement

However, traditional public procurement demonstrates a range of difficulties in being used to develop innovation. The rigidity of the procurement process often stifles flexibility and adaptability, making it challenging to incorporate innovative solutions. Large contracts, while potentially efficient for some procurements, limit the pool of suppliers to those with the capacity to handle such contracts, often excluding smaller, more innovative firms. Furthermore, traditional procurement processes provide few incentives for extended dialogue between public authorities and potential suppliers, which is crucial for fostering innovation and understanding complex needs (European Parliament, 2022) .

2.1.2 What is Joint Public Procurement in the EU?

Joint cross-border public procurement in the EU can take several forms:

2. Central Procurement: In this model, centralised procurement activities by a central purchasing body located in another Member State are carried out according to the national rules and provisions of the Member State in which the central purchasing body is located, eliminating conflicts between the national laws of European Union Member States (Malatinec, 2018).
3. Occasional Joint Procurement: This involves occasional joint procurement by several contracting authorities or entities from different European Union Member States. Such procurement must be preceded by a written agreement between the participating contracting authorities or entities (Malatinec, 2018).
4. Joint Body: This model involves the creation of a joint body set up by contracting authorities or entities from different Member States. The relevant legislation governing the procurement process must be defined, either by a decision of the competent authority acting on behalf of such a body or in the founding act of the joint entity. The applicable law can either be the law of the Member State where the joint body has its registered office or where it carries out its activities (Malatinec, 2018).

2.1.3 EU Joint Procurement

The EU public procurement laws and regulations were designed to encourage more cross-border tendering. Despite this, contracting authorities continue to encounter significant legal and practical challenges when attempting to procure from central procurement organisations in other Member States or engage in joint procurement. Although joint public procurement presents potential solutions to some issues inherent in traditional procurement, it also brings about new complexities.

- Legal and Administrative Complexity: Coordinating procurement activities across different legal frameworks and administrative procedures can be challenging. Ensuring compliance with the national rules of the central purchasing body or defining the applicable law for a joint body requires meticulous planning and legal expertise.
- Coordination and Communication: Joint procurement efforts demand a higher level of coordination and communication between participating entities. This can be resource-intensive and may require the establishment of robust governance structures to manage the process effectively.
- Supplier Participation: Although joint procurement can aggregate demand and create larger contract opportunities, it may still inadvertently favour larger suppliers who can navigate the complexities of cross-border procurement, potentially excluding smaller, more innovative firms.
- Innovation Incentives: Similar to traditional procurement, joint procurement must also ensure that there are sufficient incentives for extended dialogue and engagement with potential suppliers to foster innovation. Without these incentives, the potential for innovative solutions may not be fully realised.

By understanding these complexities and addressing them proactively, joint public procurement can enhance the efficiency and effectiveness of public service delivery while promoting innovation and competitiveness within the EU market. These difficulties need to be eliminated so that contracting authorities can fully benefit from the internal market's potential (Malatinec, 2018). Many see the nurturing of a vibrant European GovTech ecosystem as a key to potential navigate these challenges in a way that turns challenges into opportunities.

2.2 What is GovTech

GovTech, a combination of the words "government" and "technology," signifies the intersection of these two domains. Much like FinTech, which merges financial services with technology and lacks a simple, clear definition, GovTech is even more complex to define.

The term GovTech is interpreted differently depending on the context, with a particularly unique meaning in a European context. The recently adopted Interoperable Europe Act by the European Commission highlights a vibrant European startup community capable of driving the digital transformation of the public sector, promoting interoperability by default (Interoperable Europe Act, 2024). Additionally, there is the concept of reusing solutions developed by other governments to combat the "not invented here" syndrome, which is closely linked with GovTech.

The European Commission defines GovTech as the use of emerging technologies, startups, and digital products and services by governments, sourced from start-ups and SMEs, instead of relying on purchasing solutions from incumbents. However, they acknowledge that there are many—often competing—definitions of GovTech (JRC, 2022).

For example, the World Bank views GovTech as an advanced stage of digital government and digital transformation. This perspective includes the use of advanced solutions and disruptive technologies, such as artificial intelligence and public data platforms, which facilitate innovations for more effective and efficient public services (International Monetary, 2023).

In contrast, European private sector organisations in this space, like GovMind, a member of GovTech4All FPA, define GovTech as technological, predominantly digital products tailored for the public sector, generally provided by external actors—particularly startups and small to medium-sized companies (SMEs) (Venture Insights, 2024).

Thus, despite this diversity, most definitions share the following common elements: the public sector engages with startups and SMEs to procure innovative technology solutions for the provision of tech-based products and services to innovate and improve public services (JRC, 2022).The term "GovTech" thereby encapsulates a transformative approach, referring to socio-technical solutions developed and operated by private organisations, mainly startups and SMEs, intertwined with public sector components to facilitate processes in the public sector (Bharosa, 2022). GovTech solutions are seen as powerful tools for addressing and mitigating a wide range of societal challenges through innovation, particularly by overcoming the issues associated with traditional procurement, including cross-border and joint procurement.

2.3 Implementing GovTech Solutions to Overcome Traditional Procurement Issues

Public procurement, though essential for the functioning of public services, is as already highlighted fraught with challenges. Traditional procurement processes are often rigid, involve large contracts that favour fewer suppliers, and lack incentives for extended dialogue, hindering innovation (the European Parliament, 2022). However, implementing GovTech solutions is seen as a highly effective way to overcome these issues.

The cultivation and consolidation of a vibrant pan-European GovTech ecosystem and market would promote the partnership of public sector organisations with innovative start-ups and SMEs to solve societal problems (JRC, 2022) as well as ensure the reuse of the best solutions from other governments to fight the not invented here syndrome. This approach is not just about creating digital copies of bureaucratic processes but leveraging digital transformation and emerging technologies to rethink public services in a more innovative way (JRC, 2022).

2.3.1 GovTech Activities

Implementing GovTech activities is essential for realising the benefits of a GovTech approach to innovation procurement. These activities foster collaboration between the public sector and innovative start-ups and SMEs, driving the digital transformation of public services. Below are some examples of key GovTech activities:

- Challenges and Prizes: Challenges and prizes are popular methods for engaging external innovators. Public sector entities identify problems and create 'Challenges' for start-ups and SMEs to develop solutions. Winners receive financial rewards, opportunities to test their solutions, and access to decision-makers. This approach allows public sector organisations to hedge risks and test technology and cultural fit early on (JRC, 2022).
- Hackathons: Hackathons are time-constrained design sprints aimed at rapid prototyping of software-related solutions. Public sector organisations issue open calls for teams to create prototypes within a set timeframe. The best solutions often receive monetary prizes or opportunities for further development. Hackathons mobilise external talent and energy cost-effectively, although they are primarily suited for software solutions (JRC, 2022).
- Acceleration Programmes: Acceleration programmes are structured, time-constrained personal and business development initiatives. They support start-ups and SMEs through mentorship, funding, and exposure to potential clients. These programmes culminate in demo days, where participants present their solutions to government executives and investors. Acceleration programmes help start-ups navigate the 'Valley of Death' by providing sustained support and facilitating early-stage growth (JRC, 2022).
- Piloting: Piloting involves providing non-equity grants to start-ups and SMEs to test their solutions with public sector organisations. This requires public sector entities to open their infrastructure, such as databases and Research and Development (R&D) facilities, to external parties. Piloting allows the public sector to assess the viability of solutions before committing extensive resources (JRC, 2022).

- **Research and Development Grants**: R&D grants provide early-stage funding to accelerate innovation. These grants are non-dilutive and typically come with minimal paperwork, encouraging experimentation. While beneficial for fostering innovation, R&D grants offer limited interaction between start-ups and the public sector and require patience from political leadership as results may take time to materialise (JRC, 2022).
- **Ecosystem Building**: Ecosystem building involves strategic convening, networking, matchmaking, and advisory services to facilitate interactions between the public and private sectors. Successful practices include publishing guidelines, hosting office hours, and incentivising connections. This effort requires dedicated resources and focuses on building trust and fostering an innovation-friendly organisational culture (JRC, 2022).
- **Agile Product Development**: Agile product development promotes iterative, user-centred design processes. Multidisciplinary and autonomous teams work on developing public services with a focus on user experience. This approach encourages innovation, experimentation, and open, iterative methods, transforming public service delivery (Babinet, 2020).
- **Government as a Platform**: This concept involves leveraging digital platforms to enable citizens, researchers, and businesses to contribute to public services. It emphasises the use of open data and collaborative tools to foster innovation and enhance public service delivery. Governments act as facilitators, providing resources and conditions that support the creation of valuable public assets (Verdier and Pezziardi, 2016).

GovTech activities could play a crucial role in transforming public procurement and fostering an environment of innovation and efficiency. By engaging in challenges and prizes, hackathons, acceleration programmes, piloting, R&D grants, ecosystem building, agile product development, and facilitating the government as a platform approach, public sector organisations can overcome traditional procurement challenges.

The GovTech4All project incorporates elements of most of these activities, especially focusing on pilots that integrate aspects from most of the listed activities. Ecosystem building is a cross-cutting component, as conducting these activities on a pan-European basis with key GovTech players inherently supports the cultivation of this pan-European GovTech ecosystem and market. These activities not only drive technological advancements but also ensure that public services are more responsive, efficient, and user-centric, ultimately achieving the sustainability goals set on the European and national levels ((JRC, 2022; Venture Insights 2024; International Monetary Fund 2023).

2.4 The Context for the GovTech Incubator

The GovTech4All project is part of a broader European initiative aimed at fostering innovation in the public sector by supporting start-ups and entrepreneurs. This initiative is anchored in the policy and strategic objectives of the European Commission, as well as discussions and recommendations from the European Parliament.

2.4.1 European Commission Initiatives

More and more governments in Europe are setting up GovTech programmes to innovate in the public sector while helping start-ups and entrepreneurs. The European Commission seeks to support this development through initiatives like the European GovTech Incubator under the Digital Europe Programme, the foundation of the GovTech4All FPA and corresponding two Specific Grant Agreements (SGA). This incubator was envisioned to complement wider efforts for innovation at the European level, such as the work of the European Innovation Council and its Accelerator programme (JRC, 2022).

The aim of the European GovTech Incubator according to these strategic documents is to provide opportunities for national GovTech initiatives to collaborate and develop new innovative solutions on a pan European scale. Ultimately the idea is to supports the emergence of an EU-wide GovTech ecosystem and market, offering more opportunities for start-ups to scale up and transform innovations into market-ready products. At its core the idea was for the envisioned incubator to strengthen collaboration between Member States in the GovTech realm,

ensuring interoperability by default, cross-border and cross-domain exchange, and the reusability of solutions (JRC, 2022).

2.4.2 European Parliament

The importance of GovTech initiatives has also been discussed in the European Parliament. Specific recommendations forming the foundational basis of the GovTech4All project included the idea of harmonising regulated access to components for GovTech solutions at the EU level, such as digital identities, wallets, APIs, and data specifications. The Parliament suggested that attention to these aspects should be part of the remit for forthcoming pilot projects of the GovTech incubator (the European Parliament, 2022).

The European Parliament also highlighted the potential benefits of a digital platform for GovTech in the EU, which could facilitate innovations, standardisation, efficiency, and cross-border collaboration. Such a platform could combine the potential of procurement as a tool to shape the market with the innovation potential of the private and public sectors. However, it also cautions that platforms are not "silver bullets" and require careful implementation and adaptability to avoid market failures and other issues (the European Parliament, 2022). Although the idea of this platform forms the basis of the GovTech Connect project, an entirely separate project, it is very much a complimentary action seen as mutual interdependent with the GovTech4All project, often referred pre-project as the GovTech incubator, underlining the idea of nurturing a budding pan-European GovTech ecosystem.

2.4.3 GovTech4all Project Specifics

The GovTech4all project, which will be detailed further on in this document, incorporates elements of these strategic initiatives, focusing on piloting activities that integrate various aspects of GovTech activities already detailed prior. This includes supporting the design, elaboration, and execution of pilots involving subsets of the partners, assessing and identifying reusable solutions, and ensuring continuous road mapping and sustainability. A foundational element of the vision behind the project was the aim to maintain coherence and active engagement with national GovTech programmes and actors, identifying possible activities to support GovTech (Lobo, 2022). Later in this document some of these example programmes will be listed.

The GovTech4All project as the next section will demonstrate is grounded in a robust policy framework that emphasises innovation, collaboration, and sustainability. By integrating various GovTech activities and aligning with broader European initiatives, the project aims to create a dynamic GovTech ecosystem and market leading to “interoperable by default”. This approach not only addresses current public sector challenges but also paves the way for more effective and efficient public services across Europe.

3.The Govtech4all Project: the legal foundation, objectives, and governance structure

To create a sustainability strategy for the entire GovTech4All project, it is imperative to dissect the project. This involves examining the foundational documents and the project's structure. Additionally, it is essential to examine the objectives, the composite pilots, and the intended outcomes and results. Ultimately, ensuring the intended outcomes and impact and determining how to sustain them and ensure their longevity are at the core of the sustainability strategy. This comprehensive understanding combined with the detailed literature review will provide the necessary foundation to develop a robust and effective sustainability plan for the GovTech4All project.

3.1 The GovTech4all Legal Framework: The Framework Partnership Agreement and Specific Grant Agreement

The GovTech4All FPA originally united 21 leading GovTech organisations from 14 European countries. Through two rounds of expansion, it has now grown to include 26 organisations from 18 countries, and is set to further expand to 29 organisations from 20 countries. This continuous expansion is a cornerstone of the project's sustainability, ensuring its enduring impact and relevance.

Serving as the overarching governance framework, the FPA includes two SGAs, each spanning two years and conducted consecutively. The initiatives in the first SGA will directly inform the formulation of the second SGA. By employing innovative approaches such as startup challenges and forward-looking procurement, this initiative aims to revolutionise public sector technology, foster excellent digital public services, and establish a unified European GovTech ecosystem and market. This is the first pan-European project of its kind.

Launched as part of the FPA, GovTech4All-beta, the first SGA, brings together a large network of partners, representing most of the GovTech initiatives in Europe: 16 partners from 11 countries (Belgium, France, Germany, Greece, Latvia, Lithuania, the Netherlands, Portugal, Spain, Sweden, Ukraine). From July 2023 to July 2025, GovTech4All-beta supports three collaborative pilots between government agencies to reuse solutions developed by other countries and procure solutions from startups. A new round of pilots will be launched in 2025 under a new SGA.

As noted already, GovTech4All-beta also aims to expand the reach of the entire framework to include more national and local like-minded initiatives during the implementation of the action, as well as for subsequent implementing actions. National teams in charge of digital transformation are seen as ideal candidates to join the consortium. By bringing these teams onboard, the project will foster political buy-in at the core of government and elevate the prominence of the GovTech approach to digital transformation.

The GovTech4All FPA runs from July 2023 to July 2027, providing a stable and enduring foundation for this pioneering pan-European digital innovation initiative. Understanding this legal framework is crucial to promoting the sustainability of the project. To provide an effective sustainability strategy for the GovTech4All project, it is essential to first understand what GovTech is, followed by an overview of the GovTech4All project, including its foundational structure, objectives, intended impact, and outcomes. Finally, it is critical that this paper provides an explanation what sustainability means within this context.

3.2 Context and Objectives

As outlined in Chapter 2 of this deliverable, the context behind the GovTech4All project highlights the shift in how governments approach technology. Traditionally, public administrations have been seen as slow, process-driven, and reliant on established players for outsourcing technology. However, in the past decade, governments have

embraced a user-centric, agile culture through digital teams. Funding and procurement processes have become more startup-friendly, utilising instruments such as GovTech incubators, two-stage funding, and agile procurement. Government services are increasingly based on the composition and reuse of existing interoperable solutions, leveraging funding, collaboration, and open standards to create ecosystems through dedicated initiatives often referred to as GovTech.

Within this evolving context, GovTech4All promotes cross-border collaboration and government cooperation by prioritising the reusability of solutions and collaboration within the consortium and with external organisations, with a strong focus on community-building. This initiative aims to create reusable, interoperable, and citizen-centric digital public services that transcend national boundaries, overcome procurement obstacles, and promote a cooperative mindset among European governments in terms of digital transformation.

Based on this context, the overall objectives of the GovTech4All project are:

1. **Space and Methodology for Sharing Challenges and Solutions:** Provide a platform and methodology for government agencies to share common challenges and solutions, preparing for the next SGA.
2. **Implementation of Multi-Country Pilots:** Implement three multi-country pilots using a diverse range of contractual solutions.
3. **Scaling Up and Wider Deployment:** Support the scaling up and wider deployment of the pilots.
4. **Fostering Sustainability:** Foster the sustainability of the GovTech4All GovTech Incubator overall.
5. **Reinforcing Internal Knowledge Sharing and Raising Awareness:** Reinforce internal knowledge sharing among partners and raise external awareness about the GovTech incubator within partner countries and to new partner countries.

Understanding these objectives and the context behind them is essential for developing a comprehensive sustainability strategy that ensures the project's intended outcomes and impacts are achieved and maintained over the long term.

3.3 The GovTech4All-beta Pilots

The first SGA, GovTech4All-beta, encompasses three innovative pilots, each designed to tackle specific challenges concerning the digital transformation of the European public sector. These pilots incorporate various GovTech activities to test and validate innovative solutions that address critical issues such as secure cross-border data exchange, social benefit accessibility, and energy efficiency through innovative procurement. The objectives of these pilots are to demonstrate the feasibility and effectiveness of these solutions, with the intention of scaling successful outcomes across the European Union.

Table 1 - GovTech4All SGA 1 Pilot Description

#	Pilot Title	Description	Partners
1	**Secure information in cross-border data spaces**	The overarching objective of Pilot 1 (led by LANTIK) is to implement a Proof-of-Concept (PoC) for commonly agreed cross-border use cases, where security, privacy, and interoperability in the exchange/storage of sensitive information is a priority. Two use cases have been selected: • **Health:** Instant communications between health professionals with the possibility of sharing files (e.g. medical records); • **Skills:** Sharing information for students moving to other countries.	LANTIK (ES), GRNET (GR), DINUM (FR)

		These use cases will address the following technological aspects: • Secure encryption algorithms (e.g. quantum-safe encryption algorithms- PQC) • Work with encrypted data (e.g. homomorphic algorithms- FHE); • Work within shared dataspaces.	
2	**Helping EU citizens obtain social benefits with personal regulation assistants**	Pilot 2 (led by DIGICAMPUS ICTU) relies on the implementation of a Personal Regulation Assistant (PRA), a rules as a code digital tool, that will be capable to assist citizens in identifying which benefits they qualify for and in applying for them, and will enable those with digital literacy but limited business knowledge to provide guidance to potential beneficiaries. The PRA developed in this pilot will represent a move towards a more proactive government. The objective of this pilot is to amalgamate and enhance the existing knowledge of Rules as Code solutions (like OpenFisca) within the context of PRA across three member states, thereby simplifying access to entitlements for citizens and other entities.	DIGICAMPUS ICTU (NL), GRNET (GR), DINUM (FR)
3	**Startup challenge for innovative procurement**	Pilot 3 (led by GOBE) aims to test open innovation processes and innovative procurement at a cross border European level to Identify, pilot and scale up digital solutions to help European municipalities to use energy more efficiently. Pilot 3 is pioneering the GovTech open innovation process at a cross border European level. The implementation of innovative procurement method of Design Contest will allow to evaluate and select the best solutions to the identified challenges and to run a pilot with the winning startup.	GOBE (ES), CITTI (ES), Bron (SE), IA LT (LT), GovMind (DE), AYTO Madrid (ES), Beta-I (PT), GRNET (GR), USF (UA)

The pilots under the GovTech4All-beta SGA are crucial in addressing significant challenges within the public sector. By focusing on secure data exchange, social benefit accessibility, and energy efficiency, these pilots aim to demonstrate the practical impact and scalability of innovative digital solutions in public administration. The successful implementation of these pilots will provide a robust foundation for future initiatives, driving public sector innovation across the European Union and ensuring that the benefits of technology are accessible to all.

The GovTech activities described earlier are incorporated in various shapes and forms within these pilots. For example, the challenges and prizes are central to the open innovation process in Pilot 3, which uses the Design Contest adapted to the digital realm. Pilot 1 and Pilot 2 have engaged in design sprints, although these have not been competitive. The project includes digital accelerator programmes like those in the Latvian and Accelerate Estonian digital accelerators. Core activities in the SGA are pilots incorporating these elements, run through R&D grants, ensuring agile product development, and including startups to foster innovation. By involving multiple organisations in developing these innovative digital solutions on a pan-European scale, the GovTech4all project embodies its mission. Under the Digital Europe Programme, this initiative aims to develop a pan-European ecosystem and market, fostering excellence in digital public service delivery.

3.4 Expected Outcomes and Results

The vision of the GovTech incubator in European policy circles forms the basis of the GovTech4All project, aiming to achieve specific outcomes, results, and impact.

GovTech4all focuses on executing three pilot initiatives that serve as real-world testing grounds for innovative digital solutions. These pilots encompass securing cross-border data spaces, assisting EU citizens in accessing social benefits through personal regulation assistants, and the Startup Challenge for innovative procurement. The points below outline the expected outcomes of the first GovTech4All SGA:

- **Execution of Three Pilots:** Successful implementation of pilots demonstrating the real-world impact and transformative potential of GovTech solutions. These pilots aim to overcome the rigidity of traditional procurement processes by fostering innovation and collaboration
- **Startup Access:** GovTech4All enables startups to participate in enhancing innovation within public administrations through the Startup Challenge, the project's third pilot initiative. This addresses the issue of large contracts favouring fewer suppliers, thus promoting a more competitive landscape.
- **Innovative Procurement Promotion:** Empowering governments to adopt and reuse innovative solutions through design contests which align with the benefits of GovTech in promoting agility and innovation.
- **Collaborative Ecosystem and Internal Knowledge Sharing:** GovTech4All builds a collaborative ecosystem, fostering cross-border and cross-sector partnerships to tap into GovTech expertise and resources. This promotes market dynamism and European innovation.
- **Human-Centric and Interoperable Solutions:** GovTech4All ensures that digital solutions developed under the project meet the highest standards by focusing on "human-centricity" and "interoperability by default" addressing the need for user-friendly and efficient public services.

By seeking to foster these outcomes, GovTech4All aims to not only validate the effectiveness of innovative solutions but also foster a more integrated and collaborative GovTech community across Europe. These efforts will ultimately drive public sector innovation, improve service delivery, and elevate the role of GovTech in shaping the future of public administration and in so doing further strengthening and consolidating the budding pan-European GovTech ecosystem and market.

3.5 Expected Impact:

GovTech4All's innovative initiatives are set to significantly impact the public sector by promoting a culture of innovation, improving service delivery, and fostering collaboration across Europe. The project's design and objectives are rooted in overcoming the challenges and harnessing the benefits discussed in Chapter 2.

- **Formation of a Unified European GovTech Community and Market:** Strengthening the GovTech network across Europe to promote knowledge exchange and synergy, thus addressing the challenge of cross-border harmonisation.
- **Improved Digital Public Services:** Leading to improved government efficiency and responsiveness, aligned with the benefits of modernising IT infrastructure and addressing market gaps.
- **Enhanced GovTech Prominence:** Increasing the visibility and strategic importance of GovTech at national and EU levels, supporting policy initiatives and creating a conducive environment for GovTech growth.
- **Inform Policy:** supporting the creation of a policy environment that nurtures GovTech and its transformative potential addressing the risks of dependency and market dominance.
- **Ecosystem Development:** Bridging the gap between innovative solutions and widespread implementation, fostering a dynamic and competitive market that supports start-ups and SMEs.

The GovTech4All project, through its well-structured pilot initiatives, is poised to make substantial contributions to the public sector. By focusing on secure data exchange, social benefit accessibility, and energy efficiency, GovTech4All not only aims to demonstrate the feasibility and effectiveness of innovative solutions but also to create a unified European GovTech community. The project's commitment to human-centric and interoperable solutions, along with its efforts to influence policy and promote reusability, will pave the way for a more efficient, responsive, and innovative public sector across Europe.

3.6 Sustainability in the Context of the GovTech4all Project and Ecosystem

In the context of the GovTech4all project, sustainability refers to the capacity of the project to continue its existence and functioning beyond its initial funding period. Ensuring sustainability means that the project's results should be used and exploited continuously, not only during its lifetime but also after its completion. A sustainable project ensures that its outcomes and impacts are maintained and developed further, achieving long-term benefits for all stakeholders involved.

A fundamental overarching dimension of a sustainability strategy in the context of the Govtech4all is to ensure that the intended impact and outcomes are achieved and sustained, and this includes more concretely:

- Demonstrating Utility and Potential of GovTech through Pilots: The successful implementation and evaluation of the three pilots are critical. By demonstrating the feasibility and effectiveness of innovative GovTech solutions, the pilots will showcase the potential for scaling these solutions across the European Union. This will build a strong case for continued investment and adoption of GovTech solutions in the public sector.
- Ensuring Long-Term Adoption and Reusability of Solutions: One of the core objectives of GovTech4All is to promote the reuse of existing solutions to avoid the "not invented here" syndrome and ensure interoperability by default. This approach will help embed the use of GovTech solutions within public administrations, making them an integral part of the digital infrastructure.
- Building a Cohesive and Collaborative Ecosystem: Creating a robust pan-European GovTech ecosystem is essential for sustainability. By fostering cross-border and cross-sector partnerships, GovTech4All will ensure that knowledge, expertise, and resources are shared effectively. This collaborative environment will support continuous innovation and adaptation of GovTech solutions.
- Securing Policy and Institutional Support: Aligning with broader European initiatives and securing support from policy and decision-makers at both the EU and national levels is crucial. By influencing policy and creating a favourable regulatory environment, GovTech4All can ensure that the necessary conditions for sustaining GovTech activities are in place.
- Promoting Agility and Innovation: Implementing agile product development and open innovation processes will help maintain the momentum of innovation. By continuously engaging with startups and SMEs, and incorporating new technologies and methodologies, GovTech4all can adapt to changing needs and technological advancements.
- Securing Continuous Funding and Resources: To sustain the project beyond the initial funding period, it is essential to secure additional funding and resources. This can be achieved by demonstrating the project's success and impact, attracting further investments from both public and private sectors.
- Monitoring and Evaluation: Continuous monitoring and evaluation of the project's outcomes and impacts are necessary to ensure that the objectives are being met. This will involve assessing the performance of the pilots, gathering feedback from stakeholders, and making necessary adjustments to the project strategy.

Ultimately ensuring these concrete element means ensuring that the horizontal activities defined in the project foster the implementation of these key elements as well as ensuring the implementation of the pilots achieves their own aims and demonstrates the utility and potential of GovTech, which involves:

- Clear Definition of Objectives and Metrics: Each pilot having clearly defined objectives and success metrics to help in measuring the effectiveness of the solutions and identifying areas for improvement.
- Stakeholder Engagement: Engaging with all relevant stakeholders, including public sector entities, startups, SMEs, and end-users, is crucial. Their feedback and involvement will ensure that the solutions meet real-world needs and are adopted widely. Deliverable 5.1 and 5.2 that form the communication and outreach strategy is fundamental in this regard.

- **Scalability and Replicability**: The pilots should be designed with scalability and replicability in mind. By creating solutions that can be easily adapted and implemented in different contexts, GovTech4All can ensure broader adoption and impact. In fact, this is a fundamental objective of the project with a specific WP and deliverables designed to support the potential scale up of both the solutions being developed within the pilots as well as the approach and findings.
- **Showcasing Success Stories**: Highlighting the successes and lessons learned from the pilots will help in building momentum and attracting further interest and investment in GovTech solutions. This will also demonstrate the practical benefits and impact of the project. Not only do the deliverables that form WP2 assess the success of the projects but this very document and WP4 in its entirety is the means to provide these lessons learned and to distil them into precise policy recommendations.

Sustainability in the context of the GovTech4All project involves ensuring that the project's outcomes and impacts continue to deliver benefits long after the initial funding period has ended. By focusing on demonstrating the utility and potential of GovTech through pilots, building a collaborative ecosystem, securing policy support, promoting agility and innovation, and securing continuous funding, GovTech4All can achieve and sustain its intended impact and outcomes. This comprehensive approach will foster a robust and dynamic GovTech ecosystem, driving long-term innovation and improving public service delivery across Europe.

4.Methodologies

The following section provides an overview of the methodologies used to gather information and conduct analysis, forming the foundation of the GovTech4All Sustainability Strategy. It also outlines the methodologies to be employed to ensure the project's sustainability.

To gather data and perform analysis, the following methods were employed:

- **Literature Review:** A thorough literature review was conducted, utilising coding to systematically analyse relevant texts.
- **Surveys:** Designed and circulated surveys among partners to collect on-the-ground insights. Nine partners completed the surveys, which were designed to capture key concerns and opportunities related to the sustainability of the GovTech4All Project.
- **Partner Consultation:** Engaged in consultations with partners, particularly focusing on deliverable owners, to gather detailed feedback.

In addition, to ensure the ongoing sustainability of GovTech4All, the following methodologies guide the implementation of the activities employed in this sustainability strategy:

- **Continuous Improvement Methodology:** This approach focuses on iterative enhancements to processes and practices to maintain and improve project sustainability over time.
- **French Incubation Approach:** This methodology, inspired by successful French incubation models, will be adapted to support the development and longevity of the GovTech4All project.
- **Ecosystem Mapping:** This process provides an initial overview of the current European GovTech ecosystem, identifying some of the key stakeholders and their roles. As it is further developed it will ensure that all relevant actors are considered and engaged, aligning them towards common goals and fostering collaboration to build a robust and sustainable ecosystem for the GovTech4All project.

4.1 Literature Review

The literature review process began with the creation of a comprehensive reading list structured by a hierarchy of knowledge sources and specific time limits. At the top of this hierarchy were European Union documents, regarded as the highest source of truth due to their authoritative and wide-reaching implications. Following these were documents from Member States, then publications from other international institutions. Academic literature was considered next, providing peer-reviewed insights and theoretical perspectives, while grey literature, including reports from think tanks and industry publications, was also included to capture practical and emerging trends. To ensure relevance and currency, 2018 was set as the latest year for the literature review.

Once the reading list was established, the process of coding was executed. This involved categorising all data points under specific codes, such as "GovTech challenges," to systematically organise and synthesise the information. This expansive coding exercise enabled a thorough scanning of diverse sources, ensuring a comprehensive understanding of the various dimensions of sustainability in the context of the GovTech4All project. By categorising the data, it became possible to identify recurring themes, gaps in knowledge, and key areas of interest that could inform further analysis.

The insights gathered from this extensive literature review were then analysed to identify significant trends and critical issues relevant to the GovTech4All project. This analysis directly influenced the creation of the survey designed to gather insights from project partners. By integrating the knowledge obtained from the literature review, the survey was tailored to capture essential concerns and opportunities, ensuring that the feedback collected would be both relevant and actionable for the development of the GovTech4All sustainability strategy.

4.2 Survey Methodology

The survey methodology employed for the GovTech4All project's Deliverable 4.1, the Draft Sustainability Strategy, was designed to gather comprehensive insights from consortium partners regarding their experiences, needs, and visions related to GovTech and innovation. The primary goal was to compare the current situation with the aspirations and challenges faced by public administrations in the realm of digital transformation and innovation.

4.2.1 Survey Design and Distribution

To collect the necessary data, a structured survey was developed and distributed among the 15 partner organisations within the consortium. Nine partners responded, providing valuable insights from diverse geographical and institutional contexts. The partners included:

- Gobe (Spain)
- Lantik (Spain)
- Ayuntamiento de Madrid (Spain)
- Bron Innovation (Sweden)
- Digicampus ICTU (The Netherlands)
- BETA-I (Portugal)
- Innovation Agency Lithuania (Lithuania)
- GRNET (Greece)
- DINUM (France)

The survey featured open-ended questions aimed at eliciting detailed responses on several key topics. These included the needs and obstacles faced by administrations in dealing with digital and innovation challenges, as well as the most important trends, opportunities, and challenges in the GovTech sector.

4.2.2 Question Structure

The questions were designed to cover a broad spectrum of themes relevant to the sustainability strategy. They focused on identifying urgent needs within public administration, such as enhancing public procurement and providing citizen-centric services. Other questions sought to understand the most prominent obstacles, like the complexity of procurement practices and the lack of technological literacy. Additionally, the survey explored emerging trends such as artificial intelligence and digital sovereignty, as well as the best tools and methodologies for making public services more reliable.

4.2.3 Rationale Behind the Methodology

The rationale for employing an open-ended survey methodology was to capture a wide range of perspectives and insights that could inform the sustainability strategy comprehensively. Open-ended questions allow respondents to elaborate on their experiences and viewpoints, providing richer data compared to closed-ended questions. This approach is particularly useful in understanding complex and multifaceted issues such as those encountered in GovTech and public sector innovation.

Furthermore, by engaging partners directly, the survey ensured that the strategy would be reflective of the actual experiences and needs of those involved in the project. The feedback gathered was instrumental in shaping a forward-thinking and inclusive strategy that addresses both current challenges and future opportunities. The survey template and each partner's response can be found in the annexes. This comprehensive documentation ensures transparency and provides a detailed basis for the analysis and conclusions drawn in the sustainability strategy.

Overall, the survey methodology was critical in gathering detailed and actionable insights, which were then integrated into this initial sustainability strategy to ensure its relevance, effectiveness, and long-term impact.

4.3 Continuous Improvement Strategies for Sustainability

A key dimension of the GovTech4All sustainability strategy is the emphasis on incremental changes. Ensuring the longevity of the GovTech4All project, its outcomes, and the intended impact requires small, gradual improvements rather than large strides that may be difficult to maintain. This approach aligns with the principles of continuous improvement, which is a highly effective mindset, culture, and toolkit for addressing rapid changes in the modern workplace. Sustainable continuous improvement involves integrating lessons learned into the governance models to achieve long-term success.

4.3.1 Align Strategy and Leadership

Effective leadership is essential for the successful development of any continuous improvement strategy within the GovTech4All project. A sustainable continuous improvement system requires a well-orchestrated plan that ensures the coordination team, Work Package Leaders (WPL), and pilot leaders realise positive change with confidence and consistency. The GovTech4All team must understand that fostering a culture of continuous improvement is not just a procedural change but a transformational approach that ensures the project's resilience and adaptability.

Key success factors for this strategy include:

- Infusing the fundamental standards of operational excellence into the GovTech4All consortium from the outset.
- Ensuring the coordination team, WPL, and pilot leaders play a critical role in enabling successful transformation and driving culture change.
- Defining the transformation process in terms of project improvement, with a distinct improvement strategy and a clearly articulated vision of success based on the outcomes and impact.

4.3.2 Embed Implementation Design

The GovTech4All project must adapt how it embeds continuous improvement within the various organisational cultures present in the consortium, including the distinct differences between large public administrations and other partners within the startup sphere. This approach focuses on entrenching best practices quickly to shield the project's objectives, outcomes, and impact from external disruptions and internal challenges.

Key success factors for this strategy include:

- Developing a coordinated approach to execution and benefits tracking, focused on shared priorities.
- Taking a balanced approach that creates early wins in the short term and builds capabilities for the longer term.
- Providing evidence that can be used to foster political buy-in to support the longevity of the GovTech4All project, maintaining the outcomes and impact.
- Creating best practices and lessons learned from the pilots and other project activities that can be visited and utilised as models for higher stages of maturity.
- Introducing maturity assessment frameworks that allow the technologies, solutions, and approaches to be scaled up in a way that ensures their longevity.

4.3.3 Clarify Organisational Roles and Responsibilities

A continuous improvement culture within the GovTech4All project promotes ongoing enhancement by encouraging incremental changes. While a continuous improvement culture is led from the top down, it is implemented from the bottom up. The project coordinators must empower the WPLs and pilot leaders, enabling them to take ownership. This empowerment will trickle down to all partners involved, building a culture of continuous improvement in all facets of the project.

The GovTech4All sustainability strategy prioritises small, incremental steps to ensure continuous improvement and long-term success. By aligning strategy and leadership, embedding implementation design, and clarifying organisational roles, GovTech4All can foster a culture of sustainable continuous improvement. This approach ensures the project's longevity and maximises its impact on public sector innovation.

4.4 From Incubation to Running an EU GovTech Digital Service

Particularly considering that the GovTech4All project in European Union documents was envisioned as an incubator, it is fundamental to understand this methodology. The French case serves as an excellent paradigmatic example of how such incubation processes can be successfully implemented.

4.4.1 Incubation by Government Start-ups

Since the early 2010s, the French government has sought to accelerate its digital transformation through an incubation programme inspired by the tech sector (incubators, lean methodologies, frugal mindset) to create "State startups" or "GovTech startups." These are small, autonomous teams of makers set out to pursue a measurable impact, with financing renewed every six months by a board of stakeholders. The first stage is designed to issue a PoC).

The need to quickly have a measurable track record forces the teams to meet users where they are, rather than where they wish they were. The applications need to be based on the real uses of their users, which the team discovers by involving citizens in the design process, running its own support, and meeting with important stakeholders from inside and outside the administration.

With success proven on a small scale, the team can extend their application reach to provide services to a larger set of beneficiaries. This scaling comes with more funding and higher compliance standards. Sometimes, scaling does not include the application but its internal APIs. The ability inside the administration to share structured and reliable information becomes a success story.

A project, whatever it may be, needs to be anchored in real life, in the concrete, so that it becomes part of everyday life. That is why it cannot stay in the cosy nest of incubation. Incubation is only designed for testing and confronting reality, but not for anchoring it to last. With this in mind, a transition phase should be implemented as soon as the project is mature. The project must deliver a useful service, in the appropriate organisation, and with the right people and team to develop it.

Quite often, the teams working on the incubation phase are not systematically the ones who will ultimately operate the service. Therefore, it needs to convince the administrations targeted as the "buyers" of the service to jump into the startup journey as soon as possible in the incubation programme. This makes the transfer phase particularly tricky.

4.4.2 The Transfer Phase: A Key Moment for a Sustainable Service

The transfer phase, the last phase in the design of digital services in the incubation programme, is a delicate stage. It consists of entrusting a service built and operated in an environment used to digital practices to a public administration that operates very differently. However, it is important that these transfers are successful so that the services created in the incubator network have a lasting impact on people and provide maximum benefit to the administration hosting the product, accelerating its digital transformation.

As mentioned by a State Startup fellow, "the transfer phases are like a heart transplant. The heart functions with its own circuits and is fed and connected to an external system, the body. A heart transplant involves taking this living organism and connecting it to a new organism with new vessels, veins, etc. Many parameters, therefore, need to be adjusted for a transplant to be successful."

When a service designed using the State Startup approach is transferred, a team with its own organisation, methods, values, and dynamics has to fit into the ecosystem of the traditional administration, which is organised according to the principles of bureaucracy. Unsurprisingly, these differences can be risky if the quality of the digital service is to be maintained over time; without preparation, there is a high probability that the transfer will fail (Pezziardi and Verdier, 2017).

The success factors for transferring products designed using the State Startups approach include:

- Ensuring that the transfer team understands and adapts to the new organisational environment.
- Providing adequate training and support to the receiving administration.
- Maintaining open communication channels between the incubator team and the public administration.
- Continuously monitoring and evaluating the transferred service to ensure it meets the intended impact and standards.

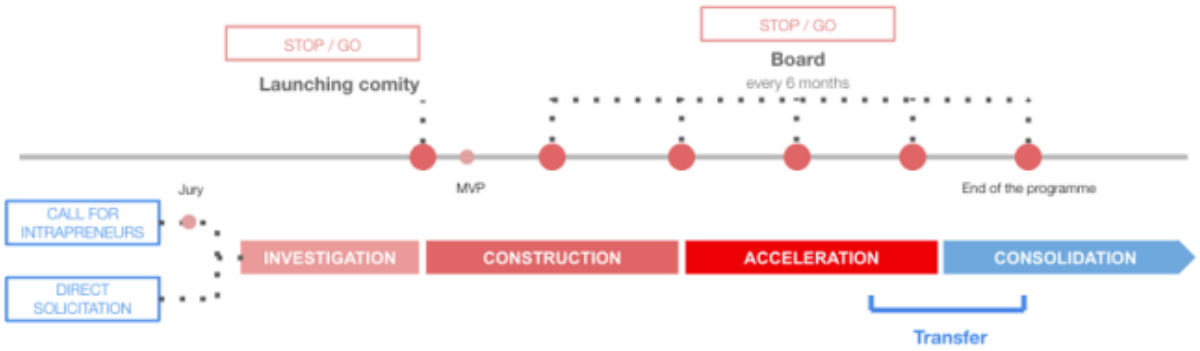

Figure 1 - From Incubation to Scale Up, the French Model

4.4.3 Six Key Takeaways from French Case Study:

Based on this French case example and the French approach to incubation, the sustainability strategy should take the following six takeaways as a guiding light in terms of creating and implementing a sustainability strategy for the GovTech4All project:

1. **Involving the Buyer's Entire Hierarchical Chain in the Transfer Phase:** The way in which services designed using the State Startup approach operate is sometimes rather unusual for public administrations. They are familiar with planning (drawing up specifications) and are used to decisions being taken at the top of the hierarchical chain. In contrast, for digital services designed using the State Startup approach, it is the operational team that regularly makes decisions about the functionalities of their product to better adapt to the needs of users as their feedback comes in. This reversal, which consists of giving flexibility and confidence to the agents who are closest to the reality on the ground and to the users, challenges the mental models to which traditional administrations are accustomed and requires the support of the entire hierarchical chain. This is essential as, to benefit from the value of the State Startup, the service must be integrated as well as possible into the host administration.

2. **Studying the Pros and Cons of All the Different Possible Hosting Scenarios:** After the acceleration phase of the State Startup, it is sometimes possible to envisage several buyers. It is important to identify and study the different host structures in which the digital solution could evolve.

3. **Taking the Time to Organise a Period of Transition Between the Old and New Digital Product Teams:** The State Startup team, made up of public sector employees and digital experts from the private sector, acquires a wealth of strategic and operational knowledge during the incubation period. Its members often become specialists in the public policy pursued by the platform, have technical expertise in the functional choices made for the digital product, and know the users of the service inside out, having exchanged views with them on a regular basis. Often, the teams are supported by former digital entrepreneurs (referred to as

coaches), who help them to structure a long-term strategic vision. It would be a shame to lose all this knowledge acquired during the incubation of the service during the transfer phase. At the start of the transfer phase, it is therefore vital to bring together all the stakeholders (including the historic operational teams) so that the new owners and the 'old hands' can meet. The aim of this meeting is to reiterate the department's raison d'être, define its long-term ambitions, the expectations of each party, and the possible obstacles or difficulties to be overcome by the new team. The success of this type of workshop depends on creating a safe space where everyone can express themselves with confidence.

4. **Providing Opportunities for Skills Development:** The transfer of a government start-up is also a unique opportunity to enable the ministry's staff to develop their skills on technical subjects (digital technology, product management, data, and APIs), strategic subjects (implementing a regulatory policy based on data, platform strategies, etc.), or organisational subjects (team rituals, managerial practices, etc.).

5. **Informing Users of the Service and Celebrating Its Takeover Once the Transfer Phase is Complete:** As in the private sector, news travels fast. The transfer will have an impact on the service and therefore on its users. It can be useful to communicate with users to inform them of the changes. This is also an opportunity to celebrate the service's successes.

6. **Monitoring Service Impact Indicators Over Time:** The impact of digital products means a lot to incubator fellows. They try to achieve one single goal during the transfer phase: to instil this focus on impact in the administrations that take over the product.

4.5 Stakeholder and Ecosystem Mapping

The stakeholder and ecosystem mapping exercise is an integral part of defining the minimal viable ecosystem, a key task in WP1 of the GovTech4All project. This mapping process provides a comprehensive overview of the current broader GovTech ecosystem, identifying some of the most important actors and their roles. The exercise is essential in understanding the variety of stakeholders involved, their technical and cultural backgrounds, and the efforts required to gather and align these partners into a cohesive project. The following map is the beginning of this ecosystem mapping exercise, which supports the sustainability strategy by ensuring all relevant stakeholders are considered and engaged.

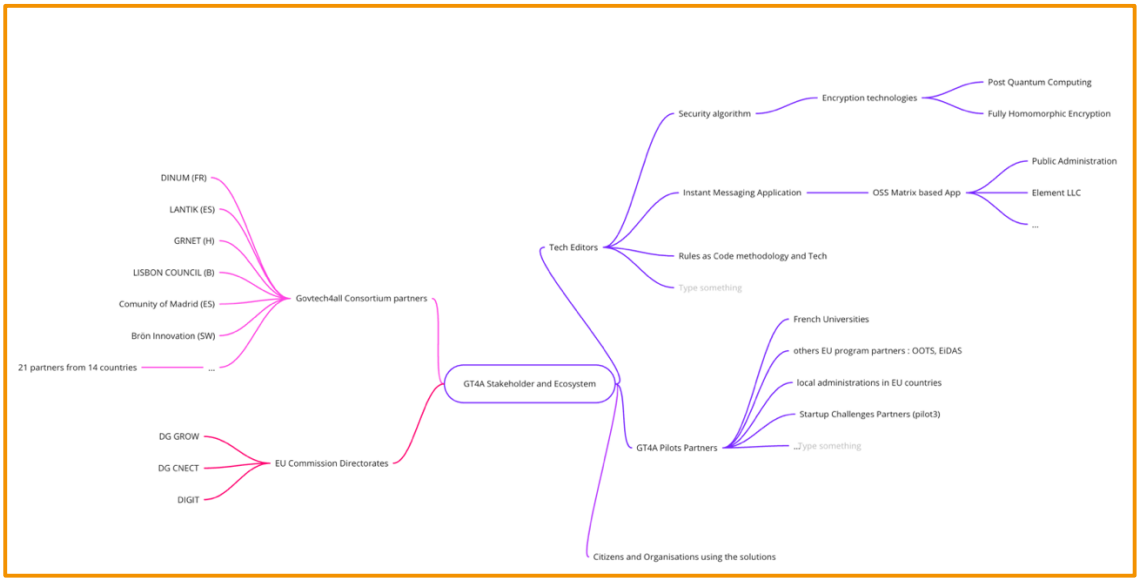

Figure 2 - The Initial Mapping of the European GovTech4All Ecosystem

4.5.1 Importance of Stakeholder and Ecosystem Mapping

Stakeholder and ecosystem mapping is crucial for in terms of sustainability of the GovTech4All for several reasons:

- **Comprehensive Understanding:** It provides a detailed understanding of the various stakeholders involved in the GovTech ecosystem, including their roles, interests, and influence.
- **Alignment and Engagement:** It helps in aligning the diverse technical and cultural backgrounds of stakeholders, ensuring they are engaged and committed to the project's goals.
- **Strategic Planning:** It supports strategic planning by identifying key actors and their interactions, which is vital for creating a sustainable and scalable GovTech solution.

This mapping exercise directly links to the GovTech4All sustainability strategy by:

- **Informing the Minimal Viable Ecosystem:** The insights gained from the mapping process are used to define the minimal viable ecosystem, ensuring that all critical stakeholders are included from the outset.
- **Facilitating Collaboration:** It promotes collaboration among stakeholders, which is essential for the success of the GovTech4All project. By understanding each stakeholder's role and potential contributions, the project can foster a cooperative environment.
- **Ensuring Long-term Success:** By identifying and engaging the right stakeholders, the mapping exercise helps ensure the long-term success and sustainability of the GovTech4All project. It allows for the development of a robust ecosystem that can adapt and thrive beyond the initial project phase.

Some of the key Points from the mapping exercise include:

- **Variety of Stakeholders:** The map highlights the diverse range of stakeholders, including public sector organisations, private companies, academic institutions, and NGOs. Each group brings unique technical and cultural perspectives that must be harmonised.
- **Efforts to Align Partners:** Significant efforts are required to align these diverse stakeholders into a single project. This includes fostering communication, understanding differing priorities, and creating shared goals.
- **Strategic Actors:** The map identifies key actors such as the European Commission, national governments, tech companies, and research institutions. These entities play crucial roles in driving the GovTech agenda and ensuring its implementation.
- **Support for Sustainability:** By integrating this mapping exercise with the minimal viable ecosystem task, the project ensures that sustainability is built into the foundation of GovTech4All. This holistic approach guarantees that all relevant actors are engaged and that their contributions support the project's longevity.

In summary, the stakeholder and ecosystem mapping exercise is a foundational activity that complements the GovTech4All sustainability strategy. It provides a detailed overview of the broader GovTech ecosystem, identifies key stakeholders, and outlines the efforts needed to align these diverse actors. This process is essential for creating a sustainable pan-European GovTech ecosystem and market that meets the needs of all stakeholders involved.

5.Analysis Behind the Sustainability Strategy

The following section provides an analysis that serves as a guiding light for the sustainability activities and strategy detailed in this document. This analysis is based on the dual sources of the literature review and the survey results, offering a comprehensive overview of the insights gathered thus far and those envisioned for the future. It will cover the survey results, distill the benefits and challenges of GovTech implementation, address joint procurement challenges, and highlight lessons learned. These insights will inform and guide the GovTech4All sustainability strategy, ensuring its effectiveness and resilience.

5.1 Survey Results

The surveys were conducted to gather as much insight as possible from the consortium partners regarding their experiences with GovTech, comparing the current situation with their needs, hopes, and vision. The questions were focused on identifying the needs and obstacles faced by administrations when dealing with digital and innovation initiatives. Additionally, the surveys aimed to uncover the most important trends, opportunities, and challenges these administrations are facing.

From the surveys, two main topics emerged as the most urgent needs for administrations (number of mentions/total mentions):

- Enhancing public procurement (5/9)
- Providing citizen-centric services (5/9)

The most prominent obstacle for public administrations is the complexity of procurement practices (7/9), followed by the lack of tech literacy (4/9). Among emerging trends, artificial intelligence (AI) is the most quoted topic (5/9), followed by digital sovereignty (3/9). The concept of State as a Platform was highlighted as the best tool to make public services more reliable (4/9). The most cited criterion for assessing public sector tech use is digital acculturation and shift of mindset (6/9), meaning public agents must culturally ramp up to provide accurate and appropriate digital services.

To support these findings, the level of tech adoption was scored around 7 on a 1 to 10 scale, indicating that public administration is increasingly aware of this major cultural gap. This was reinforced by responses indicating that the most important challenge for scaling up is the cultural shift, including skills and mindset enhancement (7/9). Product management (agile methodology) was identified as the best opportunity (5/9) for public administration to implement GovTech.

In summary, the surveys indicate that procurement remains a complex problem for administrations, linked to the need for a high level of technological culture, ultimately leading to a shift in mindset. For deploying any GovTech project, product management emerged as the most popular methodology among the partners questioned.

5.2 Benefits and Challenges of Implementing GovTech in Europe

Understanding the benefits, challenges, and risks of GovTech implementation in Europe is critical for successful adoption and sustainability. This section draws from literature reviews and survey results to highlight the multifaceted impacts of GovTech in public procurement and governance, providing a comprehensive overview for stakeholders.

5.2.2 Benefits of GovTech Solutions

Implementing a GovTech approach to public procurement can offer several benefits that address the shortcomings of traditional procurement methods:

- **Agility and Innovation**: With increasing demands for agility and innovation in government, GovTech provides a framework for governments to become more responsive and adaptive. By working with start-ups and SMEs, public administrations can increase their openness towards external stakeholders through measures like process transparency, opening APIs, and engaging in public consultations (JRC, 2022).
- **Modernising IT Infrastructure**: GovTech helps modernise digital infrastructure, making it more efficient and user-friendly. Engaging with innovative stakeholders helps governments reduce the constraints of legacy IT infrastructure, prevent vendor lock-in, and enhance the user experience of public sector services (JRC, 2022).
- **Market Dynamism**: Traditional government IT solutions often come from a limited number of large providers, creating a quasi-monopolistic market. GovTech initiatives aim to increase market dynamism by introducing more competition, fostering innovation, and reducing complacency among market participants (JRC, 2022).
- **European Innovation**: GovTech can be a driver for European innovation, helping to build a robust economy by creating competing products in a market dominated by non-EU companies. Acceleration programmes and incubators for domestic start-ups and SMEs aim to counterbalance the influence of non-EU firms (JRC, 2022).
- **Addressing Market Gaps**: Governments are uniquely positioned to understand societal needs that are not yet addressed by the market. By identifying these needs, incorporating them into their mission, and actively searching for potential solutions, governments can incentivise the market. They can bear the initial investment costs, serve as a test-bed, and become the first buyer of these innovative solutions (JRC, 2022).
- **Resource Mobilisation**: Leveraging the prominence of GovTech helps promote agile public procurement of innovation, attracting political attention and resources. GovTech provides a high return on investment by contributing to better service provision, resource efficiency, and user experience (JRC, 2022).

5.2.3 Overcoming Challenges in Joint Public Procurement

Despite the advantages of joint public procurement in the EU, significant challenges remain. These include legal and administrative complexities, coordination and communication hurdles, supplier participation issues, and insufficient innovation incentives. However, GovTech can help overcome these challenges by addressing:

- **Legal and Administrative Complexity**: By fostering collaboration between Member States and aligning procurement processes, GovTech can streamline legal and administrative procedures, ensuring compliance with national rules while promoting innovation across borders (Malatinec, 2018).
- **Coordination and Communication**: GovTech initiatives enhance coordination and communication between participating entities through digital platforms and innovative solutions, facilitating resource-sharing and joint problem-solving (Malatinec, 2018).
- **Supplier Participation**: GovTech encourages the participation of start-ups and SMEs by creating smaller, more manageable contracts and fostering a competitive environment, diversifying the supplier base and promoting innovative solutions (Malatinec, 2018).
- **Innovation Incentives**: GovTech provides incentives for extended dialogue and engagement with potential suppliers, ensuring that innovative solutions are explored and implemented (Malatinec, 2018).

GovTech offers a transformative approach to public procurement, addressing the limitations of traditional methods and fostering an environment of innovation and efficiency. By embracing GovTech, governments can modernise their infrastructure, stimulate market competition, and drive economic growth, ultimately delivering better services to their citizens and achieving their sustainability goals (JRC, 2022; Venture Insights 2024; International Monetary Fund, 2023; Cottinet, 2022).

5.2.1 Challenges and Risks

While the GovTech approach offers significant opportunities for public sector innovation, it is not without its risks. To ensure the sustainability of the GovTech4All project, it is fundamental to be aware of these challenges and risks. These include the potential creation of new monopolies, dependency on providers, risks associated with public funds, venture capital pressures, market dominance by incumbents, and the complications of integrating with legacy software systems.

- New Monopolies: Promoting GovTech could inadvertently create new monopolies, with a "winner takes all" scenario where a single provider dominates the market, potentially limiting competition and innovation in the long term (the European Parliament, 2022).
- Dependency on Providers: There is a risk of governments becoming overly dependent on GovTech providers, particularly SMEs, which might fail or be unable to scale effectively. This dependency could be exacerbated by betting on the wrong proprietary technical standards (the European Parliament, 2022).
- Public Fund Risks: Using public funds to support innovation presents risks at both political and bureaucratic levels, including the potential for misallocation of resources and political fallout from high-profile failures (the European Parliament, 2022).
- Venture Capital Pressure: GovTech start-ups often rely on venture capital, which pressures them to achieve rapid growth. However, the limited market space in government procurement can constrain their ability to scale, making them susceptible to acquisition by larger, established firms (JRC, 2022).
- Market Dominance: The presence of large-scale system integrators who dominate the market poses a significant barrier to new GovTech entrants. These incumbents often acquire promising start-ups before they mature, stifling competition and innovation (JRC, 2022).
- Lock-In through Legacy Software: Governments' reliance on legacy systems can hinder innovation. New GovTech solutions often need to integrate with existing infrastructures, limiting their potential and complicating implementation (JRC, 2022).

5.2.4 Challenges in Implementing GovTech in Europe

To ensure the sustainability of GovTech initiatives, it is imperative to be aware of the challenges in implementing such technologies. These challenges include interoperability issues, complex procurement processes, cultural differences, growth expectations in a limited market, cross-border harmonisation, and a lack of skills and institutional support. Addressing these hurdles is crucial for fostering a robust and innovative GovTech ecosystem across Europe.

- Interoperability Issues: Differing electronic platforms across Member States create obstacles for businesses attempting to participate in tenders, reducing the potential added value for local and regional authorities (Piga and Tatrai, 2018).
- Complex Procurement Processes: The bureaucratic nature of procurement processes discourages smaller stakeholders from engaging with the public sector. Lengthy projects and high entry barriers further limit the participation of start-ups and SMEs ((JRC, 2022).
- Cultural Differences: The divergence between the organisational cultures of the public sector and start-ups can impact the success of GovTech projects. Start-ups often face challenges adapting to the slower, more bureaucratic processes of government entities (JRC, 2022).
- Growth Expectations in a Limited Market: The need for growth driven by venture capital creates significant pressure on start-ups. Given that government clients are limited and highly specific, start-ups must adapt their products to different regulatory contexts across countries, which can be a significant hurdle (JRC, 2022).
- Cross-Border Harmonisation: While the underlying rules of public procurement are harmonised across the European Union, implementation varies significantly. Start-ups must navigate the legal intricacies of multiple jurisdictions, complicating cross-border expansion (JRC, 2022).

- **Skills and Institutional Support**: There is a notable lack of institutions at the European level to support the broader development of GovTech. Both European-level and Member State-level institutions need alignment to accelerate policy development and implementation (The European Parliament, 2022).

While the implementation of GovTech in Europe presents significant risks and challenges, the structured approach of the GovTech4All project helps mitigate these issues. By incorporating elements such as challenges and prizes, acceleration programmes, piloting, ecosystem building, R&D grants, and agile product development, the project fosters a robust and dynamic GovTech ecosystem. This not only drives innovation and efficiency in public procurement but also ensures the sustainable development of public services across Europe. Addressing these challenges requires a coordinated effort at both the European and Member State levels, in order to fully leverage the potential of GovTech to transform public service delivery and administration in Europe (JRC, 2022; Venture Insights 2024, International Monetary Fund, 2023).

5.2.5 GovTech Lessons Learned:

Thus far, based on the surveys, literature review, and partner consultations, here are the key lessons learned:

1. **Leverage Existing Practices and Strategic Advantages**: When building new support mechanisms and programmes, it is important to acknowledge existing practices and focus resources on areas where Member States have strategic advantages. These include providing access to infrastructure, hedging regulatory risks early on, embedding incentives in funding mechanisms, and fostering peer-learning networks.

2. **Balance Independence with Proximity to Decision-Makers**: A degree of independence is key for the success of a GovTech programme. This independence allows for experimentation and prioritising outcomes over processes. However, too much independence, combined with less proximity to decision-makers, can prove detrimental. Most successful GovTech programmes value a close relationship with executive power and draw their legitimacy from direct political mandates. Proximity to political power attracts stakeholders and secures high prioritisation.

3. **Adopt a Variety of Models and Methods**: GovTech programmes come in various forms, focusing on innovation creation, mission support, market creation, or applying the outcomes of acceleration programmes. These programmes employ a range of methods for interacting with the outside world, including challenges, acceleration programmes, R&D grants, missions, hackathons, piloting, and advisory matchmaking. There is no one-size-fits-all formula for creating a successful GovTech programme.

4. **Maintain Lean Teams for Agility**: Many successful GovTech programmes start with a small, lean team and scale up as needed, or maintain a small size by design. This approach allows them to stay agile and foster a start-up work environment. Some programmes incorporate secondments and rotations with the private sector to secure a steady supply of talent and influence the internal culture of the GovTech programme. However, a lack of proper resourcing can become a bottleneck for development.

5. **Set Clear Goals and Focus on Public Value**: GovTech programmes often start as experiments and must prove their worth to the wider public sector from the beginning. Setting well-defined goals and key performance indicators (KPIs) helps communicate success internally and externally. Many GovTech programmes focus on reducing redundancy, simplifying administrative procedures, improving user experience, and fostering economic growth. Recently, there has been a trend towards focusing on broader public values, such as sustainability (environmental sense), circular economy, public health, and education. This focus can increase stakeholder and political buy-in but should not come at the expense of clear goals.

6.Foundations of the Govtech4all Sustainability Strategy:

This chapter outlines the comprehensive activities undertaken to formulate a sustainability strategy for the GovTech4All project. Ensuring the longevity and impact of the project involves various critical activities, from governance structuring to community building and addressing challenges and risks. The sections within this chapter are designed to provide a detailed overview of these essential activities.

6.1 Governance Structure Detailed in the Consortium Agreement

The governance structure of the consortium is designed to ensure effective decision-making and project management, which supports the longevity of the GovTech4All project. The organisational structure comprises several key bodies, each with specific roles and responsibilities, providing a solid basis for expanding the duration of the project as well as ensuring the successful implementation of the next round of pilots for the second SGA. Further details about this can be found in Deliverable 6.1, the Project Management Report.

To ensure the effective management of a project, and one that can stand the test of time, it is imperative firstly to define the various governance bodies of the project and consortium, which are fundamental for decision-making and implementation.

- **Plenary Board:** The ultimate decision-making body of the consortium, consisting of one representative from each partner country and organisation.
- **Project Coordination Team:** The supervisory body responsible for the execution of the project, accountable to the Plenary Board. It includes the Coordinator, WPLs, Pilot Leaders, and a representative from each participating country.
- **Coordinator:** The legal entity acting as the intermediary between the parties and the Granting Authority, responsible for overall project coordination.
- **Work Package Leaders:** Responsible for coordinating the work within their respective WPs and steering towards the achievement of specific objectives.
- **Pilot Leaders:** Responsible for coordinating the pilots and steering towards the achievement of the objectives within a specific pilot.

Detailed below are the different responsibilities per different bodies of the GovTech4All-beta Consortium Agreement, which are fundamental to clearly define to ensure the smooth function of the project that can deliver on the intended outcomes and impact:

- **Plenary Board:** Handles major decisions such as changes to the Consortium Plan, admission of new partners, and the selection of pilots for the forthcoming SGA.
- **Project Coordination Team:** Prepares meetings and agendas, monitors project implementation, supports the Coordinator in preparing deliverables, and validates press releases and joint publications.
- **Coordinator:** Acts as the intermediary between the consortium and the Granting Authority, manages financial contributions, prepares and organises project meetings, and ensures compliance with reporting requirements.
- **Work Package Leaders:** Coordinate work within their respective work packages, monitor progress, and report any deviations or risks.
- **Pilot Leaders:** Coordinate pilot activities, monitor progress, and ensure alignment with overall project goals.

6.1.1 Voting System Overview

The voting system within the GovTech4All Consortium is designed to ensure democratic, transparent, and efficient decision-making. Creating a democratic, transparent and efficient means of decision-making is fundamental to ensure the longevity of the project. The voting rules, quorum requirements, and procedures for making decisions as outlined in the Consortium Agreement are as follows:

- Quorum Requirements:
  - **General Quorum:** Each Consortium Body (e.g., Plenary Board, Project Coordination Team) must have at least two-thirds (2/3) of its members (countries) present or represented to deliberate and make valid decisions.
  - **Meeting Re-Convocation:** If the quorum is not met, the chairperson must reconvene the meeting within 15 calendar days. If the quorum is still not reached, an extraordinary meeting can be called where decisions can be made regardless of the number of members present.
- Decision-Making Process:
  - **Consensus:** The preferred method for decision-making is achieving consensus among members.
  - **Voting:** If consensus cannot be reached and voting is necessary, the process is as follows:
    - **Representation:** For a valid vote, representation from two-thirds of the countries in the consortium is required to meet the quorum for voting.
    - **Majority Vote:** A two-thirds majority of the votes from both the countries and the partner organisations is needed to render a decision.

The specific voting procedures of the plenary board and the adoption of the minutes and subsequent implementation are delineated in the Consortium Agreement that support the democratic, transparent, and efficient dimensions of decision making are as follows:

- Country Representation:
  - **Collective Vote:** Each country participating in the consortium has one collective vote. This vote is determined by consensus among all participating organisations from that country and executed by the appointed representative.
  - **Appointed Representatives:** Representatives are appointed by consensus of the parties within the participating country.
- Decision Types:
  - **Admission of New Members:** Decisions to admit new members require a two-thirds majority vote from all countries, emphasising the importance of reaching a consensus among the member organisations.
  - **Formulation of Next Round of Pilots for the Second Specific Grant Agreement:** Decisions regarding the formulation of specific grant agreements, such as the selection of pilots or budget allocations, follow the voting rules where both country and partner organisation majorities are required.

By adhering to the detailed governance and decision-making processes outlined in the Consortium Agreement, the GovTech4All project ensures that all partners are aligned and capable of sustaining the intended outcomes and impacts beyond the project's funding period. This structured approach is essential for fostering a robust and dynamic GovTech ecosystem that can support long-term innovation in public services. Additionally, the governance structure provides a solid foundation for expanding the project's duration and ensuring the successful implementation of future pilots, particularly for the second SGA.

6.2 Sustainability through Consortium Expansion

The GovTech4All FPA, as noted previously in this document, is permanently open for national digital agencies to join. To foster a pan-European GovTech ecosystem and market, it is essential to collaborate with all critical European GovTech actors, particularly those from public administrations responsible for digital transformation and

digital governance. This includes national digital teams from the wider European community outside the European Union, supporting variable geometry and preparatory work for eventual membership to the European Union.

Attracting and reaching out to new potential partners requires a unique and tailored approach, as there is no one-size-fits-all solution. While all current partners act as antennae, identifying and engaging potential partners, each new partner is approached individually to ensure a bespoke integration process. Although the step-by-step process is outlined, it may be adapted to suit the specific needs of each potential partner.

To promote the consolidation of a pan-European GovTech ecosystem and market, it is imperative to secure the political buy-in of both public buyers and national governments. Fostering innovation in procurement processes involves dismantling traditional methods, which is more complex than purchasing solutions from incumbents. Therefore, GovTech4All emphasises a flexible and adaptable approach to expanding the consortium with the right partners, ensuring a bespoke and effective integration for each new member.

The following outlines the detailed, step-by-step process for new partners to become part of the GovTech4All consortium:

5. Proactive Engagement and Expression of Interest
    - GovTech4All employs coordinated dissemination and communication efforts, including webinars, events, and social media engagement, to proactively identify and reach out to potential new partners.
    - Stakeholder mapping is conducted through analysis of participants at relevant events, leading to targeted networking efforts.
    - National digital agencies interested in joining GovTech4All should initially contact the Lisbon Council, the coordinator of the initiative, at govtech4all@lisboncouncil.net.
    - Partners of the project act as "Antennae" to further identify and reach out to potential new partners.
6. Coordination and Initial Meeting
    - Upon expressing interest, the potential partner is put in touch with the coordinator.
    - The coordinator arranges an introductory meeting to present the project and discuss the opportunity to join the consortium. This includes a detailed explanation of the Framework Partnership Agreement (FPA) and the potential benefits of participating in pilot activities.
7. Information Sharing and Documentation
    - Following the initial meeting, the coordinator sends a comprehensive email containing all necessary information about GovTech4All, the FPA, and the latest call document for the second Specific Grant Agreement (SGA).
8. Submission of Letter of Intent
    - The interested national digital agency submits a Letter of Intent to join the consortium.
9. Consortium Voting and Approval
    - A formal vote is held according to the voting procedure delineated in the consortium agreement to admit new partners.
    - Typically, amendments to the FPA are launched in rounds, incorporating 4 to 5 new partners at a time.
10. Formal Agreement and Integration
    - Once the consortium admits the new partner, their LEAR (Legal Entity Appointed Representative) signs the consortium agreement.
    - The new partner is then officially integrated into the GovTech4All Framework Partnership Agreement.

GovTech4All emphasises that there is no one-size-fits-all approach. Each potential new partner is approached in a tailored and flexible manner. This adaptable approach extends to seeking partners from the wider European community participating in the Digital Europe Programme but not necessarily EU member states. Current partners

from outside the European Union include Rikiskaup of Iceland, Serbia's GovTech programme under the Office of the Prime Minister, Ukraine's Digital Ministry, and the Ukrainian Start-Up Fund.

By fostering collaboration and innovation through a flexible and tailored approach, GovTech4All can help reshape the landscape of European public sector technology. The project has adopted an open and inclusive ethos, welcoming a broad spectrum of national digital teams dedicated to digital transformation in Europe. This ongoing effort not only strengthens the GovTech ecosystem but also ensures a cohesive and dynamic market that can better respond to the evolving needs of the public sector and public service delivery.

6.3 Horizontal Activities Supporting the Sustainability Strategy

The GovTech4All project integrates two key sets of tools and methods that significantly support the horizontal activities essential for scaling up GovTech initiatives: the tools from WP1 and the early assessment methods. These elements are fundamental to the project's sustainability strategy, enabling the identification of societal challenges and the development of a robust GovTech ecosystem.

6.3.1 Tools from Work Package 1

The tools developed in WP1 focus on establishing a system to identify societal challenges, related problems, and GovTech solutions. These tools lay the foundation for a structured approach to GovTech innovation by providing a comprehensive analysis of the societal challenges faced by participating countries. They include:

- Understanding Societal Challenges: This involves ongoing analysis across different geographical and administrative levels, which is crucial for identifying specific needs and gaps in public sector innovation.
- Identifying Solutions: By pinpointing innovative approaches and technologies that can address these societal challenges, the tools ensure that the solutions developed are practical, scalable, and reusable across different contexts.
- Mapping Partner Expertise: Identifying which partners are working on which societal challenges helps in aligning resources and expertise effectively. This is essential for fostering collaboration and ensuring that the most relevant solutions are developed and implemented.

By establishing a clear understanding of societal challenges and identifying the right solutions and partners, these tools support the sustainability strategy by ensuring that the project addresses real needs and leverages the strengths of its partners.

6.3.2 Early Assessment Methods

The early assessment methods build on the tools from WP1 by defining an innovation ecosystem and outlining its stages of maturity. These methods focus on creating and nurturing a Minimum Viable Innovation Ecosystem (MVIE) to ensure continuous innovation and scalability of solutions. Key components include:

- Stakeholders and Interactions: The methods identify the various stakeholders involved in the GovTech ecosystem, including public and private institutions, academia, and civic tech associations. They emphasise the importance of effective interactions among these stakeholders to facilitate collaboration, idea exchange, and co-creation.
- Stages of Maturity: The ecosystem's maturity is mapped through six stages: Design, Orchestration, Innovation Development, Innovation Enablement, Expansion, and Growth. This structured approach ensures that the ecosystem evolves systematically, promoting sustainable innovation.
- Strategic Alignment and Governance: Establishing a clear governance model for the ecosystem ensures that access, participation, and commitment are well-defined. This is crucial for maintaining a healthy and evolving ecosystem that can adapt to new challenges and opportunities.

The early assessment methods support the sustainability strategy by providing a roadmap for the continuous evolution and growth of the GovTech ecosystem. By focusing on the development and scalability of innovative solutions, they ensure that the project's outcomes are sustainable and can be expanded beyond the initial scope.

The horizontal activities defined through these tools and methods are pivotal for scaling up GovTech initiatives within the GovTech4All project. By providing a structured approach to identifying societal challenges and developing a robust innovation ecosystem, these activities ensure the project's sustainability. The tools from WP1 and the early assessment methods together create a solid foundation for continuous innovation, effective collaboration, and the scaling of solutions across different contexts, thus supporting the long-term sustainability of the GovTech4All project.

6.4 Activities in the Pilots Supporting the Sustainability Strategy of the GovTech4all Project

The GovTech4all project is designed to foster public sector innovation by integrating cutting-edge technologies and methodologies into government operations. The pilots under this project play a crucial role in ensuring the long-term sustainability and scalability of the solutions developed. Below is a detailed overview of the activities within the pilots that support the sustainability strategy of the GovTech4all project, along with their intended outcomes, results, and impact:

- Pilot 1: Reusable and Scalable Technology Solutions
  - **Framework Adaptability and Reusability:** Development of technology frameworks that make use cases fairly independent from specific technologies, allowing for easy adaptation if changes occur or different algorithms are needed. These frameworks can be reused in future pilots, enhancing their sustainability and reducing redundancy.
  - **Preparation for Scaling Up:** Compiling lessons learned from the pilot and assessing reusable building blocks of the Security/Data technology frameworks, architectures, and infrastructures. Preparing for demo days to showcase the scalability potential of the results, aligning with WP5.
  - **Documentation and Handbook Creation:** Creation of two comprehensive handbooks documenting the technology behind the frameworks and the selection process for open-source libraries. These documents will be instrumental in the reuse of solutions developed in Pilot 1.

The outcome of these activities is increased flexibility and adaptability of technology solutions within the public sector. As a result, there will be an enhanced ability to scale solutions across different public administrations throughout Europe. This will have a significant impact by promoting long-term sustainability and reuse of technological innovations in Pilot 1, potentially reducing costs and development times for future projects.

- Pilot 2: Simplified Regulatory Assessments and Potential for Scaling
  - **Assistant Design for Regulatory Assessments:** Developing an assistant that simplifies the assessment of personal situations regarding regulations using Self Sovereign Identity (SSI) and personal data wallets. Though wallets and SSI are out of scope for this pilot, their potential inclusion highlights scalability and future integration possibilities.

The outcome of these activities is the simplification of processes for citizens to comply with regulations without extensive manual data entry. This will result in increased efficiency and user satisfaction in interacting with public services. The impact could be significant as these solutions can be scaled up to a larger population, enhancing public sector service delivery and citizen engagement, particularly if combined with a wallet.

- Pilot 3: Innovation Process and Methodologies for GovTech Pilots
  - **GovTech Open Innovation Process:** Each phase of the process is viewed as a building block, with reusable methodologies for similar or different processes that can also be scaled up.

- **Challenge Definition Toolkit:** Development of a toolkit to help organisations replicate the innovation process, incorporating service design methodologies and guidance from experts. This toolkit will be available as a reusable solution for any public sector organisation facing procurement challenges.
- **Design Contest (Procurement Process):** Setting a precedent in Europe by using a Design Contest to procure innovative GovTech solutions. Development of Design Contest Guidelines complemented with use cases and lessons learned from six different municipalities. These guidelines will be made public to inspire other institutions to re-use this procurement form.

The outcome of these activities is the standardisation and reusability of methodologies for public sector innovation and procurement processes. As a result, public sector organisations in Europe and beyond will be empowered to efficiently address challenges and procure innovative solutions. The impact will be the creation of a robust ecosystem for GovTech innovation, ensuring sustained progress and adaptation in public services.

The activities within the pilots of the GovTech4all project are strategically designed to ensure sustainability, scalability, and long-term impact. By focusing on adaptable frameworks, simplified processes, and reusable solutions and methodologies, the project aims to create a resilient and innovative GovTech ecosystem and market in Europe set to ensure innovation throughout the public sector landscape. These efforts will not only enhance current operations but also pave the way for future advancements and integrations, ensuring the continued relevance and effectiveness of GovTech solutions.

6.4 Creation of Tools to Support Scaling Up

The GovTech4All project places a strong emphasis on scaling up digital innovation pilots within the public sector. This is a fundamental dimension for ensuring the sustainability and long-term impact of the project. Two key tools have been developed to support this scaling-up process with the remit of WP3 of the GovTech4All project: the Validation and Maturity Assessment Scaling Framework and the Early Assessment Report.

6.4.1 Validation and Maturity Assessment Scaling Framework

The Validation and Maturity Assessment Scaling Framework provides a structured methodology for evaluating the readiness of digital innovation pilots for scaling. This framework focuses on several key areas:

- **Technical Readiness**: Evaluating the maturity of the technology involved, including its development phase, proof of concept, and validation in relevant environments.
- **Societal Readiness**: Assessing the societal impact and acceptance of the innovation, ensuring it meets the needs of the community and is ready for broader adoption.
- **Organisational Readiness**: Determining the readiness of the implementing organisations, including their capacity to adopt and integrate the innovation into their existing structures.
- **Legal Readiness**: Ensuring the innovation complies with relevant legal and regulatory frameworks, mitigating potential legal risks.

By applying this comprehensive framework, the GovTech4All project can systematically assess the potential for scaling each pilot project. This helps identify strengths and areas for improvement, guiding the pilots towards successful large-scale implementation.

6.4.2 Early Assessment Report

The Early Assessment Report builds on the initial framework by providing a detailed analysis of each pilot's readiness for scaling. This report is based on the GovTech4All Maturity Scan, which utilises multiple readiness levels to evaluate the pilots. The key components of the assessment include:

- **Technology Readiness Level (TRL)**: Assesses the technological maturity of the innovation, from basic principles to proven operational systems.
- **Societal Readiness Level (SRL)**: Evaluates the societal acceptance and impact of the innovation, including how well it addresses community needs and integrates with existing societal structures.
- **Community Readiness Level (CRL)**: Specifically tailored for GovTech4All, this assesses the readiness of the community and relevant stakeholders to adopt and support the innovation.

The Early Assessment Report provides an initial snapshot of each pilot's readiness across these dimensions. It highlights areas that need further development and provides recommendations for enhancing scalability. This early-stage evaluation is crucial for making informed decisions on resource allocation and strategic planning, ensuring that the pilots are on track for successful scale-up.

The Validation and Maturity Assessment Scaling Framework and the Early Assessment Report are essential tools within the GovTech4All project for supporting the scaling up of the digital innovation in the composite pilots. By providing a structured approach to evaluating readiness and identifying areas for improvement, these tools help ensure that innovations can be successfully scaled to deliver maximum societal impact. This focus on scalability is a fundamental dimension of the GovTech4All sustainability strategy, promoting long-term success and the continued advancement of digital public sector solutions.

6.5 Anticipating Barriers, Challenges, and Risks

As part of the sustainability activities for the GovTech4All project, a comprehensive literature review was conducted to provide observational awareness. This review is crucial for understanding and anticipating the potential barriers, challenges, and risks that could impact the successful implementation and sustainability of GovTech initiatives. By identifying these factors early on, the project can develop agile mitigation measures to address them effectively.

6.5.1 Anticipating Barriers

The literature review highlighted several barriers that are commonly encountered in the implementation of GovTech solutions:

- **Interoperability Issues:** Despite uniform procurement procedures, cross-border procurement remains limited due to differing electronic platforms across Member States, creating obstacles for businesses attempting to participate in tenders (Malatinec, 2018).
- **Complex Procurement Processes:** Traditional procurement methods are often rigid and bureaucratic, discouraging smaller stakeholders from engaging with the public sector. Lengthy projects and high entry barriers further limit the participation of start-ups and SMEs (JRC, 2022).
- **Cultural Differences:** The divergence between the organisational cultures of the public sector and start-ups can impact the success of GovTech projects. Start-ups often face challenges adapting to the slower, more bureaucratic processes of government entities (JRC, 2022).

6.5.2 Identifying Challenges

The review and survey also identified specific challenges that need to be addressed to ensure the successful implementation of GovTech solutions:

- **Growth Expectations in a Limited Market:** The need for growth driven by venture capital creates significant pressure on start-ups. Given that government clients are limited and highly specific, start-ups must adapt their products to different regulatory contexts across countries, which can be a significant hurdle (JRC, 2022).
- **Cross-Border Harmonisation:** While the underlying rules of public procurement are harmonised across the EU, implementation varies significantly. Start-ups must navigate the legal intricacies of multiple jurisdictions, complicating cross-border expansion (JRC, 2022).

- **Skills and Institutional Support:** There is a notable lack of institutions at the EU level to support the broader development of GovTech. Both EU-level and Member State-level institutions need alignment to accelerate policy development and implementation (the European Parliament, 2022).

6.5.3 Addressing Risks

Several risks associated with GovTech implementation were identified, which need to be managed to ensure project sustainability:

- **New Monopolies:** Promoting GovTech could inadvertently create new monopolies, with a "winner takes all" scenario where a single provider dominates the market. This could limit competition and innovation in the long term (the European Parliament, 2022).
- **Dependency on Providers:** There is a risk of governments becoming overly dependent on GovTech providers, particularly SMEs, which might fail or be unable to scale effectively. This dependency could be exacerbated by betting on the wrong proprietary technical standards (the European Parliament, 2022).
- **Public Fund Risks:** Using public funds to support innovation presents risks at both political and bureaucratic levels. These include the potential for misallocation of resources and the political fallout from high-profile failures (the European Parliament, 2022).

6.5.4 Creating Agile Mitigation Measures

Based on the insights gained from the literature review, the following agile mitigation measures were developed to address the identified barriers, challenges, and risks:

- **Interoperability and Standardisation:** Promoting the reusability of existing solutions and ensuring interoperability by default. This includes fostering collaboration between Member States to align procurement processes and streamline legal and administrative procedures.
- **Simplifying Procurement Processes:** Developing more flexible and startup-friendly procurement methods, such as design contests and agile procurement, to lower entry barriers and encourage the participation of innovative SMEs.
- **Bridging Cultural Gaps:** Facilitating better communication and understanding between the public sector and start-ups. This involves organising workshops and training sessions to align expectations and processes.
- **Supporting Growth and Scalability:** Ensuring that GovTech solutions are designed with scalability and replicability in mind. This includes creating solutions that can be easily adapted, scaled up, and implemented in different contexts.
- **Institutional Alignment and Support:** Advocating for the creation and strengthening of institutions at both the European Union and Member State levels to support GovTech development. This includes securing policy and decision-maker support to create a favourable regulatory environment.
- **Diversifying Providers and Avoiding Monopolies:** Encouraging a diverse range of suppliers to participate in GovTech initiatives to prevent new monopolies.

By integrating these mitigation measures into the GovTech4All project, the consortium aims to navigate the identified barriers, challenges, and risks effectively. This proactive approach ensures the project's sustainability and its long-term impact on fostering innovation and improving public service delivery across Europe.

6.6 Collaboration with Other Projects

As part of the sustainability strategy, the GovTech4All coordination team, with the support of its partners, seeks to engage with other GovTech-related projects. This includes pan-European project frameworks, legal frameworks governing projects, relevant international institutions, and other GovTech programmes beyond those participating in the Digital Europe Programme. Partnerships and collaborations in the GovTech4All project currently take four forms:

- **Expansion of the Consortium:** Adding new partners, particularly national digital teams responsible for digital government and digital transformation.
- **Synergistic Project Collaboration:** Supporting other European projects with similar goals and objectives through collaborative actions, including joint webinars and other initiatives.
- **Knowledge-Sharing Partnership:** Partnering with other projects, organisations, and institutions outside the Digital Europe Programme to share knowledge and lessons learned.
- **Project End Continuation:** Ensuring the continued use of solutions and supporting startups in accessing innovative public procurement opportunities after the SGA ends.

6.6.1 Engagement with GovTech Connect

GovTech Connect, a sister project to GovTech4All, aims to foster deployment and cross-border collaboration among actors in the GovTech space. Its objectives include promoting innovative digital government solutions, encouraging the participation of European SMEs and start-ups, and leveraging emerging digital technologies.

GovTech Connect focuses on creating a formal cross-border cooperation framework, fostering a thriving GovTech ecosystem, and building future digital public service building blocks (Lobo, 2022). However, the European Parliament notes that while platforms like GovTech Connect offer significant potential, they also pose challenges such as incumbent advantage, lock-in, contractor control of IP, and reduced incentives for public administrations to maintain in-house knowledge about new technologies (the European Parliament, 2022).

Several synergies and collaborative actions highlight the complementary nature of GovTech4All and GovTech Connect. Below are the most pertinent parts of their collaboration:

- **Monthly Meetings:** GovTech Connect and GovTech4All hold monthly meetings to discuss potential synergies and support ongoing initiatives in both projects. These meetings are crucial for knowledge sharing and amplifying communication, ensuring both projects can support each other effectively.
- **Webinars and Workshops:** The webinar "Policy Makers Leading the Way: Best Practices to Build a Successful GovTech Ecosystem with Startups," held in November 2023, aimed to increase the number of GovTech Connect community members, engage existing members, and showcase the first activities of the GovTech4All project. This webinar was a key activity for sustainability, positioning the GovTech4All project at the forefront of European initiatives, which is fundamental for its long-term success.
- **GovTech4Impact World Congress:** A joint side event, "Designing Europe's GovTech Roadmap," was organised at the GovTech4Impact World Congress on 22 May 2024. This event discussed the European strategy on GovTech, the creation of a single GovTech market, and success indicators for cross-border procurement and solution reuse. This collaboration significantly supported the sustainability of the project by placing GovTech4All at the forefront of European initiatives. It represents a pioneering pan-European GovTech initiative and allowed for direct mapping of the ecosystem from the startup perspective, addressing the challenges they face in entering innovative public procurement opportunities.

6.6.2 Engagement with SPIN4EIC Project

The SPIN4EIC project, an innovative initiative under the European Innovation Council (EIC), is dedicated to delivering support services to EIC innovators. Its primary purpose is to substantially enhance their ability to access procurement markets both in Europe and beyond. The project aims to promote the entry of outstanding EIC innovators into procurement markets, generating broader prospects for inventive SMEs and startups, and facilitating their market expansion.

Recognising the importance of the EIC's role in fostering innovation, the GovTech4All coordination team has actively engaged with the SPIN4EIC project to explore potential synergies and collaborative opportunities. SPIN4EIC complements the GovTech4All project by supporting innovation and solution providers, such as startups and SMEs, while GovTech4All focuses on helping public buyers procure innovative solutions from these entities and other means of innovation procurement.

The collaboration between GovTech4All and SPIN4EIC includes several concrete activities aimed at leveraging each other's strengths and promoting innovation in the public sector:

- **Meetings and Discussions:** Numerous meetings have been held to discuss potential synergies between the two projects. These discussions have focused on identifying areas where both initiatives can collaborate to enhance their impact on the innovation procurement landscape.
- **Innovation Procurement Event:** The SPIN4EIC project was presented during a panel on public administration challenges in innovation procurement, particularly digital innovation. This event highlighted the role of SPIN4EIC in addressing these challenges and showcased the project's efforts in promoting innovative procurement solutions.
- **Joint Knowledge Sharing Café:** In May 2024, a joint knowledge-sharing café was organised to explore potential synergies between GovTech4All and SPIN4EIC. This event culminated in support for the startup challenge demo day and the scouting strategy for Pilot 3 of the GovTech4All project. The collaboration included amplification of the challenges through social media and other dissemination channels.
- **Ongoing Collaboration:** The collaboration between GovTech4All and SPIN4EIC is set to continue, with both projects working together to support innovative startups and enhance their access to procurement opportunities. This ongoing partnership is essential for the sustainability of both projects and the broader European GovTech ecosystem.

The SPIN4EIC project represents a critical partnership for GovTech4All, providing valuable support for innovation procurement and expanding the project's reach of innovative SMEs and startups. By fostering collaboration with SPIN4EIC and other similar initiatives, GovTech4All is reinforcing its commitment to creating a dynamic and sustainable European GovTech ecosystem and market. This partnership not only enhances the immediate impact of both projects but also ensures their long-term sustainability and success in transforming public service delivery and administration across Europe.

6.6.3 Engagement with the European Digital Infrastructure Consortium (EDIC)

The European Digital Infrastructure Consortium (EDIC) is an instrument available to Member States under the Digital Decade Policy Programme 2030, designed to accelerate and simplify the setup and implementation of multi-country projects. EDICs are seen as integral in achieving the Digital Decade's general objectives and targets by facilitating collaborative initiatives among Member States.

Each EDIC is a legal entity established by a Commission decision, following an application by at least three Member States and subsequent Commission approval. The founding Member States define the EDIC's governance structure and operational rules in its Statutes. The budget for an EDIC is sourced from its members' contributions, supplemented by other revenue sources, including EU and national grants.

An EDIC may implement multi-country projects by deploying joint infrastructure, delivering services, and bringing together public entities, private entities, final users, and industry stakeholders as deemed appropriate by the founding Member States.

As part of its sustainability strategy, the GovTech4All coordination team, supported by its partners, actively seeks to engage with other GovTech-related projects, including those within pan-European project frameworks, legal frameworks, relevant international institutions, and other GovTech programmes beyond the Digital Europe Programme. One such engagement is with the Innovative Massive Public Administration Interconnected Transformation (IMPACT) Services EDIC, which is currently in the setup phase. This collaboration has brought significant benefits, including the addition of two new partners: the Hellenic Ministry of Digital Government and the Luxembourgish Ministry of Digitalisation.

As noted previously, the GovTech4All FPA is permanently open for national digital agencies to join. To foster a pan-European GovTech ecosystem and market, it is essential to collaborate with all critical European GovTech actors,

particularly those from public administrations responsible for digital transformation and digital governance. This includes national digital teams from the wider European community outside the European Union, supporting variable geometry and preparatory work for eventual EU membership.

Furthermore, to promote the consolidation of a pan-European GovTech ecosystem and market, it is imperative to secure the political buy-in of both public buyers and national governments. And this form of collaboration is imperative to facilitate the cultivation of this political support.

The partnership with the IMPACTS EDIC underscores GovTech4All's commitment to fostering innovation and collaboration in the public sector. By engaging with EDICs, GovTech4All not only enhances its immediate project outcomes but also contributes to the long-term sustainability and success of the European GovTech ecosystem. This engagement is a testament to the project's strategic vision of creating a dynamic and interconnected pan European GovTech ecosystem and market.

6.6.4 Engaging Other Key GovTech Actors

GovTech4All is actively engaging with key knowledge-sharing bodies to gather lessons learned, map the wider ecosystem of actors, and foster innovation in public sector procurement and digital transformation.

GovTech4All is has met with the World Bank GovTech Global Partnership Programme and the GovTech Global Alliance on several occasions. These meetings aim to explore opportunities for joint events and synergies, leveraging shared strengths to enhance digital transformation efforts.

- World Bank GovTech Global Partnership: This programme supports digital transformation through a whole-of-government approach and is backed by the GovTech Global Partnership. It involves countries, development partners, the private sector, academia, and civil society, with a focus on knowledge generation, strategy, and global engagements.
- GovTech Global Alliance: An international knowledge-sharing group that collaborates across the public sector, private sector, NGOs, and academia. It provides a platform for members to set agendas and create resources guiding sustainable government innovation.

Although no joint events have been realised yet, these ongoing discussions are crucial for fostering collaboration and ensuring that GovTech4All can leverage the experiences and strengths of these prominent bodies.

6.7 Effective Product Management

The survey responses indicate that the majority of GovTech4All partners and public administrations endorse product management as the most effective methodology for developing GovTech solutions. Most partners favour agile methodologies due to the flexibility they offer in project management.

Product management places a significant focus on people. Therefore, it is essential to cultivate a community of innovative players within the public administration. Initiatives that promote product management provide opportunities to share knowledge and strengthen community support. This approach involves not only production but also the sharing of experiences within the community. It is vital to communicate all types of experiences—both positive and negative—and disseminate best practices as models. The French incubation methodology exemplifies this approach (see page 24).

6.8 Efficient Key Indicators (KPIs)

As In any product management approach, setting up indicators is crucial for keeping the project on track. The following table provides a non-exhaustive list of indicators that can be applied to the GovTech programme. As the

project progresses, this list will evolve to reflect new insights and developments. These indicators help evaluate four key outputs: partnerships, products, policies, and standards.

Table 2 - GovTech4All Sustainability Strategy Key Performance Indicators

TYPE OF PRODUCT / PILOT	INDICATOR	OUTPUT
Project Wide	number of new partners joining per year	partnerships
Project Wide	number of synergies with other projects or existing products	products
Project Wide	number of innovative and reusable solutions emerging from the project	products
Project Wide	number of solutions that promote interoperability and comply with interoperability standards	Standards
Project Wide	how many emerging technologies emerge from the pilots	Standards
Beyond the Project	number of policy changes conducive to GovTech both EU and National Level	Policies
Pilot 3	number of participating startups and SMEs in SGA 1 and SGA2.	Partnerships
Pilot 3	percentage of how the GovTech approach reduces procurement times	Policies
Pilot 1	number of health documents exchanged between 2 countries	Products
Pilot 2	number of simulations done through the PRAs	Products

6.9 Beyond Community-Building

As previously mentioned, it is crucial to engage all stakeholders within a community. Governments, in particular, are significant players. Not all governments are accustomed to such practices, and they need to adapt to different methods and organisational cultures. It is, therefore, motivating to establish a lobbying policy to gain the support of these governments.

The objective is to generate political buy-in at the highest levels within European member states. Government involvement at this level within communities and acceptance of this approach marks true pluralism and democracy.

Once a policy is established in this field, it may serve as a model for other European countries, potentially leading to broader implementation of GovTech across borders. For instance, in France, small teams within each administration or ministry initially offered products. These small teams evolved into an incubation programme organically, not driven by legal requirements but through practice and necessity.

7.Future Activities for the Sustainability Strategy

To ensure the ongoing sustainability of the GovTech4All project, several future activities are planned. These activities are designed to gather insights from partners, consolidate the GovTech ecosystem at a programming level, support business modelling for SMEs, and continuously refine the sustainability strategy.

7.1 Follow-up Interviews Based on the Survey Input from Partners

It is crucial to continue gathering insights from partners about sustainability through structured and tailored interviews. These interviews will provide detailed information about the responses received and the nature of the organisations involved. The primary focus of these interviews is to identify potential means and activities to ensure the project's sustainability. By understanding the context and peculiarities of each country and organisation, a comprehensive overview of all local, regional, and national funding instruments available can be gathered. This approach will help identify the best funding instruments that can be used at all levels by any consortium partners to develop GovTech initiatives.

7.2 Consolidating the Ecosystem at a Programming Level

To consolidate the GovTech ecosystem, it is essential to move beyond working in silos and establish strong connections with key European and international stakeholders. By leveraging synergies with initiatives like the European Innovation Council (EIC), European Digital Infrastructure Consortium (EDIC), other Digital Europe Programmes, GovTech Connect, SPIN4EIC, and Horizon Europe, a more integrated and collaborative ecosystem can be fostered. This approach will enhance the sharing of resources, knowledge, and best practices, leading to more innovative solutions and a robust GovTech community.

A critical step in this consolidation process is mapping the funding instruments available at the European level. Programmes such as the Digital Europe Programme, EDIC, and Horizon Europe offer substantial funding opportunities that can be harnessed to support GovTech initiatives. Understanding and utilising these funding instruments effectively will provide a comprehensive financial foundation for scaling innovative solutions and ensuring sustainable growth. Additionally, community building is vital in strengthening the ecosystem. Establishing a network that connects like-minded individuals and organisations will promote collaboration and innovation. Initiatives such as creating a library of GovTech solutions, facilitating direct contact between solution providers and public administrations, and launching a marketplace for GovTech contracts could play a vital role. Moreover, a strong communication campaign that highlights the successes and benefits of GovTech, with clear KPIs and objectives for different stakeholders, could enhance awareness and engagement. Therefore, it will be imperative to highlight the achievements of GovTech4All to a wide audience of critical stakeholders.

7.3 Continuous Improvement: Refinement of the Sustainability Strategy

Ensuring sustainability requires continuous improvement based on the insights gained from the project's activities and partner feedback. Regular assessments and updates to the sustainability strategy will ensure that it remains relevant and effective in the face of changing circumstances and new challenges. This process involves analysing the effectiveness of implemented solutions, identifying areas for improvement, and making necessary adjustments to strategies and methodologies.

By fostering a culture of continuous improvement, the project will remain adaptable and responsive to the evolving needs of the GovTech ecosystem. This approach will help in maintaining the momentum of innovation, ensuring that the GovTech4All project continues to deliver value and achieve its sustainability goals over the long term.

7.4 Ensuring Sustainability Beyond the Project Scopes of the GovTech Ecosystem and Market

To ensure the longevity and success of the GovTech4All project, several initiatives are proposed for national governments and the European Commission to consider. These recommendations stem from survey responses, literature reviews, and insights from the GovTech for Impact World Congress in May 2024, including the GovTech Connect GovTech4All Joint Side Event.

Firstly, establishing a **European GovTech Fund** could be a pivotal move. This fund would support critical investments and provide actual contracts to assist GovTech startups and SMEs in developing innovative public administration solutions. By doing so, it could significantly bolster the nascent pan-European GovTech ecosystem. Financial incentives from this fund could have a significant impact on promoting innovation in the public sector as well as fostering growth in private sector, however, it is essential to ensure that this potential funding mechanism is accessible to all EU member states and key GovTech players. The fund could also support the transition from the current grant-based approach to direct procurement contracts, facilitating the awarding of contracts to startups and SMEs, and promoting a common understanding of the skills required to foster a pan-European GovTech ecosystem to lead Europe's digital transformation.

Secondly, **strengthening the regulatory framework** to support the scale and potential of GovTech is crucial. Legislation at both national and European levels should create a legal context that nurtures the GovTech ecosystem. Developing regulations that promote the growth of GovTech startups and implementing fundamental reforms to challenge incumbent dominance could have a significant impact. Legislation should facilitate joint procurement at the EU level to streamline processes and enhance accessibility, not only by setting up the mechanisms but also by incentivising joint procurement. In addition, legislation should also focus on providing incentives to reuse the best solutions developed by other governments in Europe to fight the 'not invented here' syndrome, which in turn would inevitably promote interoperability.

Thirdly, **addressing trust issues between public administrations and startups**, especially across borders, is vital for fostering a pan-European GovTech ecosystem and market. Developing methodologies to enhance cross-border collaboration, providing training and upskilling opportunities for civil servants, and promoting a cultural shift towards embracing innovation in public procurement are key. While there are many challenges in procuring innovative digital solutions from startups, these can be overcome with a cultural shift that builds trust between public administrations and GovTech providers. This trust involves recognising that startup solutions not only tend to be more innovative but are also inherently more tailored to the specific needs of public administrations and their communities. On the startup side, there must be confidence that accessing public sector opportunities will not be overly burdensome for those with limited resources. There must also be a cultural shift to promote the reuse of the best solutions between public administrations throughout Europe. This cultural shift could take several years, driven by evidence of the revolutionary benefits of GovTech and community building across the ecosystem.

Fourthly, **appointing GovTech ambassadors** in each member state could support startups and SMEs in accessing innovative procurement opportunities, supporting the strengthening and subsequently the sustainability of the GovTech ecosystem. Language barriers are a significant challenge for startups in accessing cross-border digital transformation opportunities as indicated in the surveys. Appointing ambassadors could help overcome these barriers and unlock the full potential of the European GovTech ecosystem and market. In addition, the ambassadors could also promote the reuse of the best solutions developed in Europe. Ultimately these ambassadors could enhance the European GovTech ecosystem, supporting streamlining procurement processes on a national level, and foster innovation across public administrations in Europe.

Fifthly, **simplifying or tweaking the innovation procurement process** to be more conducive to startup access by assisting them in navigating the procurement landscape and introducing measures to support startups encourage participation and lead to greater innovation. Simplifying processes would inherently support SME access to these opportunities. However, introducing procedures such as the design contest could be a major incentive to startups

to apply for innovation public procurement opportunities. The achievements of Pilot 3 provide solid evidence of the potential of such novel procurement approaches to promote a more cohesive and stronger European GovTech ecosystem and market.

Sixthly, fostering **a cohesive and collaborative European GovTech community** could be supported by establishing a **library of GovTech solutions**, facilitating direct contact between solution providers and public administrations, and launching a marketplace for GovTech contracts similar to the EU tenders and funding portal. The GovTech Connect project already embodies part of this idea but is focused on the initiatives rather than the solutions, so it is critical that the catalogue created in the project is further developed and disseminated. A robust communication campaign highlighting the successes and benefits of GovTech could enhance awareness and engagement with the catalogue and in turn promote the GovTech approach to digital transformation. Developing a unified digital platform for all public sector digital transformation opportunities in Europe and potentially reserving a certain percentage of these opportunities for SMEs could further consolidate the budding European GovTech ecosystem and market.

Lastly, considering the **multitude of European initiatives in the GovTech sphere** like GovTech Connect, SPIN4EIC, the EDIC, the EDIH, and others, ensuring **a more structured collaboration** could be a powerful tool to consolidate the GovTech ecosystem and market. It is imperative that a sense of common purpose is instilled, considering that all the GovTech ecosystem the Interoperable Europe Act alludes to is seen as having a common purpose: the digital transformation of the European Union, the formation of a true digital single market, and the development of the best digital public services for European citizens. Combined, it could improve Europe's competitiveness and lead to the creation of world-class European digital companies as well as societal improvements for European citizens and beyond.

Ultimately, all these steps are aimed at opening the procurement market to startups as well as ensuring the development of the best digital solutions to transform public administration and public service provision across the European Union as well as the wider European community. These are, of course, preliminary ideas that must be further refined, developed, and implemented in a harmonised way. Forthcoming interviews with partners who responded to the survey will try to further explore the nascent ideas discussed in this section that would support the sustainability of the GovTech4All project and, more importantly, the GovTech ecosystem and market the project seeks to strengthen and consolidate.

8.Conclusion

All the ingredients are in place to ensure the sustainability of these GovTech innovation initiatives: member states are prepared to co-create on common issues, there is an ecosystem of public and private players who understand the benefits of cooperation and belonging to a community of interest, and the European Commission has made financing and innovation incentive vehicles available.

In chapters 2 and 3, this deliverable defined the “What” and the “How” of a GovTech incubation programme, such as GovTech4All, and outlines a sustainability approach that will support the longevity of the intended impact and outcomes of the project.

In chapters 4 and 6, this document reviewed various strategies and methodologies for sustainability, highlighting some of the best tools for setting up and assessing sustainability in projects.

To provide a perspective on this trajectory, the deliverable, in chapters 6 and 7, laid the foundations of a sustainability strategy within a GovTech4All framework and designed a set of activities for the coming months to ensure the longevity of the European GovTech ecosystem and market.

What remains is the 'secret sauce' that will sustain this community of players and keep them motivated to work towards the common European good. This is likely to emerge from a combination of regulatory decisions and member state initiatives, as discussed in the final part of chapter 6 which GovTech4All will support with a set list of lessons learned and precise policy recommendations.

As indicated by the questionnaires sent to GovTech4All partners, many obstacles to innovation within governments persist. However, solutions are emerging both within the heart of administrations and among organisations that support GovTech strategies, where there are individuals who share a common innovation mindset.

The work in terms of WP4 over the coming months will improve the approach, involve new consortium partners in this reflection, and explore new avenues for the development of GovTech initiatives. This deliverable is a living document where new approaches, methodologies, players, and ecosystems can be incorporated as they arise. The strategy will be further defined, with the final version, D4.2 – Final sustainability strategy, to be delivered at the end of October this year

References:

Bharosa, N. (3 July 2022). *The rise of GovTech: Trojan horse or blessing in disguise? A research agenda*. Available at: https://www.sciencedirect.com/science/article/pii/S0740624X22000259.

Cottinet, T. (2022). *Pour une république numérique en pleine possession de ses moyens*. Available at: https://www.cairn.info/revue-l-ena-hors-les-murs-2020-3-page-30.htm.

European Commission. (2017). *European Semester Thematic Factsheet – Public Procurement*. Retrieved June 10, 2021, from https://ec.europa.eu/info/sites/default/files/file_import/european-semester_thematic-factsheet_public-procurement_en_0.pdf.

European Commission. (15 February 2022). *Digital Europe Programme (DIGITAL) Call for proposals GovTech Incubator (DIGITAL-2022-GOVTECH-02-FPA)*. Available at: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/digital/wp-call/2022/call-fiche_digital-2022-govtech-02-fpa_en.pdf.

Hattingh, M., Matthee, M., Smuts, A., Kalenga, I., & Pappas, C. (2020). *Sustainable Digital Communities: 15th IFIP WG 6.11 Conference on e-Business, e-Services, and e-Society, I3E 2020, Proceedings*. Available at: https://www.springer.com/book/9783030449988.

International Monetary Fund. (October 2023). *Inclusive GovTech: Enhancing Equity and Efficiency Through Public Service Digitalization*. Available at: PDF.

JRC. (June 2022). *GovTech Practices in the EU A glimpse into the European GovTech ecosystem, its governance, and best practices*. Available at: PDF.

LOBO, G. (22 February 2022). *GovTech Incubator - First Information Session*. Available at: https://joinup.ec.europa.eu/collection/public-sector-tech-watch/event/govtech-incubator-first-information-session.

Malatinec, T. (18 February 2022). *Cross–Border Public Procurement in the European Union*. Available at: https://sciendo.com/article/10.2478/eual-2021-0007.

Piga, G., & Tatrai, T. (2018). *Law and Economics of Public Procurement Reforms*. Routledge, New York. Available at: https://www.routledge.com/Law-and-Economics-of-Public-Procurement-Reforms/Piga-Tatrai/p/book/9781138296480.

Pezziardi, P., & Verdier, H. (2017). *Des Startup d'État à l'État plateforme*. Fondation pour l'innovation politique, Paris.

PWC. (September 2016). *Gov.Tech: The power to transform public services in the UK*. Available at: https://www.pwc.es/es/home/assets/gov-tech-report.pdf.

Roberts, P. S., & Schmid, J. (10 March 2022). *Government-led innovation acceleration: Case studies of US federal government innovation and technology acceleration organizations*. Available at: https://onlinelibrary.wiley.com/doi/10.1111/ropr.12474.

Sarazin, B., Cohendet, P., & Simon, L. (2017). *Innovation Communities / Les Communautés d'innovation*. EMS Editions.

The European Parliament- IMCO Report. (May 2022). *The Digital Single Market and the digitalisation of the public sector GovTech and other innovations in public procurement*. Available at: https://www.technopolis-group.com/wp-content/uploads/2022/06/IPOL_STU2022703356_EN.pdf.

The World Bank. *GovTech as a Platform for Digital Government Transformation*. Available at: https://thedocs.worldbank.org/en/doc/805211612215188198-0090022021/original/GovTechGuidanceNote1TheFrontier.pdf.

The World Bank. (2021). *GovTech Maturity Index Report: The State of Public Sector Digital Transformation*. Available at: https://documents1.worldbank.org/curated/en/495831623303257484/pdf/GovTech-Maturity-Index-The-State-of-Public-Sector-Digital-Transformation.pdf.

TONON, C. (November 2020). *La GovTech, nouvelle frontière de la souveraineté numérique*. Available at: https://www.ifri.org/sites/default/files/atoms/files/tonon_govtech_nov2020.pdf.

Verdier, H., & Pezziardi, P. (January 2016). *Des startups d'État à l'État plateforme*. Available at: https://www.fondapol.org/etude/pierre-pezziardi-et-henri-verdier-des-startups-detat-a-letat-plateforme/.

Venture Insights. (2024). *The GovTech Opportunity For a Digital and Sustainable Future*. Available at: https://www.venture-insights.de/european-govtech-publication.

Appendix

SURVEYS

- Survey template
- Surveys, per partner
- Survey analysis board

Annex 1 Survey Template

GovTech4All Sustainability Assessment Survey

This is a survey for the GovTech4All project's Deliverable 4.1, the Draft Sustainability Strategy for the GovTech4All incubator (D4.1). As outlined in the Specific Grant Agreement (SGA), D4.1 will harness the consortium's collective intelligence and leverage the diverse expertise therein. This survey stands as an important mechanism in formulating the strategy, ensuring it is both reflective and inclusive of the multifaceted insights from the diverse set of Consortium Partners.

This deliverable specifically focuses on collaborative efforts, explicitly requiring input from Consortium members in the formulation of the sustainability strategy. Ultimately, it aims to chart a comprehensive path towards the sustainability of the GovTech4All project and ecosystem, integrating insights from scenario building, technology roadmaps, and stakeholder engagement.

Specifically task 4.1, Scenario Building and Road Mapping, which forms the basis of D4.1, underlines the essence of forward-looking activities, emphasising the integration of:

- Scenario building exercises that resonate with societal needs and governmental responses.
- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

Your insights are critical to crafting a strategy that not only meets but exceeds the aspirations of the first GovTech4All SGA sustainable future. We invite you to contribute your perspectives, respecting a word limit of 100 words per question to ensure conciseness and clarity. Your feedback will be instrumental in shaping a strategy that is not only comprehensive but also forward-thinking and inclusive of emerging trends and technologies.

The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
e.g • A set of sovereign communication tools for public employees • Tools to facilitate the management of administrative forms
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
e.g An application that can be used to design and manage administrative forms from start to finish, with direct control by each administration
What obstacles are there that impede innovation in public procurement and the delivery of public services?
e.g • The complexity of the organisation • Lack of digital literacy and innovation methodology • …

From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?
e.g • Data cataloguing platforms or opensource tools • Offer of sovereign digital tools
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
e.g - Digital workplace dedicated for public employees
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
e.g - The « state as a platform » paradigm
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?
e.g • Digital acculturate public agents • New administration organisation to support product development • …
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?
e.g • To adopt an « agile » approach for product management • Leading public innovation communities • …
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?

e.g

- Adopting digital sovereignty practices
- Consolidating and encouraging the financing of joint product development projects

Annex 2: Surveys, per partner

BETA-I

GovTech4All Sustainability Assessment Survey

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- Scenario building exercises that resonate with societal needs and governmental responses.
- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

Your insights are critical to crafting a strategy that not only meets but exceeds the aspirations of the first GovTech4All SGA sustainable future. We invite you to contribute your perspectives, respecting a word limit of 100 words per question to ensure conciseness and clarity. Your feedback will be instrumental in shaping a strategy that is not only comprehensive but also forward-thinking and inclusive of emerging trends and technologies.

The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
The modernization of procurement practices, the innovation of bureaucratic processes, and the implementation of more efficient tools and technologies.
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
Responding to procurements call in other EU countries can be rather challenging from a compliance perspective
What obstacles are there that impede innovation in public procurement and the delivery of public services?

Lack of digital literacy, as well as the misconception that digitalization will lead to job loss, resulting in delays in the entire process. Additionally, there's an aversion to risk-taking, making decision-making difficult, especially in the face of uncertainty surrounding new technologies. Constant turnover of personnel within government agencies can disrupt continuity and momentum in innovation efforts. Furthermore, the lengthy nature of many public projects, often spanning more than four years, can deter individuals overseeing them from fully committing to innovative approaches, as they may not reap the benefits of their efforts.
From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?
One of the most significant emerging trends in public administrations stems from advancements in Artificial Intelligence (AI).
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
AI to enhance digital public services
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
Artificial Intelligence (AI). AI technologies have the potential to empower citizens by providing targeted information and increasing transparency within government operations. By leveraging AI algorithms for data analysis and decision-making processes, public administrations can enhance efficiency and effectiveness in service delivery. Moreover, AI-driven solutions enable predictive analytics and automation, optimizing resource allocation and streamlining bureaucratic processes.
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?
• Training and Education: Ensuring that public sector employees have adequate training and education in digital skills and emerging technologies is crucial. • Exposure to Innovation: Fostering an environment that encourages exposure to innovation is key. This involves providing opportunities for public sector employees to engage with emerging technologies, attend industry conferences, participate in innovation labs, and collaborate with external partners, such as tech companies, startups, and academic institutions. • Mindset Shift: Promoting a mindset shift towards embracing innovation and data-driven decision-making is essential. Encouraging a culture of experimentation, risk-taking, and continuous improvement within government agencies can help overcome resistance to change and facilitate the adoption of new technologies and practices.
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?

Portugal: 6
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?
11. Cross-border innovation 12. European integration 13. Interoperability
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?
• Procurement processes • Organizational Processes and Tools • Digital Skills Gap and Organizational Culture

LANTIK

GovTech4All Sustainability Assessment Survey

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- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

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The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. **You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.**

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?

e.g

- A set of sovereign communication tools for public employees
- Tools to facilitate the management of administrative forms

Some of the most urgent needs that are common across public administrations in Europe include:

14. **Fostering citizen-centric service delivery**: Public services should be designed around the needs of citizens, not the convenience of bureaucracies. Improving user experience, accessibility, and responsiveness of public services is key.
15. **Harnessing secure data and digital technologies**: Leveraging secure data storage & sharing, and emerging technologies like AI, quantum, blockchain, and the Internet of Things can help public administrations become more efficient, evidence-based, and innovative in-service delivery, always considering security as a priority.
16. **Addressing sustainability and climate change:** Public administrations play a crucial role in driving the transition to more sustainable societies. Integrating environmental considerations into policies, procurement, and operations is becoming increasingly important.

Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?

e.g
An application that can be used to design and manage administrative forms from start to finish, with direct control by each administration

A few examples include:

17. **Digital Service Delivery Platforms:**
    - Example: The city of Barcelona, Spain has developed a comprehensive digital services platform called "Decidim" that allows citizens to engage with the local government, access public services, and participate in decision-making processes in a secure way.
18. **Citizen Engagement Apps:**
    - Example: The city of Paris, France has launched a mobile app called "Paris.fr" that enables citizens to report issues, access public services, and provide feedback on city initiatives.
19. **Predictive Analytics for Urban Planning:**
    - Example: The city of Helsinki, Finland has developed a data-driven platform called "Urban Platform" that uses predictive analytics to optimize urban infrastructure and service delivery.

What obstacles are there that impede innovation in public procurement and the delivery of public services?

e.g

- The complexity of the organisation
- Lack of digital literacy and innovation methodology
- …

Key obstacles deterring innovation in public procurement/delivery of public services:

20. **Rigid procurement regulations and processes:**
    - Highly regulated, lengthy procurement timelines, and risk-averse decision-making can make it difficult
21. **Organizational culture/resistance to change:**
    - Public sector organizations can be resistant to experimentation and new ways of working, favoring the status quo.
    - Difficulties changing the established procedures.
    - Lack of incentives
    - Limited digital skills and capabilities within the public sector
22. **Concerns about privacy, security, and risk:**
    - Scrutiny and requirements around data privacy, cybersecurity, and risk management.
    - Lack of clear guidelines/standards for emerging technologies (e.g., AI, quantum) can create uncertainty.

From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?

e.g

- Data cataloguing platforms or opensource tools
- Offer of sovereign digital tools

Here are some of the most significant emerging trends we see in relation to public administrations:
Data-driven governance: The rise of data cataloguing platforms, open data initiatives, and advanced analytics are enabling public administrations to become more evidence-based, transparent, and responsive.
Digital transformation: Widespread adoption of cloud computing, automation, and citizen-centric digital services is modernizing public sector operations and service delivery.
Collaborative ecosystems: Increased cross-sector partnerships between government, industry, academia, and civil society are fostering innovation and co-creation of solutions for complex public challenges.
Ethical AI governance: Policymakers are developing guidelines and frameworks to ensure the responsible development and deployment of AI technologies within the public sector.
Sovereign digital infrastructure: The emergence of open-source tools and secure, interoperable digital platforms is empowering public administrations to maintain greater control over their data and systems, always with security at the core.

Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?

e.g
- Digital workplace dedicated for public employees

Here are concise examples of emerging trends in public administrations:
Data-driven governance: Barcelona's open data portal and Flanders' central data catalog enable evidence-based policymaking.
Digital transformation: Tallinn's X-Road platform and Milan's "Milano Servizi" app modernize citizen services.
Collaborative ecosystems: Interreg Europe's cross-border projects and Amsterdam's data platform foster inter-agency cooperation.
Ethical AI governance: EU's AI Act and Helsinki's AI Register ensure responsible AI deployment.
Sovereign digital infrastructure: Gaia-X's federated data infrastructure and Rennes' open-source tools empower public administrations to maintain digital sovereignty.

In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?

e.g
- The « state as a platform » paradigm

In our view, the following methods, assets, and tools have significant potential to enhance the efficiency and reliability of public services and policies:
The **"state as a platform" paradigm**, which leverages open data, APIs, and interoperable digital infrastructure to enable collaborative service delivery and citizen co-creation.
Advanced data analytics and predictive modeling techniques to support evidence-based policymaking, optimize resource allocation, and proactively address emerging challenges.
Process automation and intelligent workflow management systems to streamline administrative tasks, reduce errors, and free up public sector employees for higher-value work.
Secure, decentralized digital identity solutions to improve access to public services, enhance privacy protections, and combat fraud.

What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?

e.g

- Digital acculturate public agents
- New administration organisation to support product development
- …

Here are some essential criteria we would consider for assessing the public sector's readiness to integrate new technologies:
Digital skills and culture: The extent to which public sector employees have the necessary digital literacy, data analysis capabilities, and openness to innovation.
Organizational agility: The presence of flexible, user-centric structures and processes that can support the iterative development and deployment of new technological solutions.
Data governance and infrastructure: The availability of high-quality, interoperable data, as well as secure, scalable digital platforms to enable data-driven decision-making and service delivery.
Collaborative partnerships: The strength of the public sector's engagement with private, academic, and civic stakeholders to co-create innovative solutions.

On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?

For the specific case of Bizkaia, we would rate the public sector's readiness to adopt new technologies for enhancing public services and evidence-based policymaking around an 8 out of 9.
All Basque Country administrations have been using certificates provided by Izenpe with Giltza as a key to unlock secure digital interconnected multi-administration solutions, demonstrating a commitment to citizen-centric service delivery and secure data-driven decision-making.
However, challenges remain in areas like legacy IT infrastructure, digital skills gaps, and cross-agency coordination. Continued investment and a sustained focus on organizational transformation will be crucial to fully harness the potential of emerging technologies.
There is still room for improvement to reach the highest levels of public sector technological readiness and innovation.

What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?

e.g

- To adopt an « agile » approach for product management
- Leading public innovation communities
- …

In our view, the top three opportunities for implementing GovTech solutions on a larger scale and mainstreaming the approach are:

23. **Embracing agile and user-centric product management**: Adopting flexible, iterative development methodologies that prioritize citizen needs and rapid iteration can help public administrations quickly deploy and scale innovative digital services.
24. **Fostering public innovation ecosystems**: Establishing collaborative platforms that bring together government, industry, academia, and civil society can catalyze the co-creation of GovTech solutions and promote knowledge-sharing.
25. **Leveraging emerging technologies strategically**: Selectively integrating advanced technologies like AI, quantum, and blockchain, can help public sectors enhance service delivery, improve decision-making, and achieve greater operational efficiency.

What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?

e.g

- Adopting digital sovereignty practices
- Consolidating and encouraging the financing of joint product development projects

Here are the top 3 challenges:

26. **Fragmented funding and collaboration:** Securing sustained, cross-agency funding and fostering meaningful partnerships between the public sector, private companies, and civic organizations remain persistent challenges.
27. **Standardization:** Inconsistent regulations and data formats across regions hinder broader adoption of GovTech solutions.
28. **Culture Shift:** Public sector resistance to change and siloed structures can slow down widespread GovTech implementation. Public administrations often lack the digital expertise, data literacy, and entrepreneurial mindset required to effectively design, implement, and scale GovTech initiatives.

Innovation LITHUANIA

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Specifically task 4.1, Scenario Building and Road Mapping, which forms the basis of D4.1, underlines the essence of forward-looking activities, emphasising the integration of:

- Scenario building exercises that resonate with societal needs and governmental responses.
- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

Your insights are critical to crafting a strategy that not only meets but exceeds the aspirations of the first GovTech4All SGA sustainable future. We invite you to contribute your perspectives, respecting a word limit of 100 words per question to ensure conciseness and clarity. Your feedback will be instrumental in shaping a strategy that is not only comprehensive but also forward-thinking and inclusive of emerging trends and technologies.

The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
e.g • A set of sovereign communication tools for public employees • Tools to facilitate the management of administrative forms • public procurement (more faster) - automatisatopn of task • Feedback from the citizens

Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
e.g An application that can be used to design and manage administrative forms from start to finish, with direct control by each administration - digital tools / urgent needs : the procurement take so long vs the need - for companies for founding, to easier copy data from one file to another (rpa) - difficulté to reach out citizens , all of them , not only the most motivated, (ex : rules as code) > proactive public services
What obstacles are there that impede innovation in public procurement and the delivery of public services?
e.g • The complexity of the organisation • Lack of digital literacy and innovation methodology • … • Endusers are not involved in the creation of the services, gap with the political agenda, voices • Difficult processes to overcome, opening the procurement to new players • Budget tied to a yearly agenda, if not burnt in that time has to be refunded
From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?
e.g • Data cataloguing platforms or opensource tools • Offer of sovereign digital tools • digital mobile tools and apps (uber , …) by companies > people expect the same for the gov • Data exchange between administration (Once only Principle)
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
People got it from Uber they want to for their heath service e.g - Digital workplace dedicated for public employees
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
e.g - The « state as a platform » paradigm - « one stop shop «, we have all the tech for that - design methodology is in place but not many people are using it. It needs time and efforts.iteration is not used enough in public system
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?

e.g • Digital acculturate public agents • New administration organisation to support product development • … - its not the org , its the people ! We're working more on the mindset, New Zealand and Spain has a great approach
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?
7
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?
e.g • To adopt an « agile » approach for product management • Leading public innovation communities • … - We're Funding pilots solutions > procurement method - Agile approach - Public servant and citizens are expecting it (apps on daily basis)
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?
e.g • Adopting digital sovereignty practices • Consolidating and encouraging the financing of joint product development projects - Procurement - Skills and mindset enhancement (design methodology) - Money for experimentation in the public sector, at all level (national ; local) Methodology for that. ?

BRON

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- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

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The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
29. Old systems and old digital infrastructure that require large investment costs to replace. 30. You buy what you want per unit and don't explore problems and challenges from a system perspective. 31. People are afraid to take risks, to use taxpayers' money to explore new ways of working. There is too little permission to make mistakes. 32. They are not use to think interoperability, reuse and cooperation and the “not invented here-syndrome” is still a big issue. 33. The meeting between the public sector and the business community is characterised by suspicion and mistrust on both sides.
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
Yes, I have a lot of examples and experience from the public administration in Sweden. It will be easier to talk about this then write. **#Lack of tech litteracy** Systems are not talking to each other do to superposition of several platforms with diff tech Many municipalities don’t know the system they have. Meaning they are facing huge and increasing costs One solution is to take APIs or change te system We noticed 80% of tech you buy is not efficient And the people is not involved in the equation (to work with the tech) **#procurement with business community** public agent are afraid to talk with company, they think they make a disfavor in the procurement process and company don’t know how the public ecosystem works Suspicious of money
What obstacles are there that impede innovation in public procurement and the delivery of public services?
Public administrations are used to buy from the shelf, they want to have a robust, long-time solution to their needs. They are not used to take risks. They are afraid to talk to private sector, risking to not talk to everyone (equal treatment). Privat sectors are used to pitch and sell their products, missing the part to really understand your customer (e.g. the public sector complexity). It’s a difficult process to answer the tenders.
From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?

-How to handle AI from different perspectives. -Resilience, environment/climate and security issues. -open data and share data across authorities.
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
For a long time the public sector get more and more to do and more expectations from the citizens. This creates a greater need for streamlining in processing processes in order to keep up. AI could contribute to great efficiency, but how do you implement AI, how safe is it, what is the municipality allowed to do, etc. The war, the climate change and extreme weather and the rising crime, affects political decisions.
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
Design thinking, as a tool to really understand the challenge and to ensure the citizen engegement. Open source, for mor reusability and interopability. “It´s not ONE system who will serve all the public service, but several system that will serve ONE public service”.
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?
To have control over systems and their interopability, to know whats old an new systems, to have budget for investments in digital infrastructure. To have knowledge about best practice, to work togheter with others. To have a clear policy for working with innovation and new ways of working, including the possability to fail.
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?
Big municipalities 8-9 Small municipalities 5 State agencies 7-8 It all depend on budget, policy incitements and dedicated staff.
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?
Through a system approach, a long perspective and collaboration.
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?

Money, understanding of the process and not clear objects/goals.

DIGICAMPUS

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In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
• Long term vision on the Digital work to be done by the public sector vs the private sector
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
Across the EU both public and private parties are struggling to identify what the Public Sector will build operate or outsource vs what they expect from market parties to build for public services.
What obstacles are there that impede innovation in public procurement and the delivery of public services?

• Small scale parties, • The procurement requirements are difficult to fulfill for small scale parties. Such as insurances or lengthy administrative processes.
From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?
DI wallet, data spaces, interoperable EU act and Digital sovereignty
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
• Development of data wallets across Europe • The rise of qualified service providers, trusted list EU → https://eidas.ec.europa.eu/efda/tl-browser/#/screen/home • Dataspaces programs across Europe. • Large Scale Pilots
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
AI, lot of new opportunities to reduce administrative work Rules as codes, new way of looking at laws and regulations Wallets
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?
• See the questionnaire made for WP3 regarding technology readiness level
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?
5, we are not ready to allow GovTech companies to deliver services to society. For instance the Dutch government is building their own wallet, instead of using what is available at the GovTech market. The general view on the private sector are money maker machines that don't respect public values, but not all are like that.
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?

34. Across Europe the Public Sector needs to reduce expenditures. This limits innovation capacity, but private organizations can help reduce money 35. Interoperable Europe act, 36. The need for digital autonomy on Europe to be less dependent on foreign big tech. • …
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?
37. Not enough knowledge at public agencies 38. Negative perception on market parties. 39. Lack of interoperability across public agencies and different sectors

GRNET

GovTech4All Sustainability Assessment Survey

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The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?

The most urgent needs within public administrations across Europe centre on enhancing digital infrastructure and interoperability to foster more efficient, transparent, and citizen-centric services. A paramount need is the development and adoption of a set of sovereign communication tools designed specifically for public employees. These tools should prioritize security and data protection to handle sensitive information, while enabling seamless communication across various branches and levels of government. This would support not only internal collaboration but also cross-border interoperability among EU member states, aligning with the goals of the Digital Single Market.

Additionally, there is a pressing requirement for robust, user-friendly tools to manage administrative forms and processes. Such tools would significantly reduce bureaucratic overhead, streamline public service delivery, and improve the accessibility of government services for citizens. By automating and digitizing form management, public administrations can cut down on processing times, minimize errors, and free up resources to focus on more complex tasks that require human oversight. Moreover, these tools should be adaptable to accommodate emerging trends and technologies, ensuring they remain relevant and effective in the face of rapid digital transformation and evolving societal needs. Integrating these tools within a broader digital strategy would enhance not only administrative efficiency but also public trust and engagement, crucial components for a sustainable and responsive public sector.

Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?

In Greece, as in many parts of Europe, the most urgent needs within public administration revolve around digital transformation, enhancing data security, and improving service accessibility and efficiency. These needs are critical in addressing both internal operational challenges and in providing better services to citizens.

Firstly, **digitalization of services** is a key priority. Greek public administration requires comprehensive platforms that enable digital interaction between the government and the public, thus reducing physical visits and paperwork. This includes everything from the filing of taxes to applications for social benefits. Implementing robust e-government platforms that can handle these transactions securely and efficiently would significantly enhance public service delivery.

Secondly, **cybersecurity and data protection** are paramount, especially as public administrations handle sensitive personal and financial information. Greece, like other EU countries, must adhere to GDPR and other regulations aimed at protecting citizen data. Strengthening cybersecurity measures and training public employees in data protection best practices is essential to build trust in digital platforms.

Lastly, **interoperability within public systems** across Greece and other EU states remains a crucial need. Ensuring that systems can communicate effectively not only within the country but across borders is vital for streamlined operations, especially in areas like healthcare, public security, and cross-border services. This requires both technological solutions and collaborative policy frameworks that support data exchange and service integration.

What obstacles are there that impede innovation in public procurement and the delivery of public services?

In Greece, several significant obstacles impede innovation in public procurement and the delivery of public services, much like in other countries grappling with public sector modernization.

One major barrier is the complexity of organizational structures within the public sector. Greek public administration often involves multiple layers of bureaucracy, characterized by rigid hierarchies and compartmentalized departments. This complexity can lead to slow decision-making processes, inefficiencies in managing resources, and difficulties in implementing new technologies or processes. The intricate web of procedures and approvals required for public procurement can deter innovation, as it tends to favour established methods and vendors over new, potentially more effective solutions.

Another critical challenge is the lack of digital literacy and innovation methodology among public sector employees. While there are certainly pockets of progress, a broad segment of the workforce lacks the necessary skills to leverage digital tools effectively. This skills gap can result in resistance to adopting new technologies, further compounded by a shortage of training and development programs tailored towards modernizing skills in digital competency. Without a workforce that understands and embraces digital tools and innovative methodologies, public services struggle to evolve in ways that meet the changing needs of the population.

Additionally, financial constraints often play a significant role in impeding innovation. Budget limitations can restrict the ability of public institutions to invest in new technologies and processes. In times of economic difficulty, funding for training, development, and the adoption of innovative technologies in public services can be one of the first areas to face cuts, leaving public administrations lagging behind technological advances and best practices seen in more digitally mature environments. This financial challenge underscores the need for strategic planning that prioritizes long-term digital transformation with sustained investment.

From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?

In the realm of public administration, several emerging trends from policy, technology, science, and society are reshaping how services are delivered and managed. These trends are driven by the increasing interconnectivity of our world and the rapid pace of technological innovation.

Policy-wise, there is a strong movement towards open government and transparency, fuelled by policies that promote data accessibility and citizen engagement. This trend is evident in the proliferation of initiatives like open data platforms where governmental data is made available to the public to increase transparency, improve public services, and encourage civic engagement. Such policies are supported by frameworks like the EU's Digital Single Market, which aims to ensure access to online activities for individuals and businesses under conditions of fair competition and a high level of consumer and personal data protection.

Technologically, the adoption of digital technologies such as Artificial Intelligence (AI), blockchain, and the Internet of Things (IoT) in public administration is a major trend. AI is being utilized to improve decision-making processes and streamline operations, from predictive analytics in urban planning to AI-assisted customer service platforms that enhance the citizen-government interaction. Blockchain technology promises enhanced security and transparency in transactions, applicable from registries and document verifications to secure voting mechanisms. IoT technology is also becoming prevalent, particularly in smart city initiatives, where it helps monitor and manage infrastructure like traffic, public utilities, and emergency services in real time.

Scientifically and socially, there is an increasing emphasis on sustainability and social responsibility within public administrations. This trend is influencing policy making and service delivery to align more closely with environmental sustainability goals, like reducing carbon footprints and promoting green public procurement practices. Socially, there is a greater focus on inclusivity and accessibility, ensuring that public services are accessible to all segments of the population, including those with disabilities or those in remote areas. This includes not only physical accessibility but also digital inclusivity, ensuring that digital transformations do not leave behind those less technologically adept.

Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?

1. Policy: Open Data Initiatives
Example: The European Data Portal serves as a comprehensive repository of public data across Europe, underpinning the open government data trend. By offering access to over a million datasets across Europe, the portal facilitates innovation, transparency, and economic growth by enabling businesses, researchers, and citizens to harness public data for various purposes. This initiative supports the EU's policy direction towards improving government transparency and engaging citizens in the governance process.

2. Technology: Artificial Intelligence in Public Services
Example: The use of AI in Finnish Public Services. Finland has implemented AI across various government services to streamline operations and improve citizen engagement. One application is the use of AI chatbots that assist in providing information and services to citizens, reducing wait times and improving service delivery efficiency. This is part of Finland's broader strategy to become a leader in AI and digital services, demonstrating how technology can enhance the interaction between government and citizens.

3. Science: Sustainability in Urban Planning
Example: The Smart Dublin Initiative leverages scientific research and green technologies to create sustainable urban living solutions. The initiative includes projects like the deployment of IoT sensors to monitor air quality and manage traffic flow more effectively, contributing to environmental sustainability goals. This is a direct application of scientific advancements and technology in public administration to address urban challenges and improve the quality of life for residents.

4. Societal: Digital Inclusion Programs
Example: The Digital Inclusion Strategy in Barcelona aims to ensure that all citizens have the skills and access necessary to participate in the digital economy. This includes offering free Wi-Fi in public spaces, creating digital training centres for the elderly and other vulnerable groups, and providing support for digital literacy. Barcelona's approach addresses the societal challenge of the digital divide and ensures that the benefits of digital transformation in public administration reach all segments of society.

With respect to Greece:

1. Policy: e-Governance Initiatives
Example: gov.gr- Greece has made significant strides in digital governance with the launch of gov.gr, a centralized platform that integrates all government services and provides citizens with the ability to conduct transactions digitally. This initiative is part of Greece's broader effort to improve government transparency and efficiency, reducing bureaucracy and making public services more accessible to citizens.

2. Technology: AI and Digital Transformation
Example: Intelligent Systems for Athens Public Transportation - Athens has implemented AI-driven traffic management and public transport scheduling systems to optimize routes and reduce congestion. This use of technology not only improves efficiency but also enhances the public transport experience by providing real-time updates and adjustments based on traffic data.

3. Science: Focus on Renewable Energy in Public Infrastructure
Example: The Hellenic Wind Energy Association Initiative- Greece has been actively promoting the incorporation of renewable energy sources into public infrastructure. A notable example includes projects facilitated by the Hellenic Wind Energy Association, where wind energy is increasingly used to power public buildings and street lighting, supporting Greece's commitment to sustainability, and reducing its carbon footprint.

4. Societal: Inclusivity in Digital Access
Example: Digital Solidarity- Greece launched the "Digital Solidarity" initiative during the COVID-19 pandemic to provide free or low-cost digital services and tools to citizens. This program aimed to ensure that all segments of the population, particularly the economically disadvantaged, could access digital education, teleworking tools, and online services, thereby promoting digital inclusivity.

In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?

In the public sector, several methods, technological assets, and tools stand out for their potential to significantly enhance the efficiency and reliability of public services and policies. These innovations are pivotal in transforming how public administrations operate and engage with citizens.

Cloud Computing and Big Data Analytics are vital technological assets. Cloud computing allows public entities to store, manage, and process vast amounts of data without the need for extensive physical infrastructure, leading to cost savings and improved data accessibility. Coupled with big data analytics, these tools enable governments to analyze large datasets quickly to make informed decisions, predict public needs, and efficiently allocate resources. For example, during crisis management or public health emergencies, real-time data analysis can guide immediate and effective policy responses, thus enhancing public safety and welfare.

Blockchain Technology offers another transformative potential in enhancing transparency and security in public transactions. By creating decentralized and tamper-proof records, blockchain can be used for various applications such as secure voting systems, transparent public procurement, and reliable record management, reducing fraud and increasing trust in public operations.

AI and Machine Learning are increasingly being integrated into public services to automate routine tasks, optimize service delivery, and enhance decision-making processes. AI applications can range from predictive analytics in urban planning and environmental monitoring to personalized public service delivery that can adapt to individual citizen needs. AI-driven tools not only streamline operations but also reduce human error and ensure consistent service quality.

What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?

Assessing the public sector's readiness for integrating new technologies involves evaluating multiple critical criteria to ensure that technology adoption is effective, sustainable, and aligned with the goals of public service improvement and policy development.

Technical Infrastructure and Compatibility is a fundamental criterion. It assesses whether the existing technological infrastructure can support new systems, both in terms of hardware and software. This includes the availability of robust internet connectivity, adequate server capacity, and compatibility with existing databases and applications. Ensuring that new technologies can be seamlessly integrated into the current infrastructure without requiring prohibitively expensive or disruptive upgrades is crucial for a smooth transition.

Workforce Digital Literacy and Training is another essential criterion. The successful adoption of new technologies heavily depends on the ability and readiness of public sector employees to utilize these tools effectively. This involves evaluating the current level of digital skills among the workforce and identifying gaps that could hinder the adoption of advanced technologies. Providing comprehensive training and ongoing support is necessary to empower employees, enabling them to leverage new technologies for enhanced service delivery and policy formulation.

Governance and Policy Frameworks also play a critical role. There must be clear legal and regulatory frameworks in place that not only support the adoption of new technologies but also address issues related to data security, privacy, and ethical considerations. These frameworks should facilitate data sharing between departments and agencies while ensuring compliance with data protection laws, thus fostering an environment that supports innovation while safeguarding citizen rights.

On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?

Assessing the readiness of the public sector in Greece to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies involves several considerations. Historically, Greece has faced challenges in public sector modernization due to economic constraints and bureaucratic complexities. However, recent initiatives suggest significant progress.

40. Digital Infrastructure: Greece has made strides in improving its digital infrastructure, notably with the expansion of digital services through platforms like gov.gr. This initiative demonstrates a commitment to digitizing public services, improving accessibility for citizens, and streamlining government operations.
41. Government Support and Policy Framework: The Greek government has shown strong support for digital transformation, evidenced by its recovery and resilience plan funded by the EU, which allocates substantial resources to digital reforms. This includes efforts to enhance connectivity, digital skills, and the integration of digital technologies in public administration.
42. Workforce Digital Literacy: Despite progress, challenges remain in fully equipping the public sector workforce with the necessary digital skills. Ongoing training and education are crucial for maximizing the potential of new technologies.

Given these factors, on a scale of 1 to 9, **Greece's readiness might be placed around 5 or 6**. This indicates a moderate readiness level, where the foundations for digital transformation are being laid and significant efforts are underway, but where further improvement in digital literacy and infrastructure integration is needed to fully leverage technology for public service enhancement and policy development. This positioning reflects a trajectory of improvement with continued areas for growth.

What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?

The implementation of GovTech solutions on a larger scale presents numerous opportunities for transforming public services, enhancing efficiency, and fostering greater citizen engagement. Here are the top three opportunities for mainstreaming this approach:

Improving Public Service Delivery: GovTech solutions offer significant potential to streamline and enhance the delivery of public services. By adopting digital platforms and tools, governments can simplify processes, reduce administrative burdens, and deliver services more quickly and efficiently. For example, online portals for submitting applications, renewing licenses, and accessing social services can significantly improve the user experience and accessibility. These digital solutions also enable governments to collect and analyze data more effectively, allowing for continuous improvement of services based on user feedback and usage patterns.

Enhancing Transparency and Accountability: One of the main advantages of GovTech is its ability to increase transparency and accountability in government operations. Digital solutions such as blockchain can be employed to secure transactions, manage records, and ensure the integrity of data, making government dealings more transparent. Furthermore, open data initiatives can empower citizens by providing access to government data, fostering greater transparency, and encouraging civic engagement. This not only helps in building trust between the public and the government but also promotes a participatory approach to governance where citizens can contribute to decision-making processes.

Facilitating Innovation and Economic Growth: Mainstreaming GovTech solutions can stimulate innovation both within and beyond the public sector. By adopting new technologies, governments can create ecosystems that encourage startups and businesses to develop innovative solutions that address public challenges. Additionally, the government's investment in digital infrastructure and technology can attract private sector partnerships and investment, driving economic growth. These collaborations can lead to the development of new industries and expansion of existing ones, particularly in areas such as cybersecurity, data analytics, and digital services.

Adopting an Agile Approach for Product Management: Adopting agile methodologies in the public sector can significantly enhance the efficiency and effectiveness of GovTech initiatives. Agile practices focus on flexibility, iterative development, and continuous feedback, which are essential for adapting to the rapidly changing technological landscape. By implementing an agile approach, governments can manage projects in a way that allows for quick pivots and adaptations based on real-time feedback and changing needs. This method not only accelerates the development process but also ensures that the end products are more aligned with user requirements and current challenges. Furthermore, agile practices encourage collaboration among teams, breaking down silos within departments, and promoting a culture of innovation and continuous improvement.

Leading Public Innovation Communities: Cultivating and leading communities focused on public innovation can drive the widespread adoption and refinement of GovTech solutions. These communities can bring together technologists, government officials, academics, and citizens to co-create solutions that address public sector challenges. By fostering a collaborative environment, these communities can leverage diverse expertise and perspectives, leading to more innovative and effective solutions. Additionally, public innovation communities can serve as test beds for new technologies, providing real-world feedback and scenarios that help refine these technologies before they are scaled. This participatory approach not only enhances the quality and relevance of GovTech solutions but also builds a sense of ownership and engagement among stakeholders, facilitating smoother adoption and implementation.

What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?

Scaling up the implementation of GovTech solutions and mainstreaming the approach faces several pressing challenges that can impede progress. Here are three of the most critical challenges, including the adoption of digital sovereignty practices and the consolidation and encouragement of financing for joint product development projects:

43. Adopting Digital Sovereignty Practices: As governments seek to integrate more technology into their operations, the issue of digital sovereignty becomes increasingly crucial. This involves ensuring that the government retains control over its own data and the technology solutions it uses, rather than being overly reliant on foreign or multinational corporations. The challenge here is to develop or procure technology solutions that comply with national laws and regulations while ensuring that they are robust and secure enough to handle sensitive information. Implementing digital sovereignty requires strategic investment in local technology sectors, developing standards and frameworks that prioritize national security and privacy without stifling innovation.

44. Ensuring Interoperability and Standardization: One major hurdle is the lack of interoperability and standardization across different government platforms and systems. For GovTech solutions to be effectively scaled and mainstreamed, they must be able to communicate and work seamlessly across various government agencies and jurisdictions. This requires a commitment to developing and adhering to common standards and protocols that ensure data and systems compatibility. Without this, there is a risk of creating siloed solutions that cannot leverage the full potential of a connected government infrastructure.

45. Addressing the Skills Gap and Enhancing Digital Literacy: A pervasive challenge in the public sector is the digital literacy skills gap among existing government employees. As GovTech solutions become more sophisticated, the need for skilled professionals who can manage, maintain, and innovate these digital tools becomes more critical. Governments must invest in comprehensive training and development programs to upskill their workforce. Additionally, attracting new talent with the requisite tech skills requires making public sector roles appealing and competitive. This involves not only training but also transforming public sector work culture to align more closely with the dynamic and innovative cultures seen in the tech industry.

MADRID CITY COUNCIL

GovTech4All Sustainability Assessment Survey

This is a survey for the GovTech4All project's Deliverable 4.1, the Draft Sustainability Strategy for the GovTech4All incubator (D4.1). As outlined in the Specific Grant Agreement (SGA), D4.1 will harness the consortium's collective intelligence and leverage the diverse expertise therein. This survey stands as an important mechanism in formulating the strategy, ensuring it is both reflective and inclusive of the multifaceted insights from the diverse set of Consortium Partners.

This deliverable specifically focuses on collaborative efforts, explicitly requiring input from Consortium members in the formulation of the sustainability strategy. Ultimately, it aims to chart a comprehensive path towards the sustainability of the GovTech4All project and ecosystem, integrating insights from scenario building, technology roadmaps, and stakeholder engagement.

Specifically task 4.1, Scenario Building and Road Mapping, which forms the basis of D4.1, underlines the essence of forward-looking activities, emphasising the integration of:

- Scenario building exercises that resonate with societal needs and governmental responses.
- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

Your insights are critical to crafting a strategy that not only meets but exceeds the aspirations of the first GovTech4All SGA sustainable future. We invite you to contribute your perspectives, respecting a word limit of 100 words per question to ensure conciseness and clarity. Your feedback will be instrumental in shaping a strategy that is not only comprehensive but also forward-thinking and inclusive of emerging trends and technologies.

The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
• Lack of adequacy of public procurement rules and innovative technology solutions : It is not the same buying physical goods than IT services that includes cloud infrastructure + value added services
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
It is difficult to buy non tangible cloud services such as an IA based engine that provides online answers to a total of 15,000 conversations.
What obstacles are there that impede innovation in public procurement and the delivery of public services?
Public procurement forces us to give a lot of detail about the services to buy, and IT innovative projects with an agile methodology are adaptive and variable
From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?
Artificial Intelligence digital services
Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?
There are not clear and stable Artificial Intelligence business models and they are difficult to buy and to make evaluation criteria
In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?
Developing the Ideas contests where there is a call for tenders and the target is to solve a challenge, best idea awards a contract.
What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?

• Digital literate public agents working at legal and finantial departments
On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?
6
What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?
• To adopt an « agile » approach for product management • Creation of a public innovation procurement communities • Creation of a collection of successful initiative procurement procedures with real cases
What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?
• Innovative procurement training • Technology trends trining to civil servants • Management awareness about the govtech advantages

DINUM

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- Identification of public administration needs, innovation barriers, and emerging trends from policy, technological, scientific, and societal dimensions.
- Exploration of methods, technological assets, and tools that elevate public sector service efficiency and policy reliability.
- Assessment of public sector readiness for new technology integration to foster effective public services and informed policy development.
- Envisioning visionary scenarios and forthcoming challenges, supported by stakeholders' engagement to enrich and validate the roadmap.

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The survey encompasses a series of precise questions, estimated to take approximately between 30 minutes and an hour of your time. You are not required to conduct any background reading to inform your answer; however, you are welcome to conduct your own research and incorporate it into your responses.

In your opinion, what are the most urgent needs within public administration that are common across all public administrations in Europe?
- A shared methodology to foster innovation in public organisation tools design and development • A set of sovereign communication tools for public employees • Tools to facilitate the management of administrative forms
Could you share specific examples from your experience, especially if you have worked within or alongside public administrations?
#methodology @dinum an accelerator of public services initiatives as been set up : beta.gouv.fr. Based on the « State platform » Principle, the accelerator aims to help any public employee to design and deploy new services that help the administration to provide better services to French citizens. Through a detailed path, the public employee, considered as an « intrapreneur » , can get the means to develop the conceived service, and has to demonstrate the impact of this service in the relative short period of time. This methodology, with examples, is detailed in several articles (fr). #state startup The State Startup team, made up of public-sector employees and private-sector digital experts, acquires a wealth of strategic and operational knowledge during the incubation period. Its members have often become specialists in the public policies pursued by the platform, possess technical expertise in the functional choices made for the digital product, and know the service's users inside out, having interacted with them on a regular basis. And in many cases, the teams are supported by former digital entrepreneurs (so-called coaches), who help them structure a long-term strategic vision. It would be a pity to lose all this knowledge acquired during the incubation of the service during the transfer phase. At the start of the handover phase, it is therefore vital to bring together all the stakeholders (including the historic operational teams) so that the new owners and the "old hands" can meet. The aim of this meeting is to recall the department's raison d'être, define its long-term ambitions, everyone's expectations and any obstacles or difficulties to be overcome by the new team. The success of this type of workshop depends on the creation of a safe space where everyone can express themselves in complete confidence. The transfer of a government start-up is also a unique opportunity for ministry staff to develop their skills in technical subjects (digital, product management, data and APIs), strategic subjects (implementation of a data-driven regulatory policy, platform strategies.) To develop their skills on technical subjects (digital, product management, data and APIs), strategic subjects (implementing a data-based regulatory policy, platform strategies, etc.) or organizational subjects (team rituals, managerial practices, etc.). As in the private sector, news travels fast... the transfer will have an impact on the service and therefore on its users. It may be useful to communicate with users to inform them of the changes. #communication tools An application that can be used to facilitate communications calls and exchange of documents within EU administrations. Member states are welcome to use and share open source tech and common tools in order to ease the development of these tools and to better invest, collectively, on them.
What obstacles are there that impede innovation in public procurement and the delivery of public services?

#complexity
The complexity of the organisation, meaning the way an administration deal with procurement and its ecosystem, is widely present within the French administration. Due to several layers of players in the procurement process, A procurement procedure can take time and often, have an impact on the innovation process of the product.

#digital Literacy
An evident lack of digital literacy and innovation methodology tend to slow down the implementation of digital product/tools within the public administration.

From your perspective, what are the most significant emerging trends originating from policy, technology, science, and society in relation to public administrations?

- Data cataloguing platforms or opensource tools

Catalogs of data and open source tools are a strong trend within administrations.
The issue is that some administration don't comply with the shared rules for exposing and classifying tools.

- Offering of sovereign digital tools

In the same perspective, a set of digital tools dedicated to bring any administration to an upper level of sovereignty, or to offer an alternative to private software offers.

Can you provide specific examples showcasing these significant emerging trends in any of these areas concerning public administrations?

- Digital workplace dedicated for public employees

An alernate workplace to free public administrations from licensing fees burden and to still give them the choice to answer their particular needs.

In your view, what methods, technological assets, and tools have the potential to enhance the efficiency and reliability of public services and policies in the public sector? And why?

- The « state as a platform » paradigm as mentioned here :

http://tcrn.ch/29llGEq

What criteria do you consider essential for assessing the public sector's readiness level for integrating new technologies to improve public services and support the development of evidence-based policies?

- Digital acculturate public agents
- New administration organisation to support product development

On a scale of 1 to 9, how prepared do you think the public sector in your country is to adopt new technology for enhancing public services and enabling the formulation of better-informed, evidence-based policies?

7

What are the top three opportunities, in your opinion, for implementing GovTech solutions on a larger scale and for mainstreaming the approach?

- To adopt an « agile » approach for product management
- Leading public innovation communities

- Take the « state as a platform » position

What do you believe are the top three most pressing challenges to scaling up the implementation of GovTech solutions and mainstreaming the approach?
• Adopting digital sovereignty practices • Consolidating and encouraging the financing of joint product development projects • Accelerate digital aknowledgement learning

Annex 3: SURVEY ANALYSIS BOARD

GT4A WP4 SURVEY

Main outlined topics

Primary **Topic**
Secondary Topic

Q1 & 2 [MOST URGENT NEEDS]

GOBE
Dynamic Capabilities - collaboration with private sector - enhance public procurement - interoperable data

LANTIK
citizen-centric service delivery- secure data and digital technologies- sustainability and climate change

MADRID
Public procurement with tech perspective

BRON
Old (new) systems and old (new) digital infrastructure- risk aversion- collaboration with private sector- interoperability and cooperation mindset

DIGICAMPUS
Collaboration with private sector

BETA-I
Modernization of procurement practices - better bureaucratic processes - high-end technology

LITHUANIA
Public procurement - automatisation of tasks - feedback from citizen

GrNET
Citizen-centric services - sovereign tools - reducing bureaucracy tools and processes - digitized services - data protection - interoperability

DINUM
Methodology - sovereign communication tools - admin management tools

Q3 [OBSTACLES]

GOBE
Procurement practice

LANTIK
Procurement practice - organizational culture - privacy, security

MADRID
Procurement practice

BRON
Lack of tech literacy - communication with private sector

DIGICAMPUS
Procurement practice - small scale parties

BETA-I
Lack of digital literacy - aversion to risk taking - personnel turnover - too long projects

LITHUANIA
Users not involved in service création - procurement processes - unappropriate budget agenda

GrNET
Complex organizational structures (procurement processes) - lack of digital literacy - financial constraints -

DINUM
Procurement organisation complexity - digital literacy

Q4 &5 [EMERGING TRENDS]

GOBE
Service design - AI - procurement methodology

LANTIK
Data-driven governance- Digital transformation- Ethical AI governance- Collaborative ecosystem - Sovereign digital infrastructure

MADRID
AI

BRON
AI - climate issues - open and shared data

DIGICAMPUS
Data spaces - DI wallet - digital sovereignty - EU interoperability

BETA-I
AI

LITHUANIA
Digital mobile tools/apps - data exchange -

GrNET
Policy-wise (open data)- digital technologies such as Artificial Intelligence (AI)- sustainability and social responsibility (inclusion)

DINUM
Data cataloguing platforms - sovereign digital tools

Q6 [TOOLS FOR MORE RELIABLE PUBLIC SERVICES]

GOBE
Data strategy - state as a platform/interoperability

LANTIK
state as a platform- Advanced data analytics- Process automation- digital identity solutions

MADRID
Ideas contest for call for tenders

BRON
Design thinking - open source - open tech (multiplicity of systems)

DIGICAMPUS
wallets - AI - rules as code

BETA-I

AI

LITHUANIA
One stop shop - design methodology

GrNET
Cloud Computing - Blockchain Technology - AI and LLM

DINUM
State as a platform

Q7 [ASSESSMENT CRITERIA]

GOBE
Data availability - culture of evaluation - interoperability standards

LANTIK
Digital skills and culture- Organizational agility- Data governance- Collaborative partnerships

MADRID
Digital skills and culture

BRON
IT Systems control - best practices - embracing innovation

DIGICAMPUS
Nc

BETA-I
Training and Education - Exposure to Innovation - Mindset Shift

LITHUANIA
Mindset shift

GrNET
Technical Infrastructure and Compatibility - Workforce Digital Literacy and Training- Governance and Policy Frameworks

DINUM
Public agent digital acculturation level - product development by design

Q8 [LEVEL OF ADOPTION OF TECH]

GOBE
Nc

LANTIK
9

MADRID
6

BRON
7 (avg - depend on type of agency)

DIGICAMPUS
nc

BETA-I
6

LITHUANIA
7

GrNET
5 to 6

DINUM
7

Q9 [OPPORTUNITIES FOR IMPLEMENTING GOVTECH]

GOBE
Culture of experimentation (test and learn)

LANTIIK
user-centric product management- innovation ecosystems- Leveraging emerging technologies

MADRID
Public procurement communities - agile product management - procurement use cases

BRON
System approach - long perspective - collaboration

DIGICAMPUS
Interoperability - digital sovereignty

BETA-I
Cross border innovation - EU integration - Interoperability

LITHUANIA
Procurement method - agile approach - mobile apps services

GrNET
Improving Public Service Delivery- Enhancing Transparency and Accountability- Facilitating Innovation and Economic Growth- Adopting an Agile Approach for Product Management- Leading Public Innovation Communities

DINUM
Agile product management - public innovation communities - state as a platform

Q10 [CHALLENGES FOR SCALING UP]

GOBE
Service design

LANTIK
Fragmented funding and collaboration- Standardization - Culture Shift

MADRID
Procurement training - tech training for agents and management

BRON
Money - process understanding - clear objectives

DIGICAMPUS
Culture shift - lack of interoperability - collaboration with the private sector

BETA-I
Procurement processes - Organizational Processes and Tools - Digital Skills Gap and Organizational Culture

LITHUANIA
Procurement - skills and mindset enhancement (design methodology) - money

GrNET
Adopting Digital Sovereignty Practices- Ensuring Interoperability and Standardization- Addressing the Skills Gap and Enhancing Digital Literacy

DINUM
digital sovereignty practices- financing of joint product development projects - digital aknowledgement learning