

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



A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. Some nodes are highlighted with blue circles, and others with blue dots. The lines are thin and gray, creating a mesh-like structure.

State of the art

A decorative network diagram in the bottom-right corner, similar to the one in the top-left. It shows a network of nodes and lines, with some nodes highlighted by blue circles and others by blue dots.

Related work



Early adoption

- © Development by Ericsson
- © Adoption in the Middle East and North Africa
- © Deployment in France



ERICSSON



Google Cloud



T Mobile™

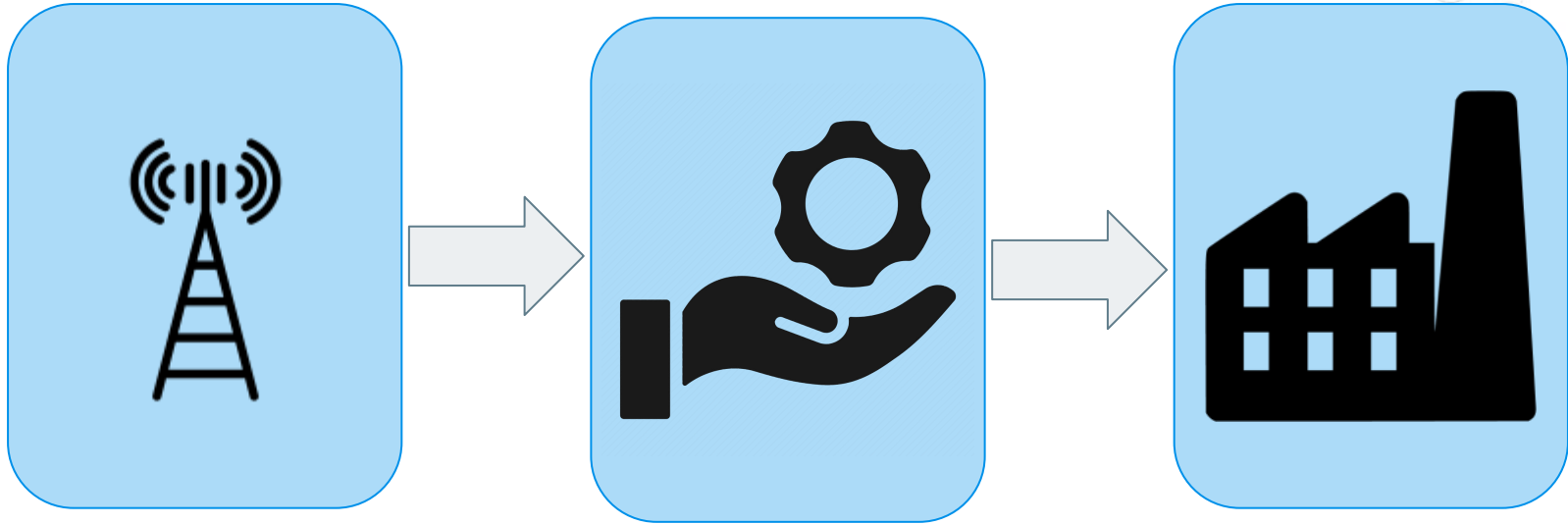


free



INTEGRATED
communications

Target Audience

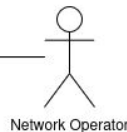
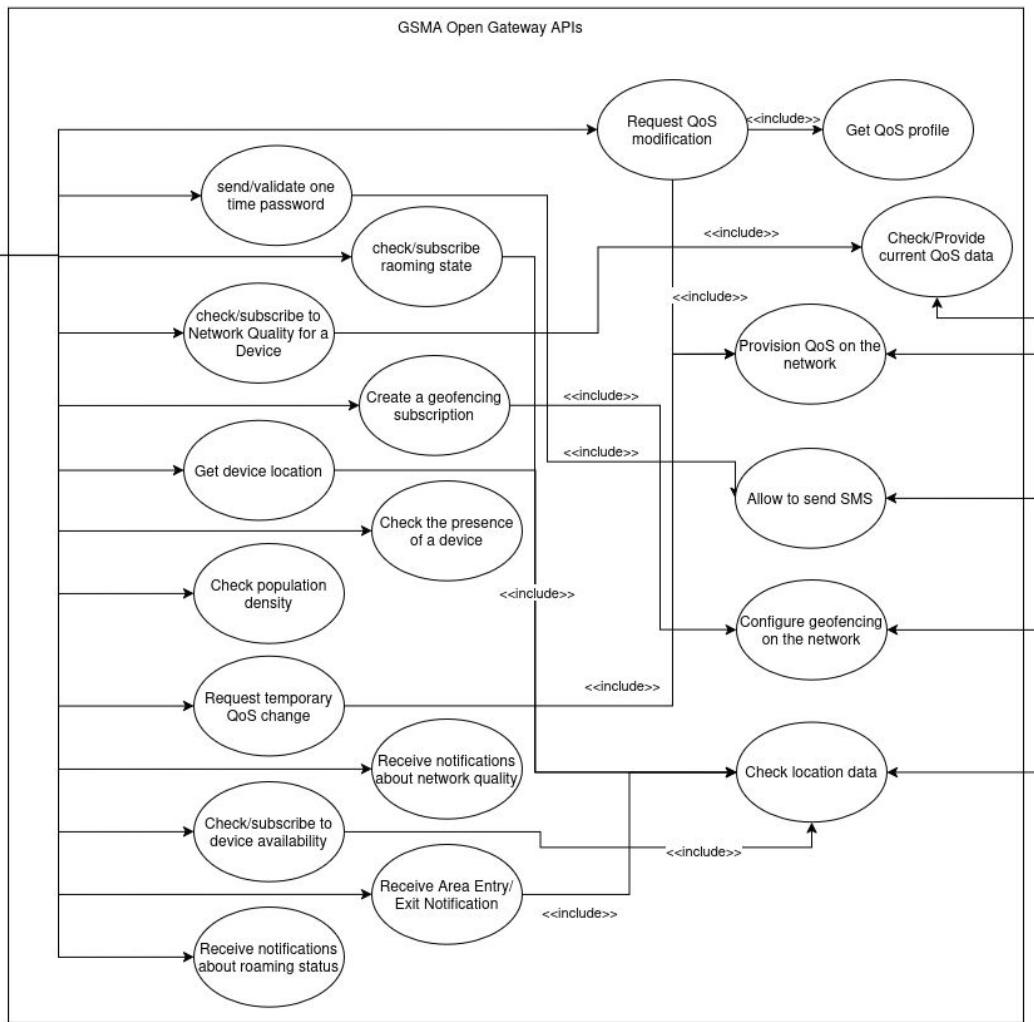
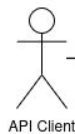


Business
(MNO)

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

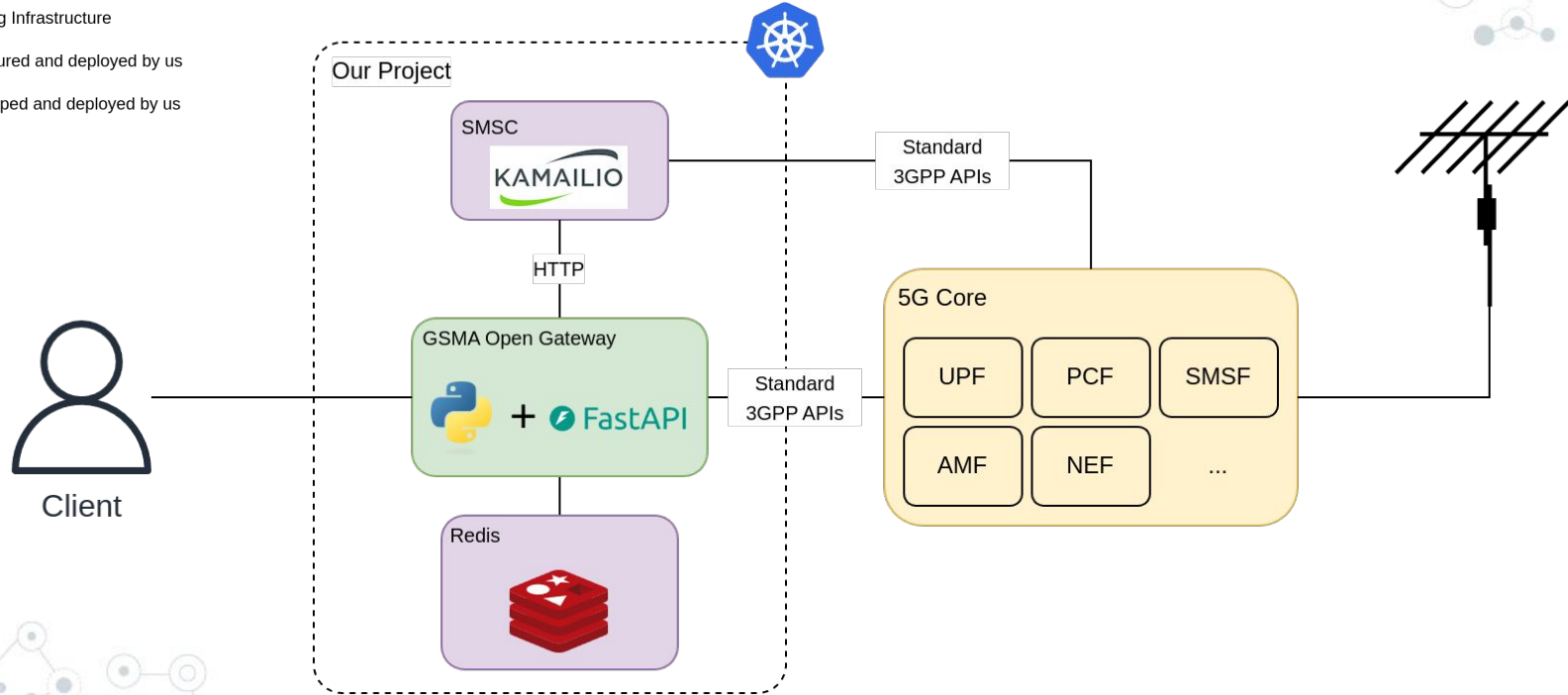
The APIs must:

- ⦿ 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

- Existing Infrastructure
- Configured and deployed by us
- Developed and deployed by us



Architecture: Reality

