

Open and Unified Framework to Interconnect Sensing IoT devices, data and application (oneM2M and OCG)

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«.....when selecting an IoT platform?"

- Avoiding Vendor Lock-In
- Costs (including follow-up costs)
- Integrated Security & Privacy
- Scalability (more connected sensors)
- Future-Proofing (new features and supported use-cases)

Making a choice is still challenging!

We connect standards





The Future Lies in Coexisting Standards



- A common platform that supports both standards broadens the spectrum of potential applications that can use it.
- Application developers can decide whether they want to connect by using oneM2M-APIs or SensorThings API.
- Both standards together cover more features than one standard alone.
 - STA for example focuses on collecting observations in a dedicated data model in a geospatial-enabled way.
 - oneM2M also covers lower layers e.g. it defines interworking with connectivity technologies defined in 3GPP.

Same same but different

- OGC SensorThings API:
 - Specialized and lightweight, designed specifically for geospatial and sensordata with a RESTful API focus on sensors.
 - Ideal for sensor and geospatial data-focused applications, such as environmental monitoring, smart cities, weather stations, and location-based monitoring.
- oneM2M:
 - A generalized IoT platform for interoperability and compatibility across multiple protocols and ecosystems.
 - Suited for a wide range of IoT applications requiring interoperability and scalability across multiple domains, like smart homes, smart cities, industrial IoT, and mobility solutions.





Interworking in Practice



 In the EU-funded project mySMARTLife we connected the Hamburg SensorThings API with a Deutsche Telekom T-Labs Platform based on oneM2M







Hamburg

More liveable space for more residents

The Free and Hanseatic City of Hamburg is the second largest city in Germany, with its 1.8 million inhabitants in the city adding up to 5 million inhabitants in its metropolitan region. Hamburg is a city as well as one of the 16 federal German states. Economically and culturally, Hamburg is the centre of Northern Germany and one of Europe's most liveable and commically strangest cities. Therefore, Hamburg is undertaking great efforts to put its Smart City approach into reality by using smart technologies and implementing numerous interdisciplinary pilot projects. And Hamburg is still facing a growth trend; especially younger people are attracted be the city's dynamic economy and the large number of Jobs, by the variety of educational institutions and the large range of leisure facilities and cultural opportunities. The aim of the current town planning is to find spaces within the existing areas as well as opening up new development opportunities. The city wants to create additional, high-quality urban spaces by the water, offering homes, Jobs, leisure and recreation.

Have a look at our public deliverables D3.1 and D3.2 to learn more.