instituto de
telecomunicações

universidade
de aveiro

GSMA
Open Gateway

More details in our microsite:
https://atnog.github.io/gsma-open-gw-apis/

◎ Filipe Sousa,   114196
◎ Igor Coelho,   113532
◎ Luis Godinho,   112959
◎ João Capucho,   113713
◎ Zakhar Kruptsala,   114478

Context

◎ Introduction of advanced capabilities in 5G Networks

◎ Interest in providing such capabilities to customers

◎ Need for developer centric interfaces

State of the art

Related work

Early adoption

◎ Development by Ericsson

◎ Adoption in the Middle East and North Africa

◎ Deployment in France
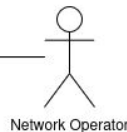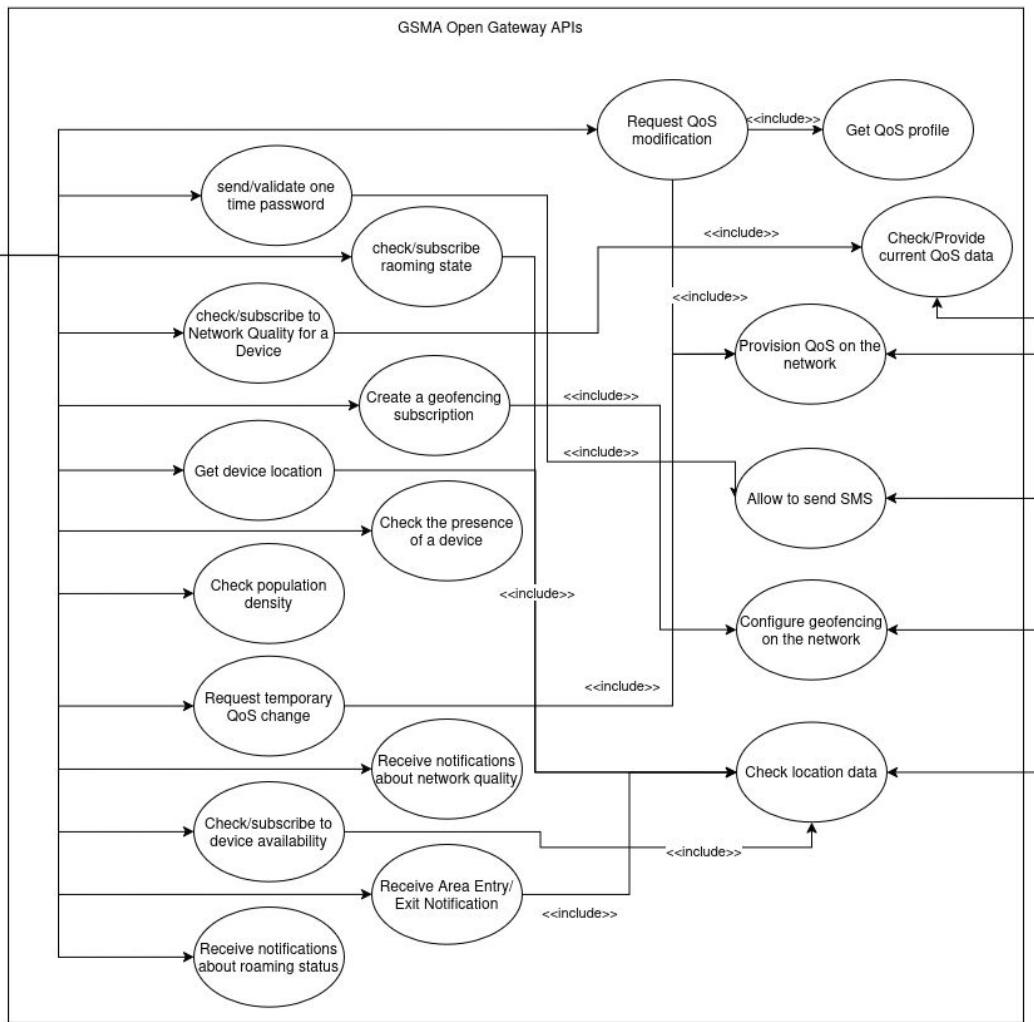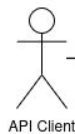
Target Audience
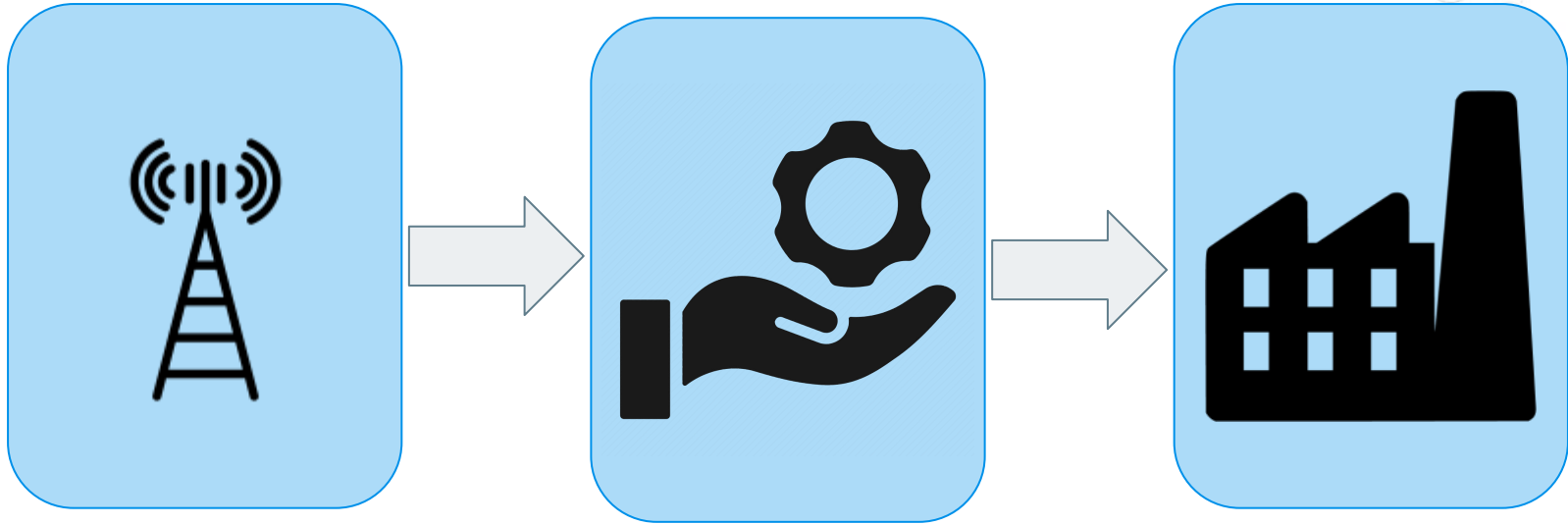
Business (MNO)

Business

Consumer

Use Cases

Functional Requirements

The APIs should:

◎ Allow subscription to location based notifications

◎ Allow the retrieval of the population density in a given area

◎ Allow developers to define Application Profiles for Quality of Service

◎ Allow retrieval of existing Quality of Service profiles on a network.

◎ Allow phone number verification and validation through SMS OTPs

◎ Allow checking whether a given device is available on the network

◎ Allow subscription to device state change notifications
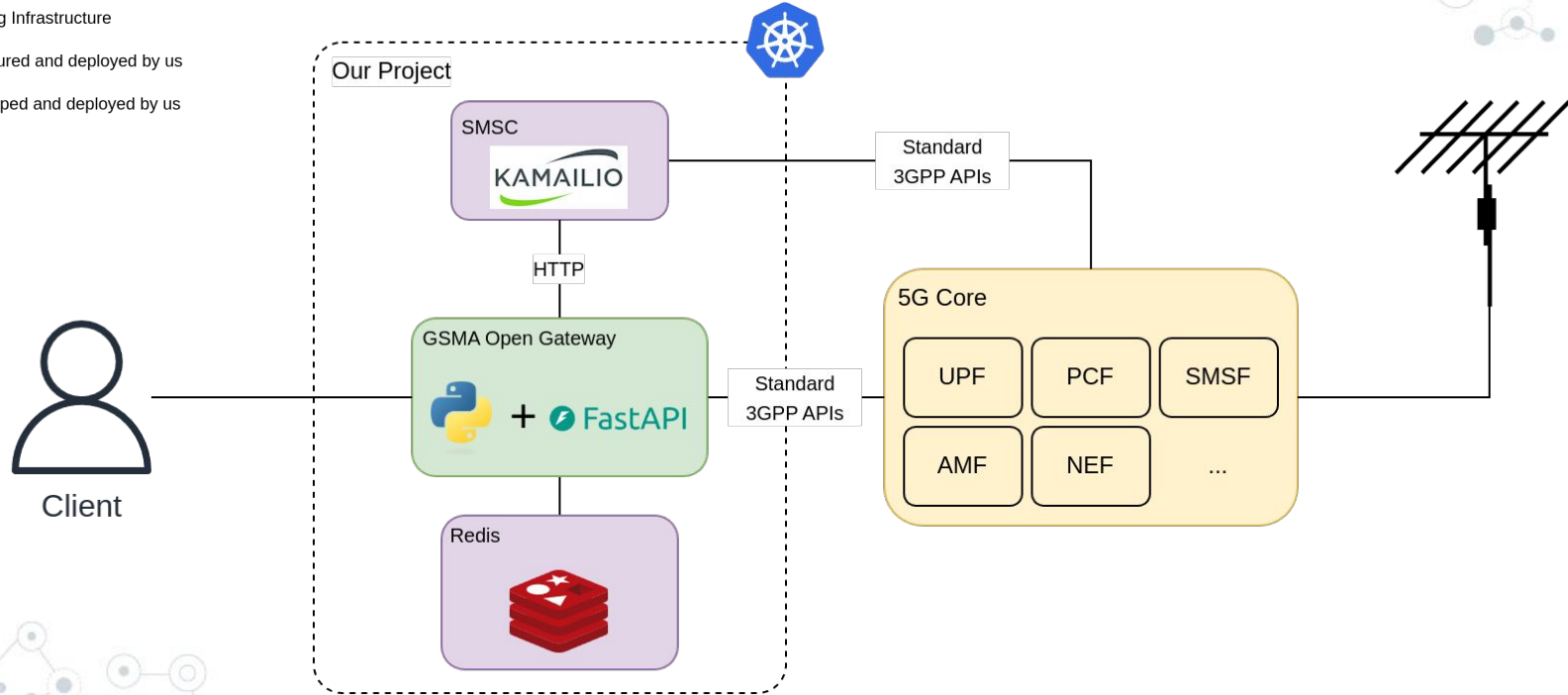
Non-Functional Requirements

The APIs must:

◎ Maintain consistent 100ms response times as users/data volume increases

◎ Guarantee support for at least 10 requests per second

◎ Have a high reliability level, as in over 99.9999%

◎ Have a high availability, such as 99% uptime

Additionally Maintainability, Portability, and Usability concerns should be met

Architecture: Ideal

Architecture: Reality