

# MOSIP as Identity Building Block Specification Implementation in GovStack Sandbox





REPUBLIC OF ESTONIA MINISTRY OF FOREIGN AFFAIRS



Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung



digital impact alliance





Sandbox Product Owner

Delegated by GIZ



#### Workgroup Lead Identity Building Block

Delegated by ID30

#### Who we are

**GovStack** is a multistakeholder initiative, focused on accelerating e-government transformation worldwide, and drawing on expertise from contributors across private sector, civil society, and governments.

The initiative was founded by the **International Telecommunication Union (ITU)**, **Estonia, Germany**, and the **Digital Impact Alliance at the United Nations Foundation** in 2020.



Republic of Estonia Ministry of Foreign Affairs







## **Our Talk**











# GovStack Building Blocks Approach

## Together, Digital Public Goods and Building Blocks enable Digital Public Infrastructure (DPI)

GovStack



Source: https://digitalpublicgoods.net/blog/unpacking-concepts-definitions-digital-public-infrastructure-building-blocks-and-their-relation-to-digital-public-goods/

# The building block approach can be applied across many sectors to support high-impact use



## Available GovStack Building Blocks Specifications



From silo ICT investments to reusable software components to digitize governments services at scale



# From silo ICT investments to reusable software components to digitize governments services at scale



## Use or not whatever block Leverage country assets, adapt to context and objectives





# Identity Building Block

## **IDBB Vision and Scope**

GovStack

Identity Building Block has to be technology and form of identity agnostic.

It should answer in a generic way to needs for authentication, credentials and identity management services.

#### Deliver authentication and management services on population identity



Identity Building Block scope

## **Identity BB purpose**



The Identity Building Block creates, manages, and uses a foundational digital identity to be



As a part of the overall identity system, it can be interfaced with other Building Blocks in order to realize the complete set of requirements necessary for delivering identification services and managing lifecycle of Foundational Identities

## Identity Building Block brings a User centric perspective

GovStack

As Identity building block is creating and managing the digital users of GovStack, it is the enabler for offering super-digital-powers at once to the end user after its on-boarding in the GovStack.



It also is in the ideal perspective to watch user experience by taking care of a smooth integration services offered by the different building blocks, overall

## Modularity

The Identity Building Block can be composed of a set of **interoperable sub-components/modules** dedicated to the **management of the foundational identity** offering different services for ensuring a **trusted foundational identity** for enabling related use cases.



## **IDBB Wave 1 (2022) Defining Vision and Scope**

GovStack

Identity **Building Block** has to be technology and form of identity agnostic.

It should answer in a generic way to needs for authentication, credentials and identity management services.

#### Deliver authentication and management services on population identity



Identity Building Block scope

Authentication Attributes sharing **ID Mapping & Tokenization** Physical ID document **Digital ID document** Mobile ID Wallet Document **Cloud ID Wallet Document** Enrollment Identity update

## IDBB Wave 2 (2023 H1) Authentication and KYC APIs / Integration with Sectors





ID Mapping allows to map identifiers in between different domain levels for purpose of application data interoperability

> Systems of a same sector can **use the same sectoral ID** but **it should not be shared across different sectors**.

**Domains** may have their own **users registry with their data** and their own **authentication means**.

Domains should directly or indirectly link back to Foundational ID to ensure person unicity.

**Domains** may **use identity** or **data** from **upper domain level**, by **inheriting authentication**.

## IDBB Wave 3 Facilitating and Accelerating on-boarding



## Wallet Building Block Defining Purpose and Scope

## Under process..

Wallet Building Block scope is Container and Content.

Wallet Building Block has to cover multiple forms of Containers and Contents

Wallet Building Block has to be inclusive.

On the long run, Wallet BB should address some sectors to be deliver more precise guidelines by onboarding sectors specific standards.

#### Storage and exchange of decentralized verifiable digital information





# **GovStack Sandbox**

#### **GovStack Offerings**

#### **Our Offerings**



GovSpecs

We work with governments to identify real-life scenarios...

Learn more



demonstration environment for...

Learn more



OUVLean

We collaborate to provide capacity building, trainings, and support designing...





#### GovExchange

We offer a platform to research the market of digital services and find...

Learn more

## Implementation Challenges

Challenges		Solutions
Functional Scope of DPGs	ID ID	GovStack Building Block Specifications
Integration with other DPGs	ID App	GovStack Architecture and API Specifications
Diverse ways of configurating and deploying	PAY ID REG	Common Configuration and Deployment Procedure

#### **Implementation Journey**



#### **Implementation Architecture**



#### Architecture Benefits: Add Use Cases and Exchange DPIs



## Live Demo

Demo starting at

https://www.govstack.global/

s Social Cash Transfer Use Case	s Social Cash Transfer Use Case - s x O sandbox-usecase-usct-backend/ x O sandbox-usecase-usct-backend/ x +	- 0 >
- C 🛱 🗇 https://govstack.gitt	ook.io/sandbox/access-demos/usct-use-case	
GovStack Development ~		GovStack Home Q Search C
Enter the Sandbox  ACCESS DEMOS  Social Cash Transfer Use Case  Construction Permit Use Case  FOLLOW METHODOLOGY  Do It Yourself  V  DIY Wireframes	<ul> <li>Social Cash Transfer Use Case</li> <li>Demonstration of a full stack implementation using a Unconditional Social Cash Transfer (USCT) use case</li> <li>GovStack Specification Compliant</li> <li>Interoperable Digital Public Infrastructure (DPI)</li> </ul>	ON THIS PAGE Which GovStack features are de How to access? Use Case Frontend Walk Through Building Block UIs How are the stack components a Data Protection Notice and Regi
DIY Dynamic Frontend > DIY Minikube DIY Full-Stack Get Deployment Support Service Design Practice >	Public Infrastructure (DPI) ✓ Continues Integration Pipeline for BB Full Stack Demo	
EXPLORE STACK Architecture	Unconditional Social Cash Transfer (USCT) programs help families meet their basic needs for well- being and safety and serves as their path to self-sufficiency. USCT are cash payments provided to financially disadvantaged or vulnerable people or households without requiring anything in return (i.e. without conditionality).	
Use Case Frontend Use Case Backend Building Blocks >	This demo covers only a small fraction of a USCT user flow for the purpose of using various Building Block APIs. For a more comprehensive visualization of the use case visit the GovStack USCT simulation.	
DevOps Infrastructure	Which GovStack features are demonstrated? With this use case implementation, we demonstrate the GovStack approach through	
Version History	<ul> <li>One possible way to implement the GovStack Specifications</li> <li>Browse through all the stack components on the left-hand side menu, to explore the</li> </ul>	

#### **Call for Cooperation**

**GovStack Initiative** 

is the <u>broker between</u> <u>demand and supply</u> in eGovernment solutions

6

#### **For Countries and Donors**

Incorporate GovStack Specs in eGov projects and procurements (indepently or in collaboration with GovStack)

	٠			<b>C</b> .::::
*			* *	ر:. •
		<u>ģ</u>		<b>C</b> *
	Ø	$\star$		

#### **For Product Owners**

Assess alignment with specifications and publish at testing.govstack.global

vStack		Software Requirements Compliance	API testing	-된 Log In	Help
The	e Software tware platfo	m is able to meet the functional requirements for one or more	If-assess they products against the functional requirements that have been developed by GovStack. These assessments help GovStack users validate that a part building Block, as well as inhether if adheres to the cross-functional requirements specified for all GovStack implementations. ar product. For detailed instructions on filling out the self-assessment forms, please refer to this document.	icular	
Fite	eports ar by Building elect Building	Block Filter by Software	Check Compliance		
		Software Version BB Specification BB Version	Status Submission Date Deployment Compliance () Requirement Specification Compliance () Interface Compliance ()		
		<ul> <li>Magc50haae</li> <li>Secure Heath</li> </ul>			
		Steve Enal			
		Steve's DPG     TestAPP     TestSoftware17.01			
		✓ Testing Company			



# **Thank You!**