

EASME - European Commission

Executive Agency for Small and

Medium-sized Enterprises

Big Data and B2B platforms: the next big opportunity for Europe EASME/COSME/2018/004



Brussels 17 Sept 2019



#### **Items**

Outcomes from the first workshop – The User's choice and the Privacy

Outcomes from the first workshop – Development and approval of services

Registration – Approval of Services and Providers

Registration – The user's choice and the Privacy

User as a driver – Privacy for each ride

User consent management under a single policy: The vehicle is just the terminal device

Consent management on Streaming data: Attribute Based Access Control

Consent management on Data at Rest: Data containers



# Outcomes from the first workshop – The User's choice and the Privacy

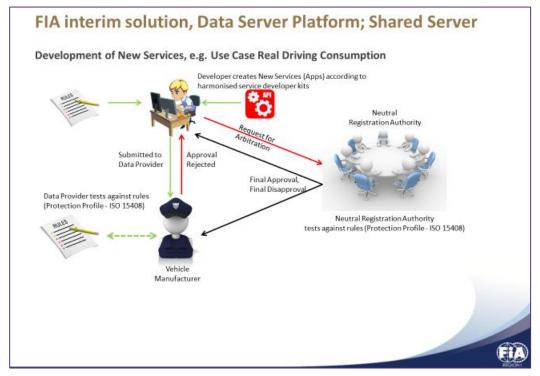
- ✓ The user must be **free to choose** the service provider.
- ✓ C-ITS Platform and Working Party 29 conclude that data derived from a vehicle should be qualified as personal data.
- ✓ The users **should be giving their consent** for the data used by the service provided.
- ✓ The users should be giving their consent **for using the data during a trip** or a time-period and may recall it anytime.



#### Outcomes from the first workshop – Development and approval of services

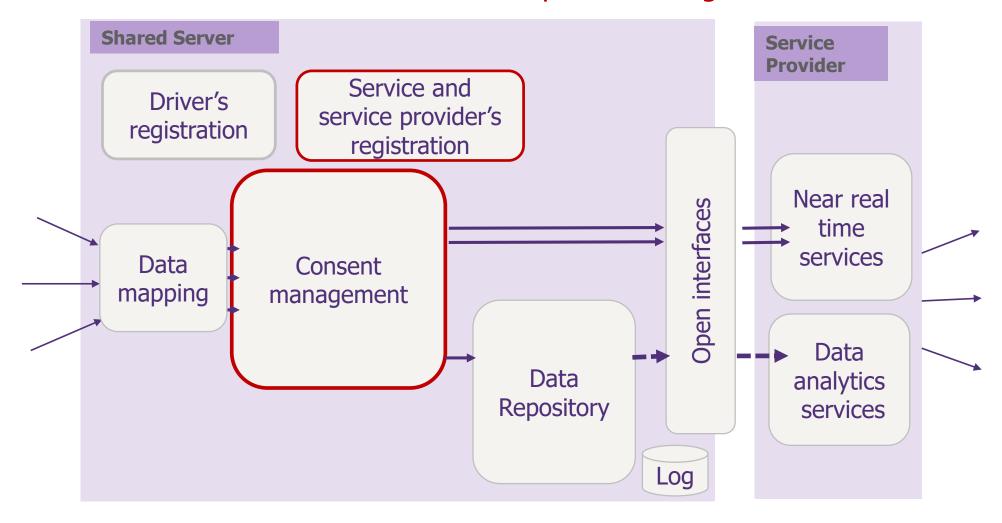
 ✓ Service providers should submit apps for registration and approval by the Shared Server operator and OEMs under the supervision of a Registration Authority, before they become available to the users.

- ✓ Limit data access to the necessary data, to provide a specific service.
- ✓ The purpose of which the data is used must be known.



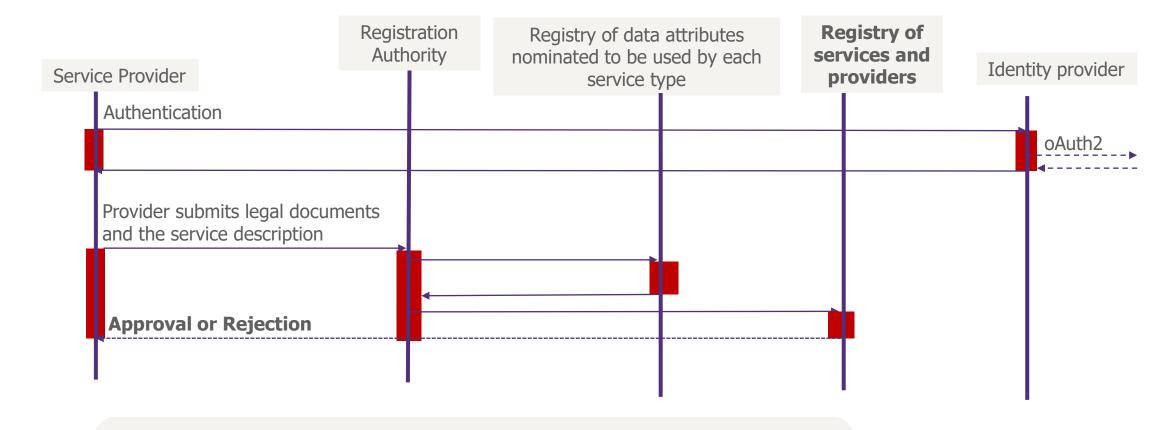


## The main roles - Service and service provider's registration



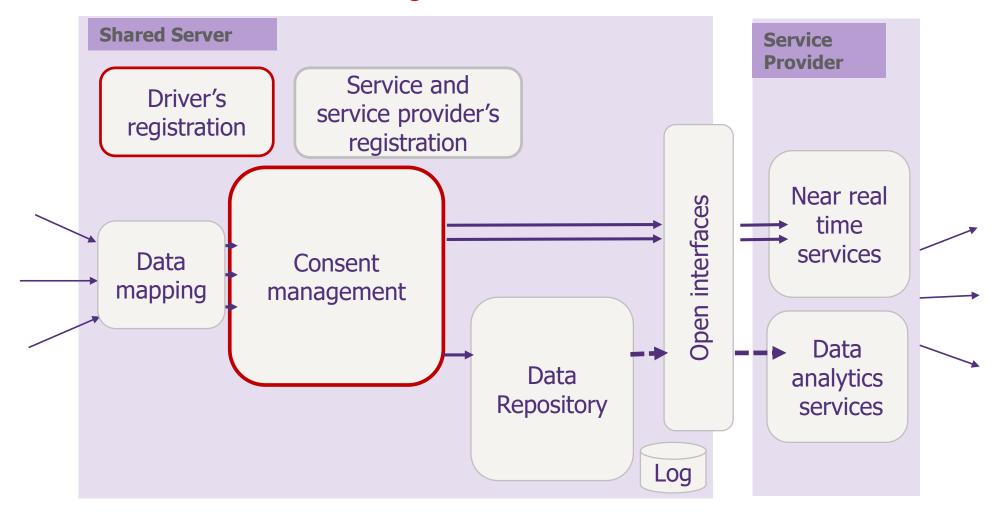


#### Registration – Approval of Services and Providers



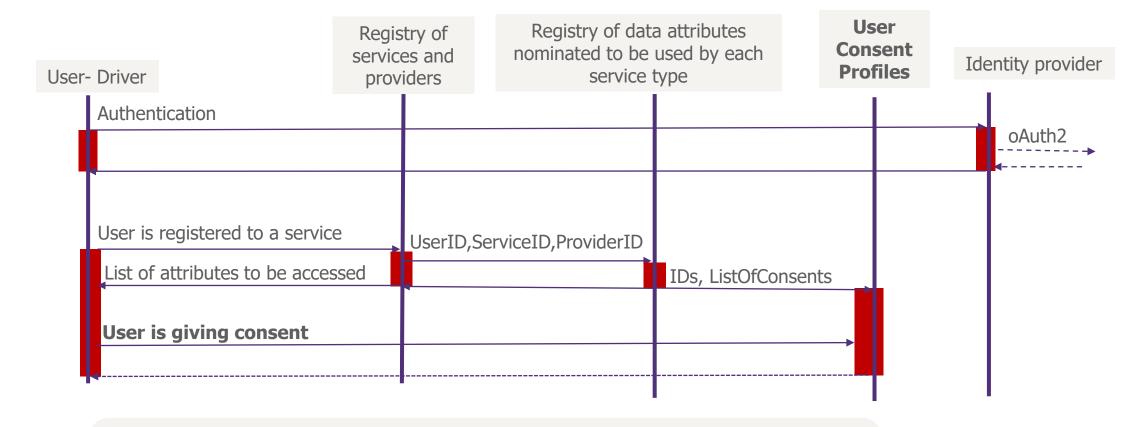
Each registered service uses data attributes that have been declared in advance.

## The main roles – Driver's registration





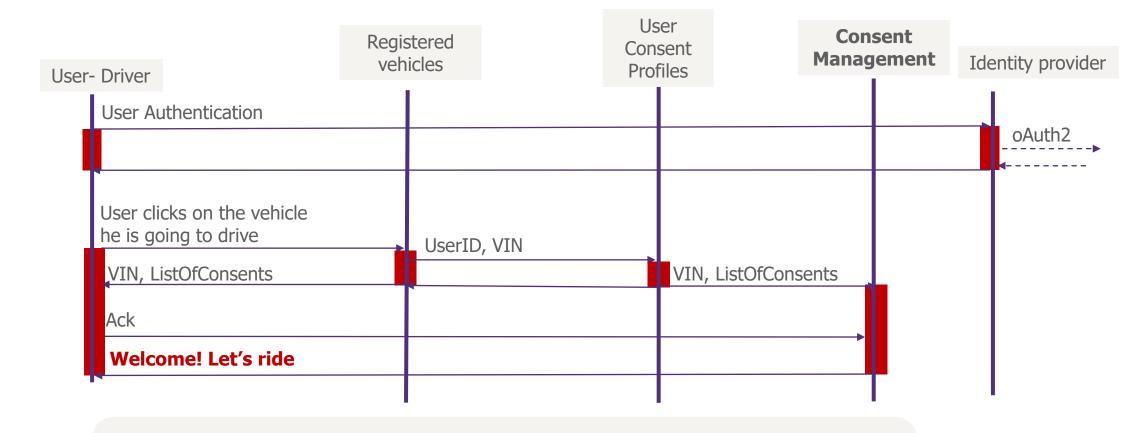
#### Registration – The user's choice and the Privacy



The user is giving his/her consent allowing specified data attributes to be used for each service.



#### User as a driver – Privacy for each ride



During a ride the VIN number of the vehicle is joined with user consents feeding the Consent Management engine of Shared Server

#### User consent management under a single policy: The vehicle is just the terminal device



We empower users by ensuring their **right to self-determination regarding their personal data.** 



Registration Authority monitors the data required by the service providers classifying them in predefined types of data access.



User declares his/her preferences about services and service providers and the Shared Server replies with a set of predefined needs of user's consents.

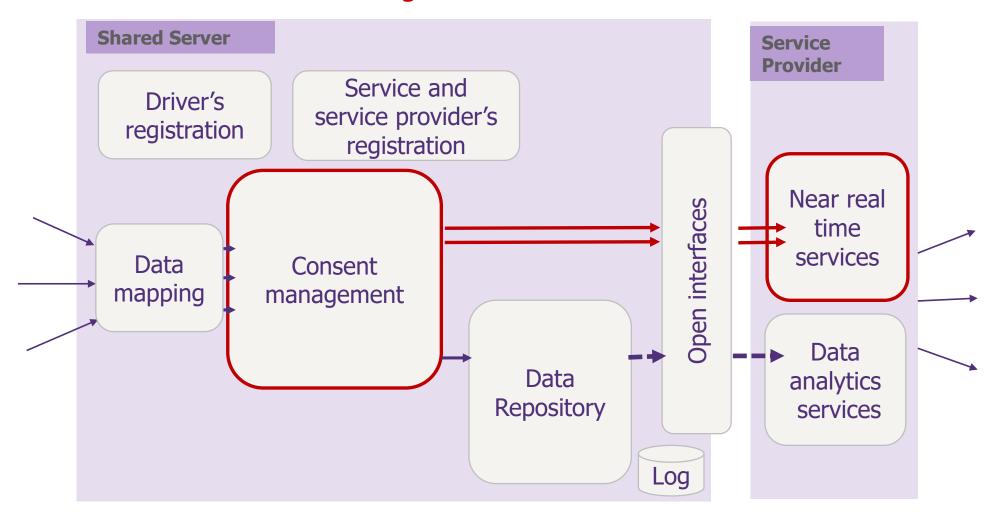


User's consents are managed **under a single policy in a fine-grained way** deepening into a single trip.

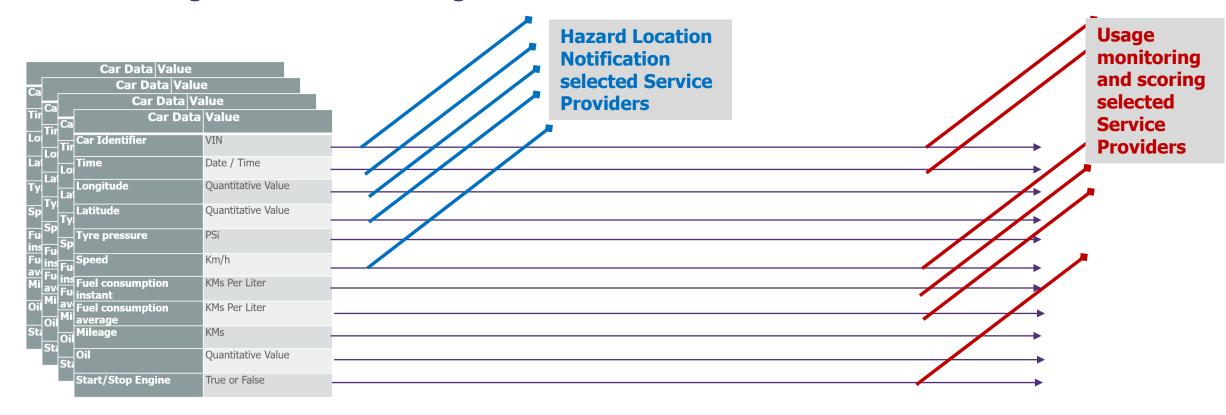


The vehicle is just the terminal device his/here the user is logging in during a trip and his/her consent policy applies.

# The main roles – Streaming data and consent



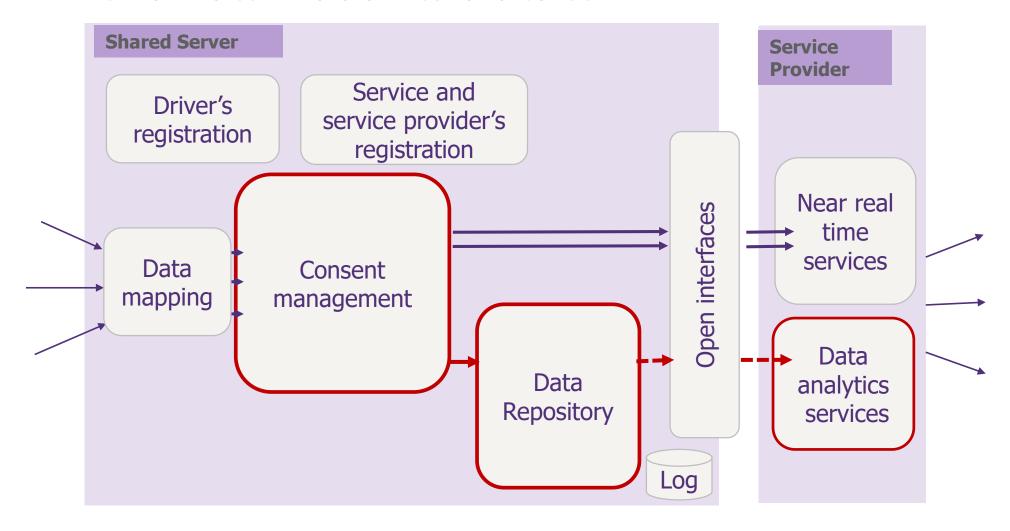
#### Consent management on Streaming data: Attribute Based Access Control



# Less than 300ms for ABAC on streams That's a CHALLENGE



#### The main roles – Data at Rest and consent





## Consent management on Data at Rest: Data containers



The data attributes are grouped by their consent restrictions and they are stored **in data containers** maintaining the purpose of data processing.

**Data containers**, actually are the "Data at Rest" product of Shared Server and they will be preserved in the Data Repository



Data at rest would be provided as raw data or cubes by several dimensions via an API. May also become available to service providers via direct access to SQLdatabase or nonSQL data storage.

In light of AI applications demand for data is expected to be more intensive giving opportunities for the development of **new business models and joint ventures** in the area of data marketplaces



Data containers are naturally supported by Azure platform.





#### The main roles

