

## Sønderborg ICT Platform



### Main sector

- ICT urban platform

### Overview

Sønderborg's long term vision is to build a Digital Ecosystem for city data and services by integrating various data inputs and sensor systems together into one city ICT platform, where anyone could add their own Value Services on top of provided city platform.

Sønderborg's ICT solution is a Telia smart city service, localized for Sønderborg city and partner's needs. This solution was first introduced in Tartu city in 2018 and after successful introduction, it was deployed in Sønderborg.

The ICT solution consists of multiple separate modules:

1. Telia IoT platform for easy integration of any sensor systems,
2. Data Access Layer (DAL) for authentication and content management. This layer also introduces an API for third party access to the data,
3. Data Mapping Tool as a technical service for describing and allocating data for end-users,
4. City Portal for end-user access to City and personal data.

On top of the IoT platform and other data inputs, one of the most important parts of the ICT solution is Data Access Layer (DAL). This is a secure gatekeeper module between data producers and consumers. All authentications are controlled by DAL, also sharing, delegation information and consent management is handled in this module. These are the components to secure the data and ensure the GDPR compliance.

City Portal includes two strictly separated parts - Open Data portal and My Data portal. Under the Open Data part of the portal, everyone can see, free of charge, the data that has been published by the city or building owners.

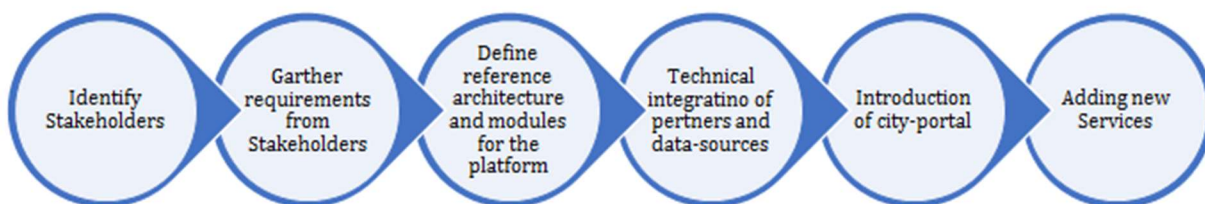
For the My Data part of the portal, Danish national NemID hard-authentication options are used - meaning every Danish citizen can log in conveniently without a separate user-account



needed. After login, a person can see all the data related to him/her and the data that is shared or delegated for him/her.

Technically the ICT solution consists of multiple services and technologies that are interconnected through API's. Some of which are only for internal use to ensure the future proofness by modularity, where all the modules can be changed in the system, without changing the whole system itself at once. The rest of the API's are open to be used by partners who have joined the ecosystem and want to utilize one or multiple benefits of the Sonderborg Digital ecosystem.

**Process**



**Benefits**

- enhance automation and thus also increase optimization;
- gather all relevant city-wide data into one innovative platform;
- allow 3<sup>rd</sup> party applications on top of local ICT platform;
- enable to cross-use data on a city, building and apartment level;
- enable to monitor the functioning of systems;
- increase citizens' awareness of their energy balance and thus allow the residents to make better-informed consumption decisions.

**Stakeholders**

<b>Owner of the solution</b>	Sonderborg City, ZERO
<b>Service/technology provider</b>	Smart City platform/ Telia
<b>Users</b>	Citizens
<b>Investors</b>	H2020, Telia

**Investment/Finance:** Ca. 1 Mill. €

**Contact**

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