

# POSEIDON

## THE POSEID-ON PROJECT

**“PROTECTION AND  
CONTROL OF SECURED  
INFORMATION THROUGH  
A PRIVACY ENHANCED  
DASHBOARD”**

**Workshop on Privacy Challenges in Public and  
Private Organizations,  
IFIP Summer School on Privacy and Identity  
Management, August 19-23, 2019 in  
Brugg/Windisch, Switzerland**

**Presenter:**

Alessandra Bagnato, Softeam

**21<sup>ST</sup> AUGUST 2019, UNIVERSITY OF  
APPLIED SCIENCES NORTHWESTERN  
SWITZERLAND (FHNW)**

**BRUGG/WINDISCH, SWITZERLAND**

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Framework Programme of the European Union



# INDEX



INTRODUCTION



CHALLENGES  
and  
ARCHITECTURE



APPROACH



Public and Private  
Organizations  
Use Cases

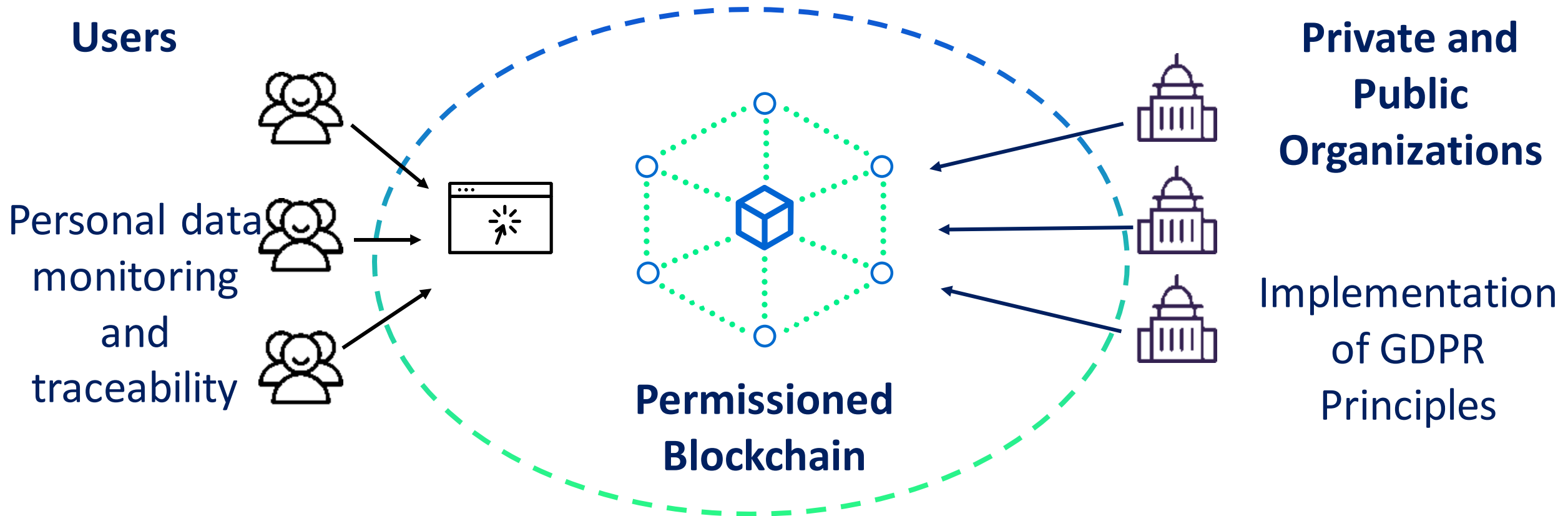
# INTRODUCTION

# POSEIDON

# PROJECT

# THE POSEID-ON PROJECT

“Protection and control of Secured Information through a privacy enhanced Dashboard”



# POSEID-ON PROJECT

GRANT AGREEMENT NUMBER: 786713  
H2020-DS-2016-2017/ DS-08-2017

## Protection and control of Secured Information by means of a privacy enhanced Dashboard

- innovative intrinsically scalable platform
- integrated and comprehensive solution aimed to safeguard the rights of data subjects
- exploiting the cutting-edge technologies of Smart Contracts and Blockchain
- support organisations in data management and processing
- ensuring GDPR compliance

# POSEID-ON CONSORTIUM



Perfect integration  
between  
private and public  
organizations



# POSEID-ON PROJECT PILOTS



# EXCELLENCE & AMBITION

## GDPR COMPLIANT



Right to access



Data portability



Rectification



Right to be forgotten



Restriction of processing

## SOCIETAL IMPACT



Support for Fundamental Rights



Increased Trust and Confidence



Increased use of privacy-by-design

## DATA ETHICS



Data Minimization Principle



Privacy Exposure Alert



Data Access Authorization



# IMPACT & OPPORTUNITIES

## IMPACT ON USERS

- ✓ Increased trust in the Digital Single Market
- ✓ Simplified access to an increased number services and procedures
- ✓ Easier interaction with public entities

## BENEFITS FOR PUBLIC ENTITIES

- ✓ Integration of existing IT protocols, practices and technologies
- ✓ Simplification of bureaucratic procedures

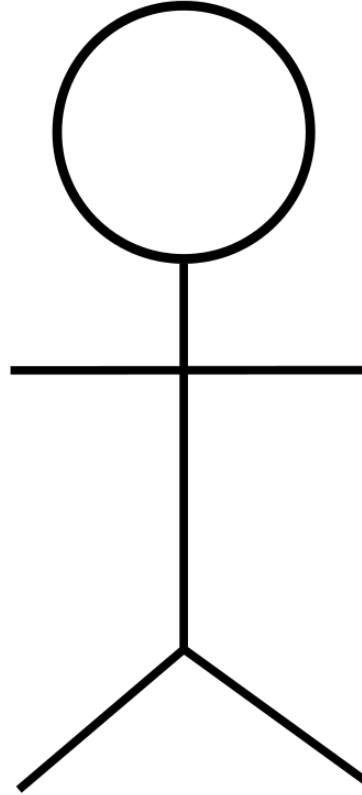
## BUSINESS OPPORTUNITIES FOR PRIVATE ENTITIES

- ✓ New services, new customers and new professional profiles
- ✓ Integration with public entities
- ✓ Less responsibility when managing clients' personal data
- ✓ **GDPR compliance**

# APPROACH TACKLING CHALLENGES AND ARCHITECTURE

# THE USER COMES FIRST NO EXCEPTIONS

# WHO IS THE USER?



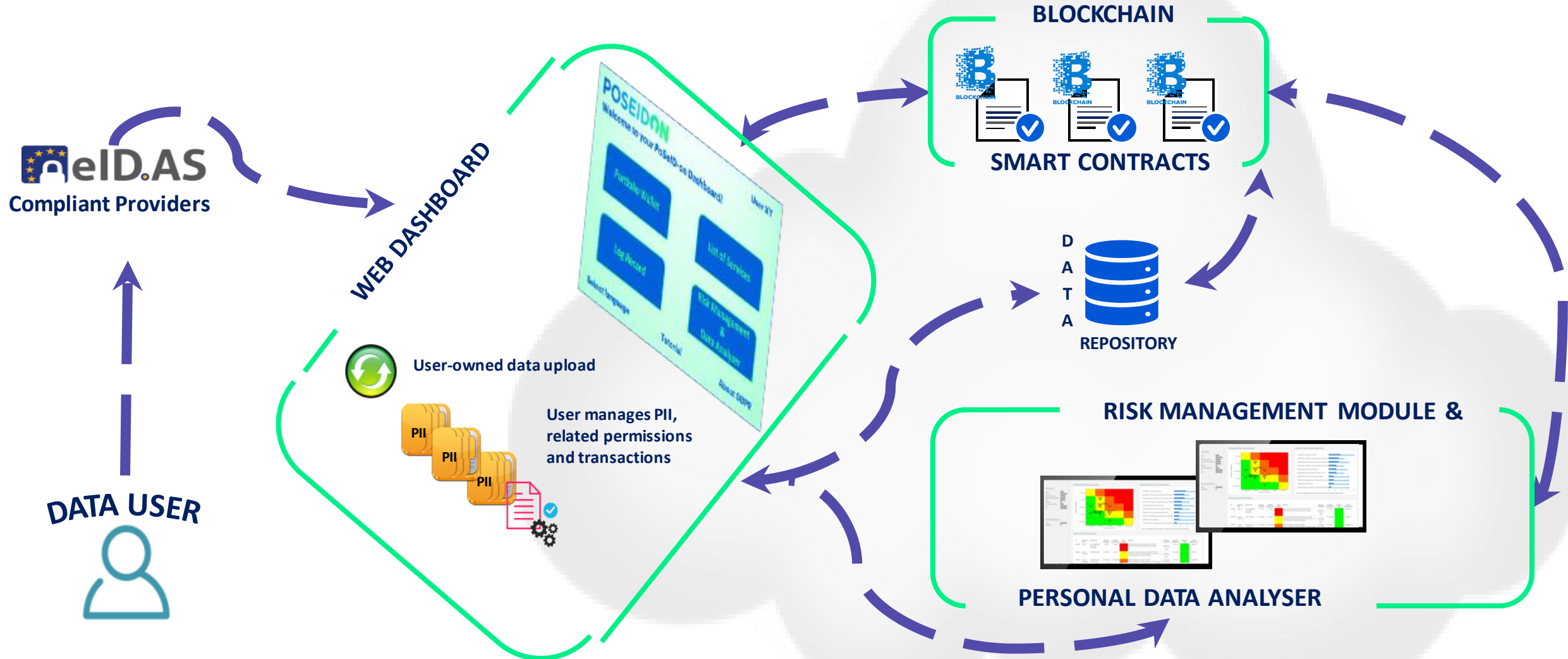
Every European citizen

# WEB-BASED

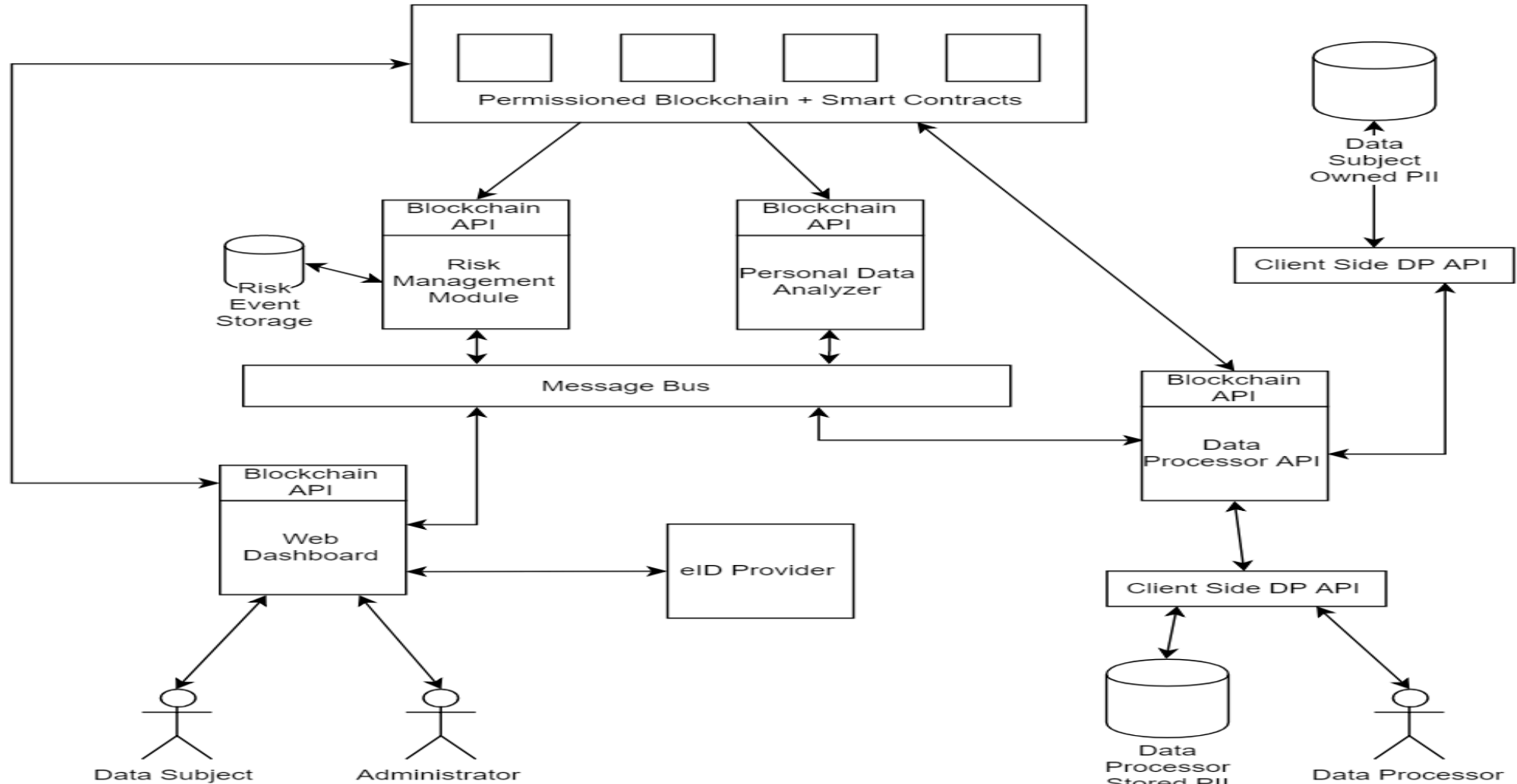
## Only a Web Browser is needed

- Targeting the most common application platform in the world
- Reaching the largest group of users
- Open standards

# ARCHITECTURE (1/2)



# ARCHITECTURE (2/2)



# EXAMPLE OF USE CASE: PRIVATE ORGANIZATIONS



# SVE “PRIVACIZ CONSENT” TOOL FROM SOFTEAM

**PRIVACIZ CONSENT IS A TOOL DEDICATED TO SOFTEAM’S CUSTOMERS TO ENABLE THEM TO APPLY FOR A CLAIM ABOUT THEIR PERSONAL DATA.**

- WITH THE E-CITIZ PLATFORM, SOFTEAM PROPOSES THE SVE (“SAISINE PAR VOIE ELECTRONIQUE” WHICH MEANS SEIZURE BY ELECTRONIC WAY), AN ESERVICE PRODUCT ALLOWING USERS TO APPLY FOR A CLAIM OR ANY SORT OF DEMAND TO THE COMPANY.
- THIS ESERVICE CAN BE CUSTOMIZED FOR VARIOUS APPLICATIONS AND IS FOR NOW CLOSE TO THE MARKET OF EGOVERNMENT DUE TO A REGULATORY CONSTRAINT ON MUNICIPALITIES IN FRANCE.
- SVE CAN BE USED AS WELL BY EGOVERNMENT STRUCTURE AS PRIVATE COMPANIES.
- THE POINT OF INTEREST ON THE SVE SERVICE IS ABOUT PERSONAL INFORMATION BECAUSE FOR EVERY APPLICATION, THE USER (CITIZEN OR CUSTOMER) HAS TO FILL SOME PERSONAL DATA (FIRSTNAME, LASTNAME, POSTAL ADDRESS ...) ON EVERY CLAIM.

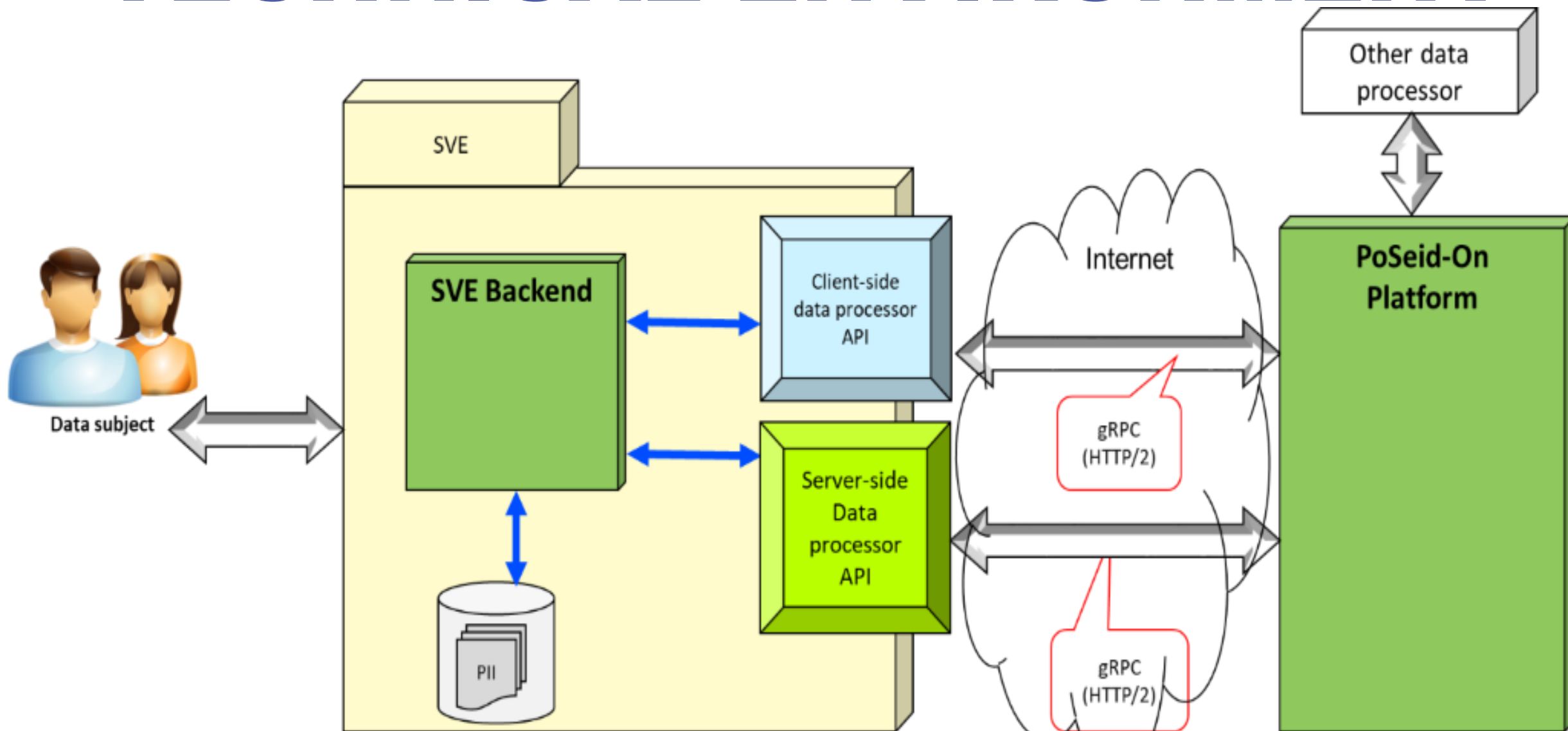
# SVE “PRIVACIZ CONSENT” TOOL FROM SOFTEAM

WITH THE GDPR, SOFTEAM’S CUSTOMERS, EMPLOYEES, SUPPLIERS, CONTACTS... CAN ASK SOFTEAM TO ACCESS/MODIFY/DELETE THEIR PERSONAL INFORMATIONS.

TO APPLY FOR THIS, PHYSICAL PERSONS HAVE TO IDENTIFY THEMSELVES AND GIVE SOME OF THEIR PERSONAL INFORMATION USED TO RECOGNIZE THEM AND VERIFY THEY ARE ALLOWED TO ACCESS PERSONAL INFORMATION THEY CLAIM TO OWN.

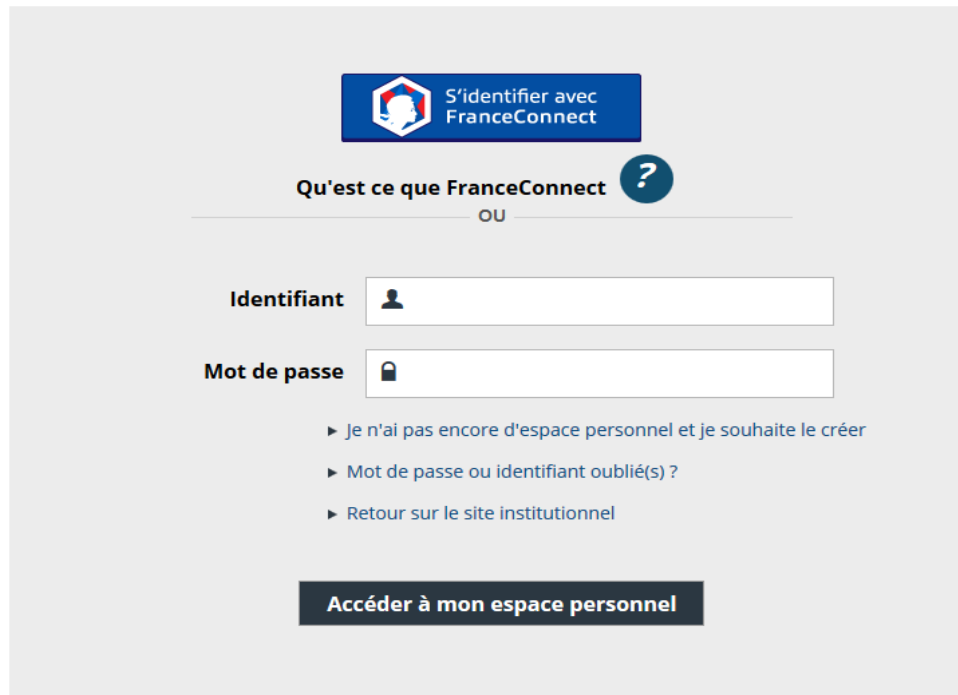
THIS IS WHERE POSEIDON WILL BE USED FOR.

# TECHNICAL ENVIRONMENT



# SCENARIOS DESCRIPTION & ISSUES

SOFTEAM GROUP



The screenshot shows the FranceConnect login interface. At the top, there is a blue button with the FranceConnect logo and the text "S'identifier avec FranceConnect". Below this, the text "Qu'est ce que FranceConnect" is followed by a question mark icon and the word "OU". There are two input fields: "Identifiant" with a person icon and "Mot de passe" with a lock icon. Below the input fields, there are three links: "Je n'ai pas encore d'espace personnel et je souhaite le créer", "Mot de passe ou identifiant oublié(s) ?", and "Retour sur le site institutionnel". At the bottom, there is a dark blue button with the text "Accéder à mon espace personnel".

ACCOUNT  
CREATION ON  
PRIVACIZ

Conformément à la loi Informatique et Libertés du 06/01/1978, vous disposez d'un droit d'accès, de rectification et de suppression pour toutes les informations vous concernant. Vous pouvez exercer ce droit en écrivant directement à SOFTEAM (info@e-citiz.com)  
Version 2.1.1.0

Credits

# SCENARIOS DESCRIPTION & ISSUES


**SOFTEAM GROUP**


- Déconnexion
- Porte documents
- Profil personnel
- Mon Compte


! Aucun dossier trouvé.

SOFTEAM  
SOFTEAM

*Institute*  
SOFTEAM  
Institute

  
MODEDEMPLOI

  
MODELIOF

  
SOFTEAM  
Systèmes

*e-Citiz*  
SOFTEAM e-Citiz

Conformément à la loi Informatique et Libertés du 06/01/1978, vous disposez d'un droit d'accès, de rectification et de suppression pour toutes les informations vous concernant. Vous pouvez exercer ce droit en écrivant directement à SOFTEAM ([info@e-citiz.com](mailto:info@e-citiz.com))

Version 2.1.1.0

Credits

**SELECT ENTITY TO  
EXPRESS GDPR  
RIGHT**

# SCENARIOS DESCRIPTION & ISSUES

**SOFTEAM GROUP**

**SOFTEAM**

▼

Service du recrutement

☐

Accès

☐

Rectification

☐

Droit à l'oubli

☐

Limitation

☐

Portabilité

☐

Opposition

☐

Demande de contact du responsable de Traitement

►

Gestion des Clients et de la prospection IDF, Ouest et Sud-Ouest

↶ Retour

🗑 Annuler cette demande

➔ Continuer

Conformément à la loi Informatique et Libertés du 06/01/1978, vous disposez d'un droit d'accès, de rectification et de suppression pour toutes les informations vous concernant. Vous pouvez exercer ce droit en écrivant directement à SOFTEAM (info@e-citiz.com)  
Version 2.1.1.0

Credits

WHICH RIGHT TO EXPRESS ?

# SCENARIOS DESCRIPTION & ISSUES

SOFTEAM GROUP

Présentation du dispositif

Informations du demandeur

Votre demande

Pièces Justificatives

Récapitulatif

## Présentation

Conformément à l'article 12 du Règlement (UE) 2016/679 du Parlement européen et du Conseil du 27 avril 2016, vous disposez du droit d'accès aux informations vous concernant pour les informations figurant dans nos fichiers informatisés ou nos manuels.

### Avant de commencer


Merci de préparer une copie de justificatif d'identité :

- Carte d'identité
- Passeport

### Déroulement de la demande

Cette demande prend environ 5 minutes pour être déposée.

 Annuler cette demande

 Commencer

Conformément à la loi Informatique et Libertés du 06/01/1978, vous disposez d'un droit d'accès, de rectification et de suppression pour toutes les informations vous concernant. Vous pouvez exercer ce droit en écrivant directement à SOFTEAM ([info@e-citiz.com](mailto:info@e-citiz.com))

Version 2.1.1.0

Credits

NEEDED  
INFORMATION TO  
FULFIL THE  
PROCESS


# SCENARIOS DESCRIPTION & ISSUES

**SOFTEAM GROUP**

Présentation du demandeur Informations du demandeur Votre demande Vos justificatifs Révisé(e)

Demande n°OCT2020 de 21/09/2019

### Informations générales

 Service des études

NOM

Prenom

Email

Adresse électronique (personnelle)

### Adresse postale

Rue

Numéro de rue

C.P.

Ville postal

Lieuville

Pays

Il est interdit d'utiliser les informations et données du Service Études sans l'autorisation écrite de SOFTEAM GROUP. Toute utilisation non autorisée des informations vous appartenant, vous sera adressée sous la forme d'un avis écrit directement à SOFTEAM GROUP.

© Softeam S.A.S 2019



# THE USER CAN LET POSEID-ON FILL THE FIELDS



# SCENARIOS DESCRIPTION

**SOFTEAM GROUP**

Présentation du dispositif Informations du demandeur Votre demande Pièces justificatives Récapitulatif

Demande n°ECTZ31665 du 21/05/2019

**Informations générales**

Get my data from **POSEIDON**

Nom \* Asked to Poseidon

Prénoms \* Asked to Poseidon

Adresse électronique (courriel) \* Asked to Poseidon

**Adresse postale**

Numéro Asked to Poseidon

Nom de voie \* Asked to Poseidon

Lieu-dit Asked to Poseidon










Code postal \* Asked to Poseidon

Localité \* Asked to Poseidon

Pays Asked to Poseidon

Conformément à la loi informatique et Libertés du 06/01/1978, vous disposez d'un droit d'accès, de rectification et de suppression pour toutes les informations vous concernant. Vous pouvez exercer ce droit en écrivant directement à SOFTEAM (info@e-citiz.com)

Version 3.1.0.0

**AFTER IDENTITY PAIRING  
(POSEIDON & PRIVACIZ), DATA  
WILL COME FROM POSEIDON**

# PATH FOR EVALUATION

- **EVOLUTIONS ON THE PRIVACIZ TOOL TO INTEGRATE POSEIDON ACCESS TO THE DASHBOARD**
- **IMPLEMENT THE DATA PROCESSOR (CLIENT PART)**
- **IMPLEMENT THE DATA PROCESSOR (SERVER PART)**
- **FIRST EVALUATIONS TO PROVIDE FEEDBACK**

# EXAMPLE OF USE CASE PUBLIC ORGANISATION

# OVERVIEW



The General Administration, Personnel and Services Department (DAG) of the Italian Ministry of Economy and Finance (MEF) is in charge of the management of payroll functions for approximately 2.1 million Italian public sector employees. This service is provided through a unique payroll function, NoiPA – which annually manages more than €51 billion in payments.

**NoiPA** is a portal created to manage administrative and economic data of central and peripheral Public Administration employees. Therefore, NoiPA has a big experience in personal data management.



The NoiPA pilot will be based on some of its services. It will imply the customization of these services to integrate PoSeID-on solution to provide the users with a single platform for personal data management, as well as to support NoiPA to be compliant with the GDPR.

# BUSINESS APPROACH



PoSeID-on records immutably users' consent to the processing personal data while using/requesting a NoiPA service and inform the user about its own data treatment.

## ADDED VALUE FOR THE MEF (and third parties)

- **Increased transparency** in data management **enhances users' trust**
- **Ensured GDPR compliance** (secure registration of consent)
- In the middle run: **possibility to increase the number of services** for NoiPA users

## ADDED VALUE FOR THE USER

- **Increased awareness** about what personal data he/she gives the consent to the processing and to which entity
- Consent to the processing of personal data is requested in a **transparent, simple and user-friendly way**
- Consent to the processing of personal data is registered **securely and immutably**
- **Third parties cannot claim the use of other types personal data**

# SCENARIOS



Two scenarios for 3 NoiPA services

## THREE SERVICES ACCESSIBLE FROM NoiPA

1. **Residence address**
2. **IBAN upload/update via NoiPA based application**



### SCENARIO 1

- The user gives the consent to data processing to NoiPA. This is stored in PoSeID-on platform
- The user is aware of data collection and treatment (including eventual personal data transfer to other entities according the law)
- User does not exit from NoiPA in its journey

3. **Insurance policy subscription provided by Reale Mutua Assicurazioni**



### SCENARIO 2

- The user gives consent to a third party for data treatment. This is stored in PoSeID-on platform
- User goes to a third party website (Reale Mutua)

# DATA MANAGEMENT



Data flows and consents

## SCENARIO 1 – RESIDENCE/IBAN

- The personal data is provided to and remains within NoiPA.
- Poseidon stores the change/insertion of the data and the fact that the user has given to NoiPA the consent to its treatment.

**THERE IS NO TRANSFER OF PERSONAL DATA BETWEEN NoiPA AND POSEIDON.**

**The user is informed of the fact that data is eventually transferred from NoiPA to other entities (e.g. INPS) according to the applicable legislation.**

## SCENARIO 2 – INSURANCE

- The personal data is provided to and remains within Reale Mutua.
- Poseidon stores the consent to the processing of data that the user has provided to Reale Mutua.
- To use the service, the user goes through NoiPA.

**THERE IS NO TRANSFER OF PERSONAL DATA BETWEEN NoiPA, REALE MUTUA AND POSEIDON.**

**The user provides the consent of the processing of the data to Reale Mutua for using the service.**

# SCENARIO 1 AS-IS (1/2)



*Residence address / IBAN upload or update via NoiPA based application*

**Login**

Codice fiscale

Password

Scrivi il captcha sottostante qui

- Hai dimenticato la password?
- Guida all'accesso

La pagina verrà aggiornata tra 14m 55s



- Amministrato
- Self service
- Spendiale
- Detrazioni familiari a carico
- Residenza fiscale e/o domicilio
- Modalità di ricezione
- Piccolo prestito
- Previdenza complementare
- Bonus igef
- Neofiscione
- Contratti scelta a tempo determinato
- Consultazione pagamenti
- Riepilogo contributi
- Servizi

## Residenza fiscale e/o domicilio

Variazione dati persona fisica - Indirizzi

Codice fiscale:  Cognome:  Nome:  Luogo e Data di nascita:  E-mail:

I campi contrassegnati con (\*) sono obbligatori  
Nel caso di domicilio, è possibile effettuare il primo inserimento tramite la selezione "Tax Indirizzi"  
Il modo che per il completamento dell'operazione è necessario disporre del PIN identificativo

Tipi indirizzi: **Residenza**

Residenza

Regione:  Provincia:

Comune:

Via/Plaça/Largo:

Numero civico:  CAP:

Data decorrenza:

Variazione indirizzo residenza

Stato:

Regione (\*):  Provincia (\*):

Comune (\*):

Via/Plaça/Largo (\*):

Numero civico (\*):  CAP (\*):

Data decorrenza (\*):





# SCENARIO 1 TO-BE (1/3)



*Residence address / IBAN upload or update via NoiPA based application through PoSeID-on*

- Adding a button “Store my consensus on PoSeID-on”



An information note on PoSeID-on that the user can open - if interested - will also be inserted in each NoiPA window.

# SCENARIO 1 TO-BE (2/3)



*Residence address / IBAN upload or update via NoiPA based application through PoSeID-on*

- Add a button “Store my consensus on PoSeID-on” allows to communicate with the PoSeID-on Platform in order to store the User’s consensus in an immutable way.



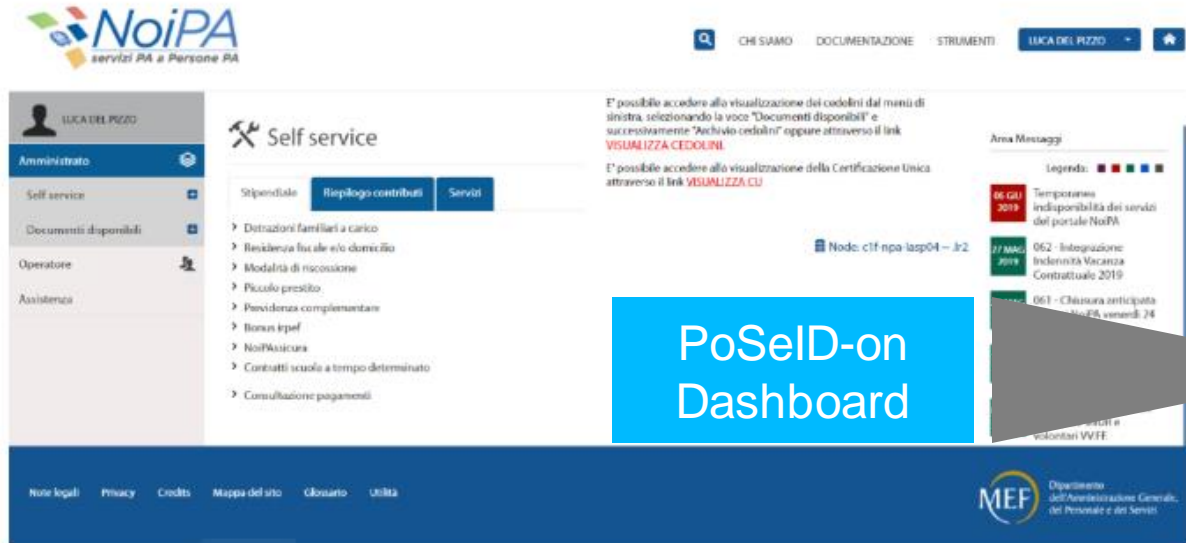
A box will be inserted asking the user to:

- **Give the consent to the processing of personal data** entered/modified
- **Take note of the fact that personal data is transmitted by NoiPA to other entities** (INPS, etc.) according to the current legislation.

# SCENARIO 1 TO-BE (3/3)



*Residence address / IBAN upload or update via NoiPA based application through PoSeID-on*



## TBD: Dashboard

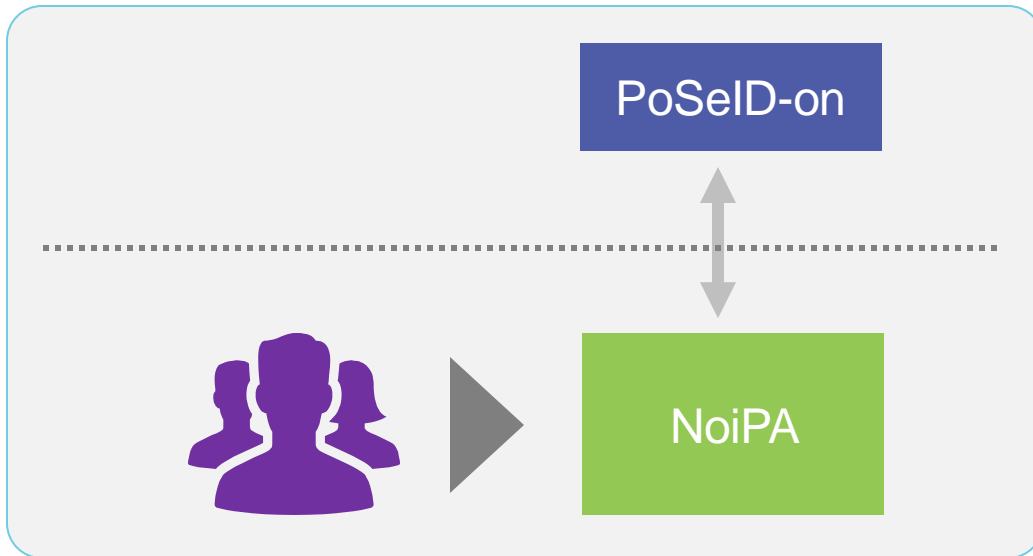
- A fixed dashboard is added to NoiPA to **inform the user** about which personal data is in possession of the system and eventually to which other (public / private) entities data is transmitted according to the current legislation (e.g. INPS).

# USER JOURNEY & INTEGRATION STRATEGY

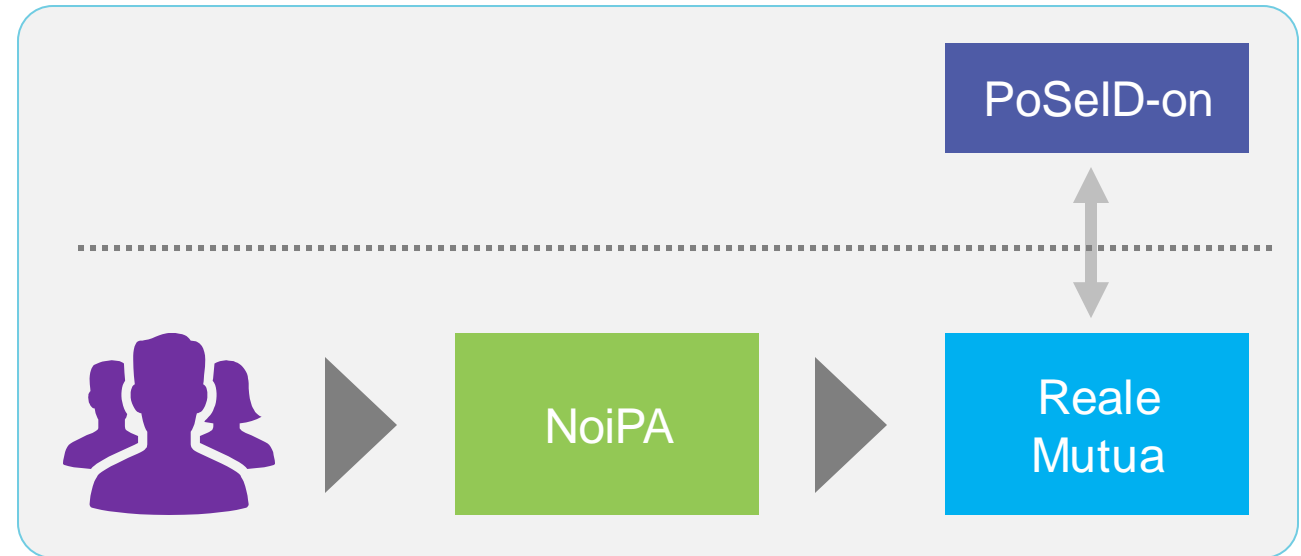


It's important to guarantee to the final user a **simple usage experience**, avoiding the “shift” between too many different systems (i.e. the NoiPA environment, the Reale mutua one, the PoSeID-on Platform): the working hypothesis is to **integrate the applications by only using APIs**. The final user will not interact directly with the PoSeID-on platform but only indirectly through NoiPA and Reale Mutua.

## SCENARIO 1 – RESIDENCE/IBAN



## SCENARIO 2 – INSURANCE



# FOCUS: INTEGRATION STRATEGY



How PoSeID-on is integrated

## FOR BOTH SCENARIOS

- PoSeID-on is integrated through APIs.
- A button opens the request of consent to data processing.
- PoSeID-on memorizes this operation.



APIs

Work in Progress!

# OUR INITIATIVE IN THE EU CONTEXT

**PoSeID-on in line with latest European Parliament resolution about Blockchain technologies**

- ✓ PoSeID-on: Blockchain and GDPR may coexist together

**PoSeID-on supports the delivery of Digital Public Services**

- ✓ Support the delivery of cross-border **digital public services** through the establishment of a **European Blockchain Services Infrastructure** after the **European Blockchain Partnership**

**PoSeID-on has been accepted by the EU Blockchain Observatory and may contribute to accelerate the digitalization of the EU**

- ✓ Our initiative was made known to the newly launched **EU Blockchain Observatory and Forum**

# POSEID-ON PROJECT

**HTTPS://WWW.POSEIDON-  
H2020.EU**

**POSEIDON** [www.poseidon-h2020.eu](http://www.poseidon-h2020.eu)  **@PoseIDon\_H2020**  **PoselDon Project**



# THANK YOU FOR YOUR ATTENTION

and enjoy the *IFIP* Summer School on Privacy and Identity Management!!!!