



PortForward

Creating the port of the future

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Current scenario

Nowadays, transport centres are in the need of new, innovative solutions that allow them to be more efficient, sustainable and user-centred. Ports are no exception to this situation, with some important challenges identified but not solved yet.

Some examples of these challenges that need to be addressed are: lack of efficiency in its operations, no real time monitoring of freight flows, no

monitoring and management of maintenance, cargo or passengers, no relation with its surroundings and notable environmental impact due to its activities.

The approach of PortForward project aims to provide a solution to some, or even all, of these challenges and to start shifting from the actual, traditional, port model towards the port of the future.

This change of course will be produced with the next approach.

Approach

To ensure that the system can be replicated and can cover different needs of the ports, Portforward will provide the design and implementation of a generic, scalable and interoperable architecture:

SCALABLE

The architecture will be modular enough to guarantee its scalability through replication of infrastructure and services.

GENERIC

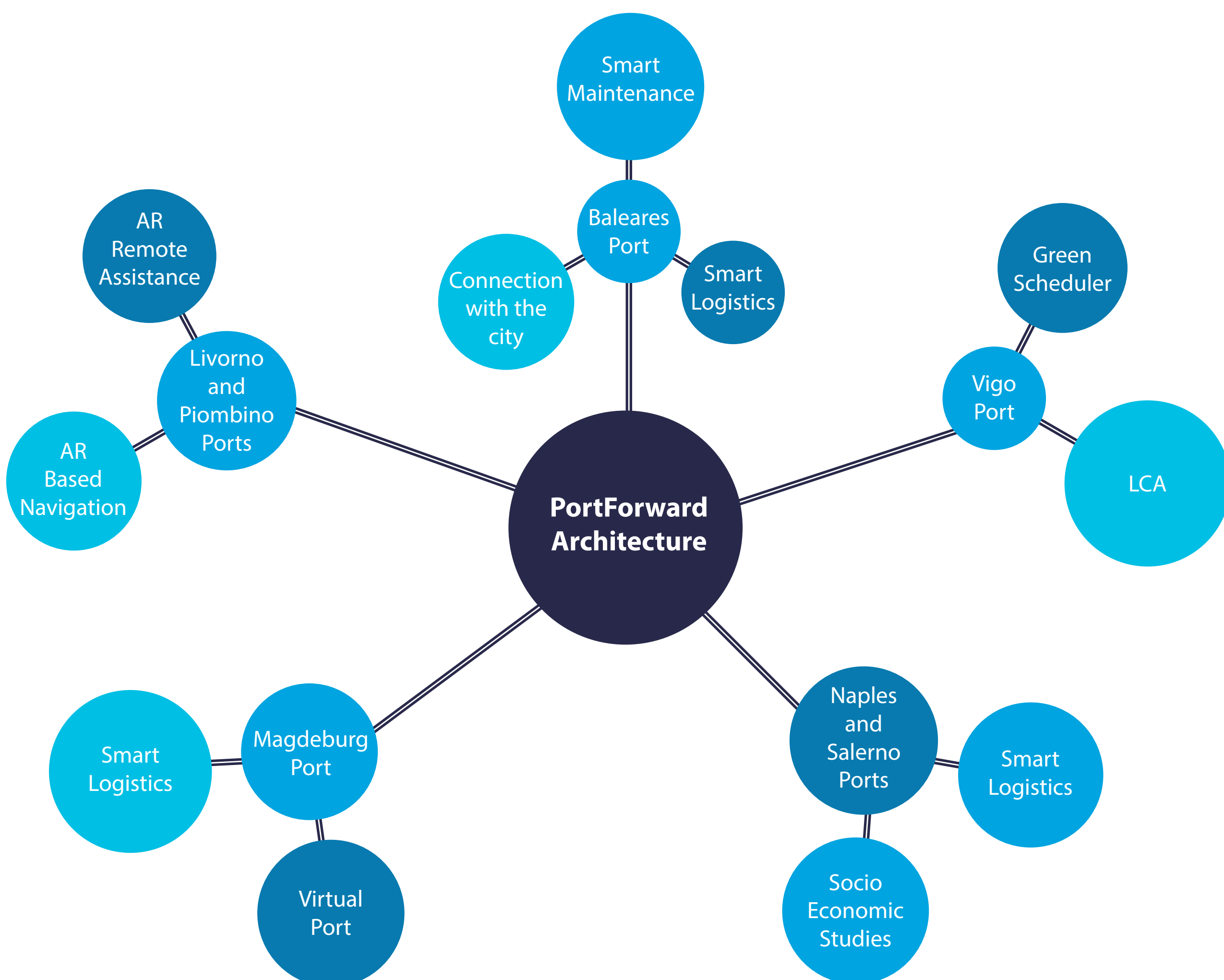
The services contemplated in the architecture will provide generic input interfaces and provide generic outputs, so each one is able to interact easily with the other services.

INTEROPERABLE

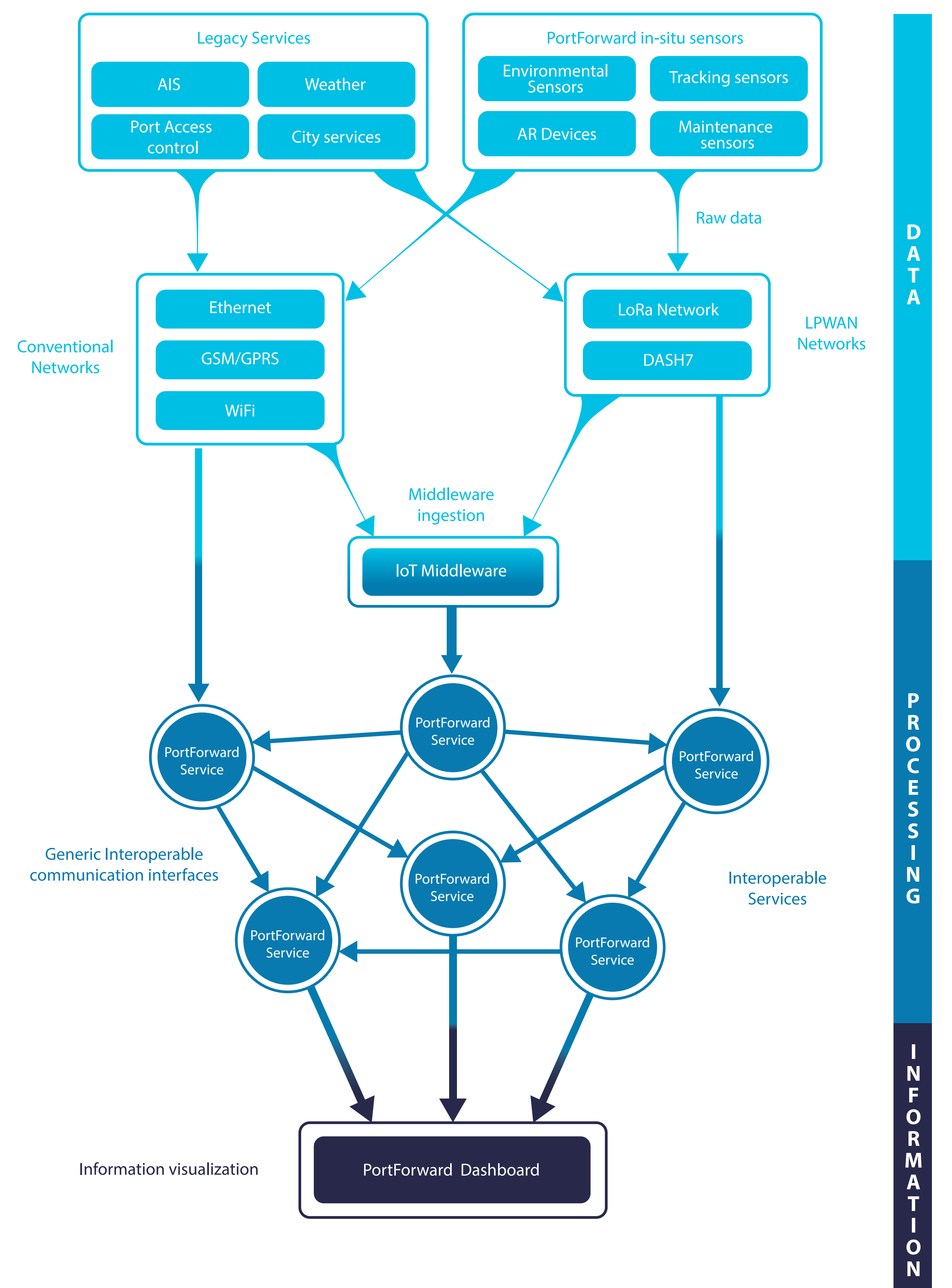
The general inputs for the architecture, as well as the outputs, will be as generic as possible, so the PortForward frameworks, its systems and devices could be easily integrated into the already available systems of the port.

Demo sites

For the demonstration of the PortForward framework, five use cases have been chosen to implement the different developments identified in the scope of the project.



Architecture



Timeline

