

Blockchain and the City Challenge Use Case 2 Summary

Events hosted by La Ruche Industrielle, Lyon, France 17 October Introduction and Workshop 13-15 November Hackathon and Workshop



Know Your Customer and Distributed Identity

Use Case Context: Subscriptions and cheap rates

The Société Nationale des Chemins de Fer Français (SNCF), the French National Railway Company, is a company close to the French state. As such, SNCF has been entrusted with public service missions. In particular, SNCF must offer special rates to people in need (such as job seekers, asylum seekers, disabled people, etc.) or to the police.

These specific rates are financed by the French administrative regions. They are described in agreements signed between the administrative regions (the state) and the SNCF regions. Indeed, SNCF has duplicated its organization within the state. For each administrative region, a twin organization has been created within SNCF.

In order to have an access to these offers, customers must provide proof or documents proving that they are entitled to this rate. For example: proof that the person lives in the designated area. This kind of proof is delivered by public companies such as EDF or La Poste. By filling out a form and providing these documents, customers receive a card that allows them to buy tickets with special rates.

As an example, following is the list of discounted TER offers on France. From left to right, the columns are The French region; For each region, the specific offers; And for each offer, the eligible people. Each subsequent column represents a document that the customer must produce to benefit from the reduced rate: the "proof."



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Currently, the application form used to get a subscription is a paper form. Customers must complete it and send all their documents by mail. SNCF classifies the documents by hand and prints a subscription card that is sent to the user. These subscriptions are only valid for one year. Every year, customers must renew their request by filling in the form again and returning all the different requested documents.

The process is complicated for SNCF and its customers. For this reason, SNCF plans to dematerialize this registration process.

Use Case Expectation: Dematerialization of the registration process and simplified verification of compliance

To achieve this, several solutions are possible with or without blockchain. The dematerialization without blockchain could bring a big improvement but it would have limits, such as:

- GDPR
- The difficulty of checking the validity of documents
- The complex process for customers who will have to, for example, scan their paper documents or renew their subscriptions each year.

Adding the blockchain could help remove these limits by:

- Using distributed identity
- Signing the documents provided by the different social organizations

Candidates should carefully propose a blockchain-based solution that:

Is simple for customers



- Improves the traceability of requests
- Is GDPR compatible
- Offers transparency to the regions
- Facilitates secure data exchanges between the different partners.

Use Case Assets:

Hardware

• Tbf. SNCF will provide some data, specification and hardware as inputs

Digital Assets

- No requirement on blockchain technology
- OS code preferred

Should you have any questions:

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