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

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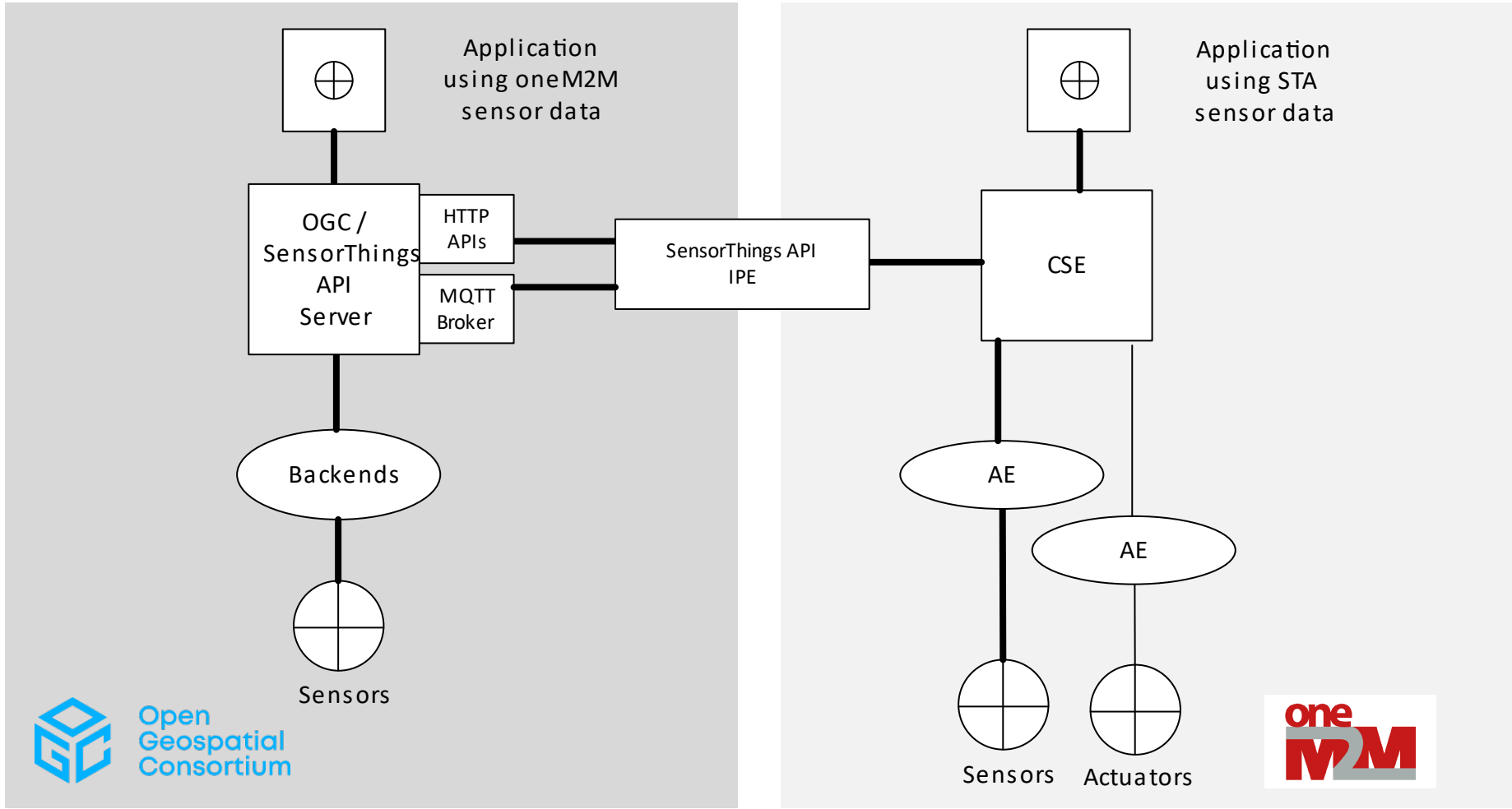
What are the key factors…

«…….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

URBAN DATA PLATFORM HAMBURG