

# MULTI PASS

MANAGING THE CONSENTS OF ACCESS  
TO FARM DATA IN A CHAIN OF TRUST  
TO MAKE NEW SERVICES EMERGE FOR  
FARMERS



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# Let us look ahead to 2025...

**Context** : Mature technologies and plethora of offers at low cost enables data collection at the source . The farm becomes a data source unavoidable.

What will be the position given to the farmer in the information system (IS) of the farm, in a context of strong competition between its socio-economic partners ?



**The farmer is captive  
of the IS of his partners :**

Exclusive trade agreements between  
suppliers

Integrated solution not answering  
all the farmer's needs

**The agricultural R&D disconnected  
from the agricultural world :**

Difficulties of accessing to the data

Risk of innovation concentration

Impossibility to compare and estimate the  
innovative services



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**The farmer at the heart  
of the IS :**



New actors integrating data  
and valuing them  
Integrated solution answering  
all the farmer's needs

**An efficient agricultural R&D  
and representative of the  
agricultural world :**

More representative references  
Innovative services more reliable and  
bringing added value

# CHALLENGES FOR A CONSENT MANAGEMENT ECOSYSTEM

# Towards a widespread use of consents

Example of a consent use for data exchanges

**1** The farmer contracts with a service provider (company A) to manage his farm data.



Farmer



Company A

Farm data



Company B

**2**

Another service provider (company B) asks to access the plot data and specifies the data processing (use). Company A becomes a data provider for company B.

**3**

I allow company A to transfer my plot data to company B for the operation of tool X. The farmer must manifest his consent to share his data from the data provider to the service provider.



# Build a chain of trust

## Typology of actors in a consent management ecosystem

The **Right holder** is the person who has the rights on the data. The consent of this person is needed to exchange data. In the MULTIPASS project, she/he is a farmer or breeder.

The right holder has delegated to a person or an organization (i.e., a **delegatee**) the right to give consents on her/his behalf.



Right holder

Service provider

The organization that sells service to farmers and that needs an access to data. It is the beneficiary of the consent.

Data provider

The manager of the service (database) in charge of providing the data to the service provider.

Consent manager

The manager in charge of a consent management system.

Consent recorder

The organization that registers consents in the consent management system.

# Respecting good practices



DATA  
PRINCIPLES



CODE OF  
PRATICE



CODE OF  
CONDUCT



CHARTE



No labels



# Farmers' expression during workshops

## Opportunities

- practical
  - avoid re-keying (interoperability)
- economic & technical
  - dashboard
  - benchmark
  - collaborative
- Facilitate relationship with the administration
- Research and innovation

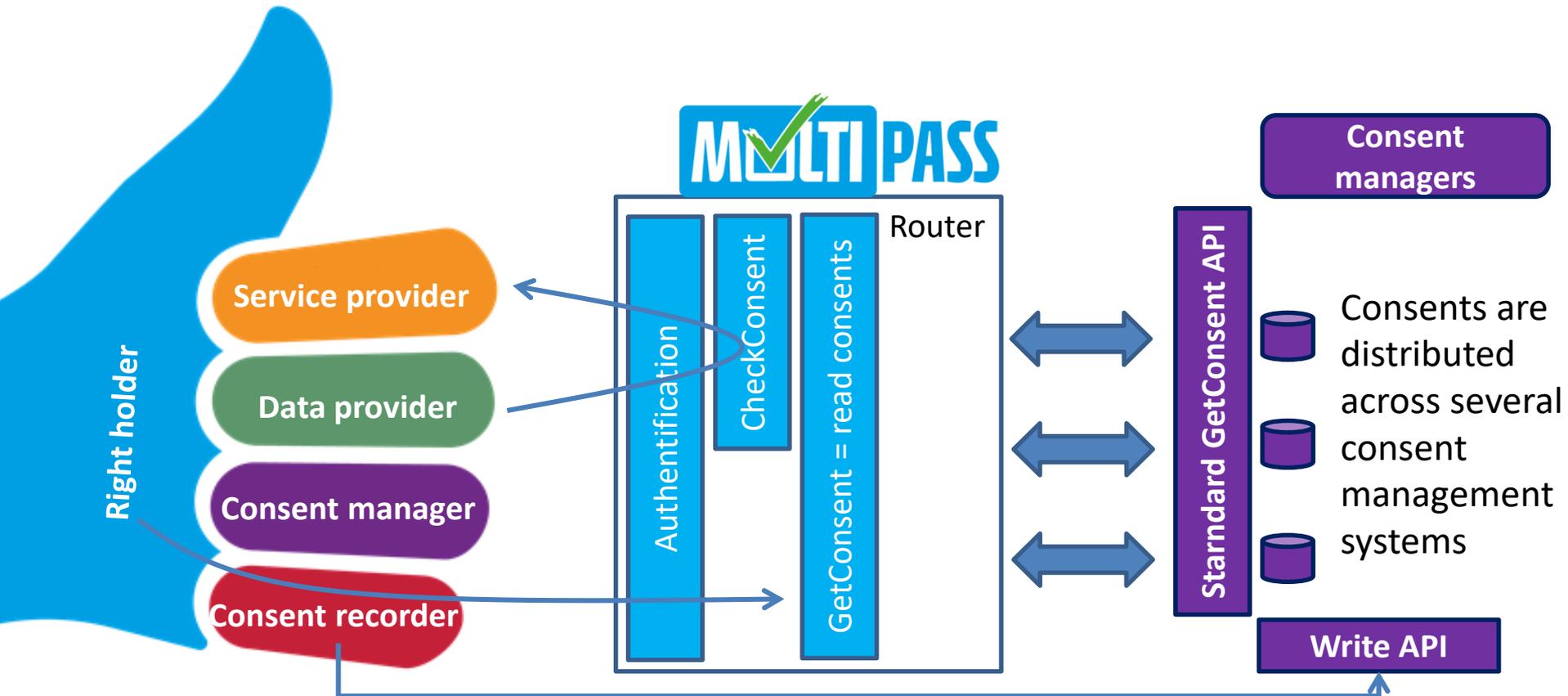
## Fears

- Misuse
  - commercial use
  - influence markets
  - targeted marketing
  - too much transparency about his interactions
  - access to accounting
- administrative controls
  - conditionality aids
  - regulation

("Repressive policy" - "no right to error")

# IMPLEMENTATION OF THE MULTIPASS ECOSYSTEM

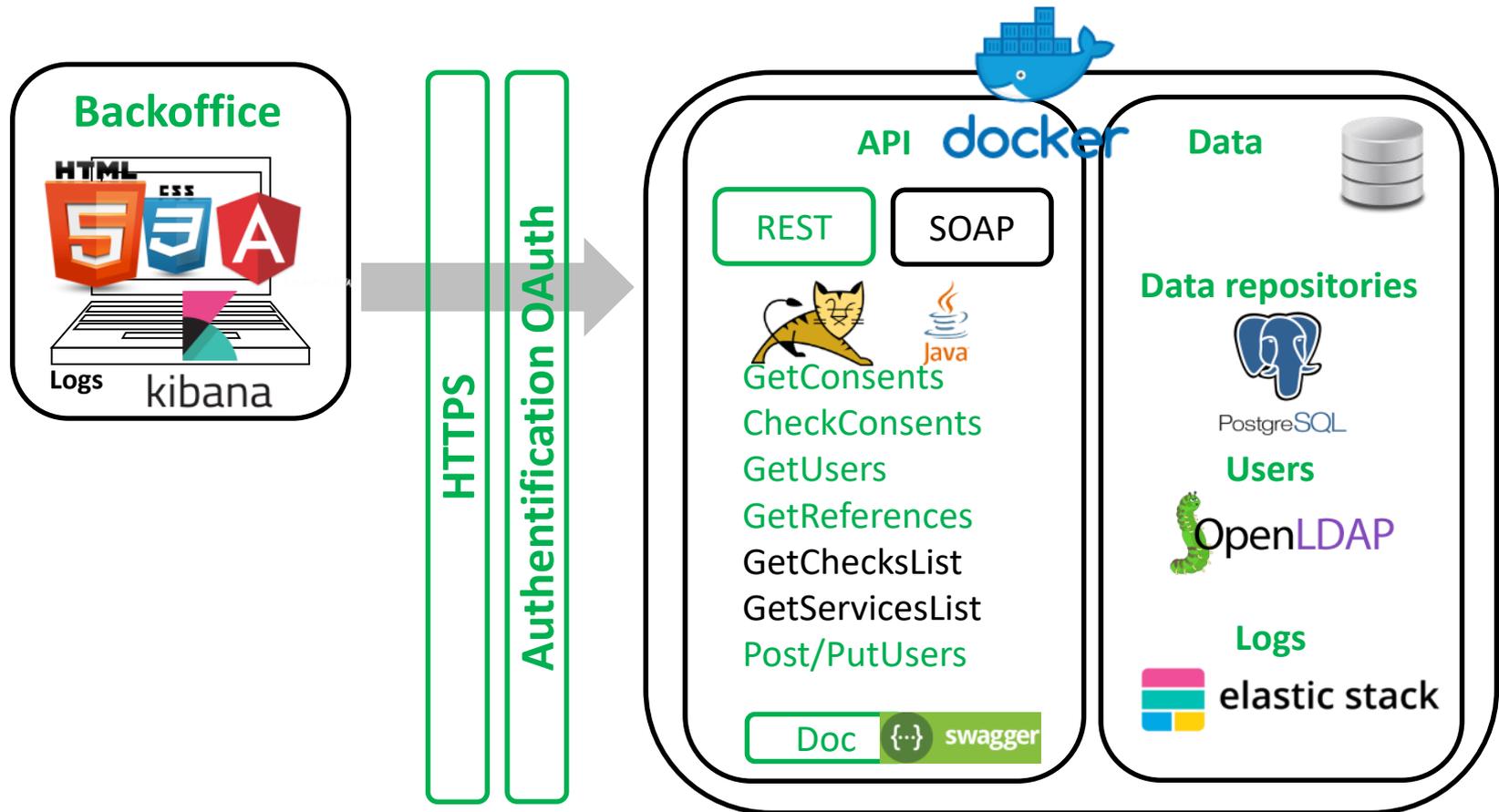
# Proposed architecture (simple)



- The router provides an actor with an exhaustive view of her/his consents -> transparency
- A right holder does not interact with the router -> consent recorder
- The router also allows a data provider to check if the consent required for a data exchange exists

- Write operation is independent from the router
- Write APIs are based on typologies and a common description of a concept

# Technical architecture



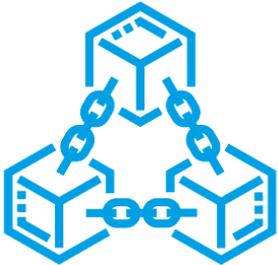
# Conditions for ecosystem interoperability

SIRET number of the farm (data producer)	<b>WHO: actors of the data exchange</b>
SIRET number of the service provider (beneficiary)	
SIRET number of the data provider	
SIRET number of the consent recorder	
Data categories	<b>WHAT: What is the data exchange about</b>
Use case (codes)	
Use case description (free wording)	
Consent beginning	<b>Scope of consent</b>
Consent end	
Restrictions on consent (and data): (optional free wording)	
Anonymisation	<b>Constraints</b>
Contract (explicit, implicit ...) : If yes, contract reference or terms of use	
Reversibility of the consent (not possible if based on a contract)	

## Description of the concept of consent

DISCUSSION  
CONCLUSION

# DISCUSSION



- A Blockchain could constitute the ecosystem on its own, but the challenge at this stage is to explore its promises in terms of trust decentralization. For this, in the second phase of the project, two consent management tools will be compared within use cases. The first one is based on a trusted third party (France Génétique Elevage, 2016) and the second one will be based on Blockchain technology.



- MULTIPASS does not have the ability to interfere with consent management systems. They have to verify that the person who registers a consent is the one for whom the consent is given. It is therefore recommended to clearly identify the users with the creation of identity providers for agriculture, as there are elsewhere (French administration, Google or Facebook).



- Finally, it is the responsibility of the consent manager to ensure the legal value of the consents collected. The participants of the MULTIPASS workshop held on Sept 27th, 2018 (bringing together socio-economic partners of the farmer) highlighted the overlap in the regulatory bases of contracts and consents. There may be a risk of contradiction between a consent and a pre-existing contract.

# MULTI PASS



Consents

Demonstrate the benefits and feasibility of a consent management ecosystem

Proof of concept for interoperability between existing and future consent management systems.

POC



Open INNOV

Avoid the risk of concentration of innovation  
Bring new knowledge and new services by the analysis of massive farm data, in a chain of trust