



# oneM2M global IoT standard - Overview

**oneM2M**  
The IoT Standard

**72<sup>nd</sup> Technical Plenary & Industry Day Workshop**

Imperial Lexis Hotel, Kuala Lumpur, Malaysia  
10th Nov - 14th Nov 2025

Hosted by

KETI TTA **oneM2M** ETSI MTSB

Sponsored by

indico GLOBAL Funded by the European Union

Industry Day Workshop: oneM2M Session

12 November 2025 // Kuala Lumpur, Malaysia

Roland Hechwartner

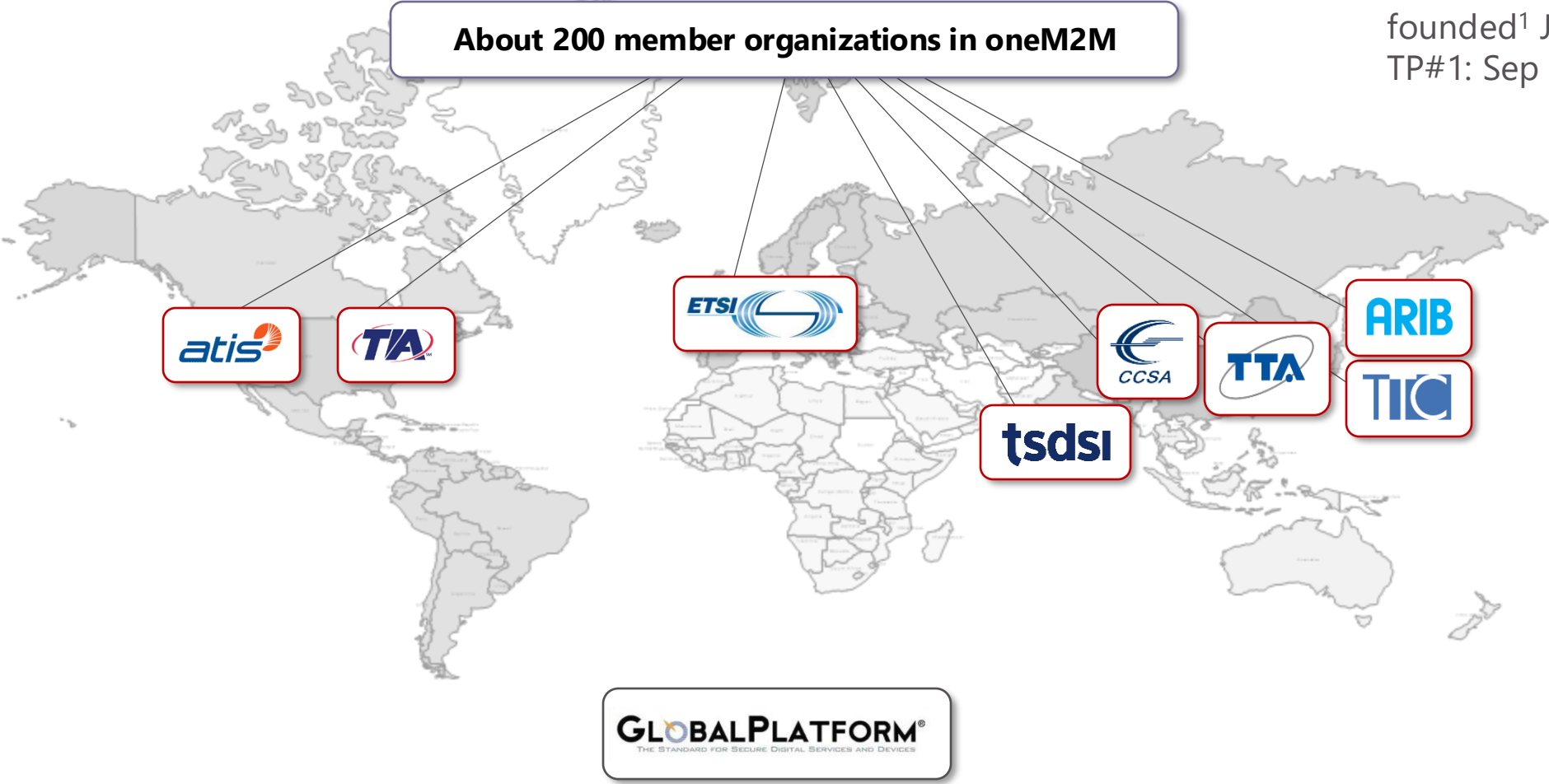
Chair oneM2M Technical Plenary / Deutsche Telekom

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- The **oneM2M** Partnership Project
- To **Overcome the Fragmentation** in the IoT Space
- The **Common Service Layer Toolkit**
- **A little bit of history**: highlighting key-events
- **Insights** - Learnings from Deployments
- What's Next? - **Future Features**
- Takeaways

# oneM2M Partnership Project

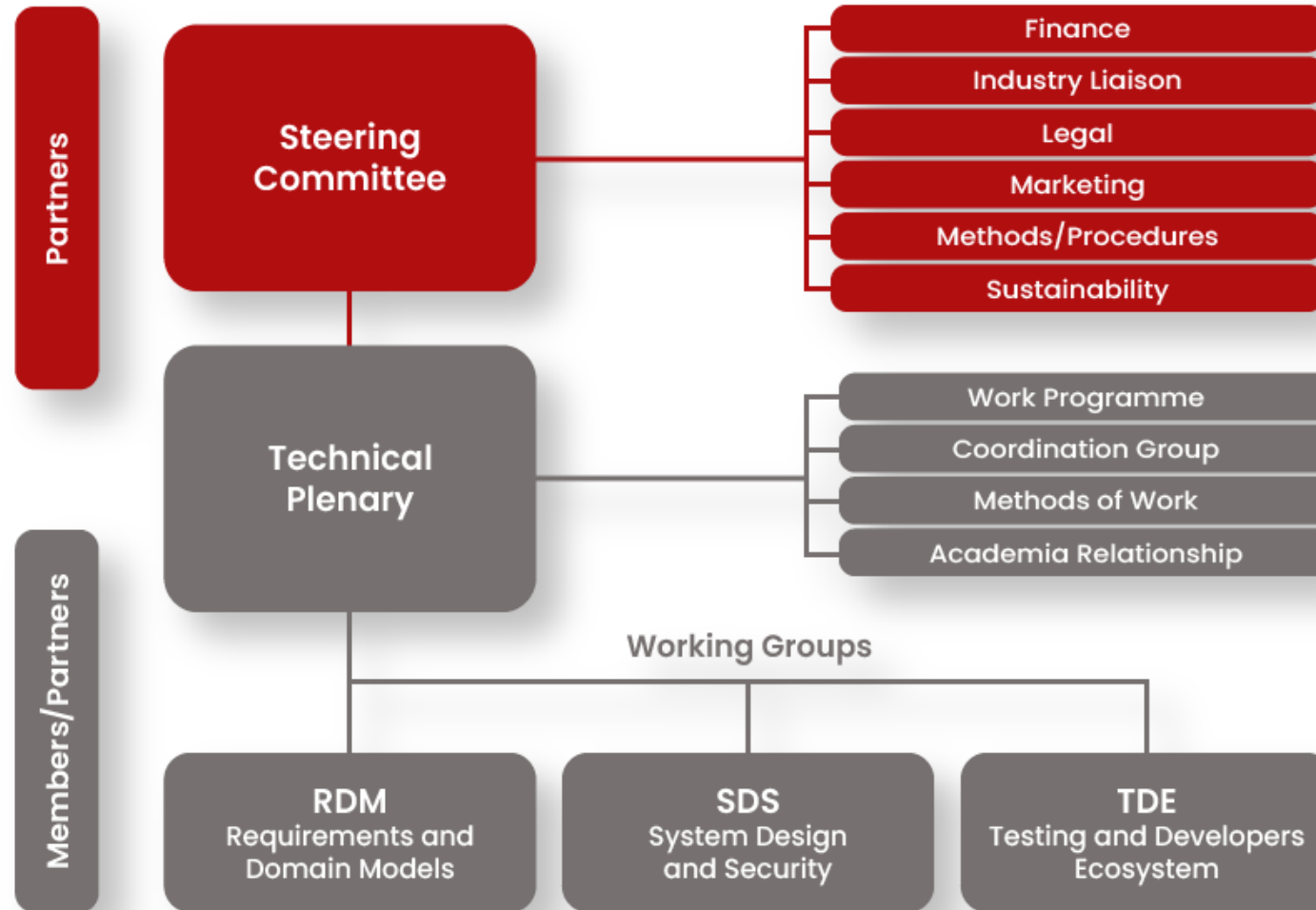
<https://onem2m.org/>



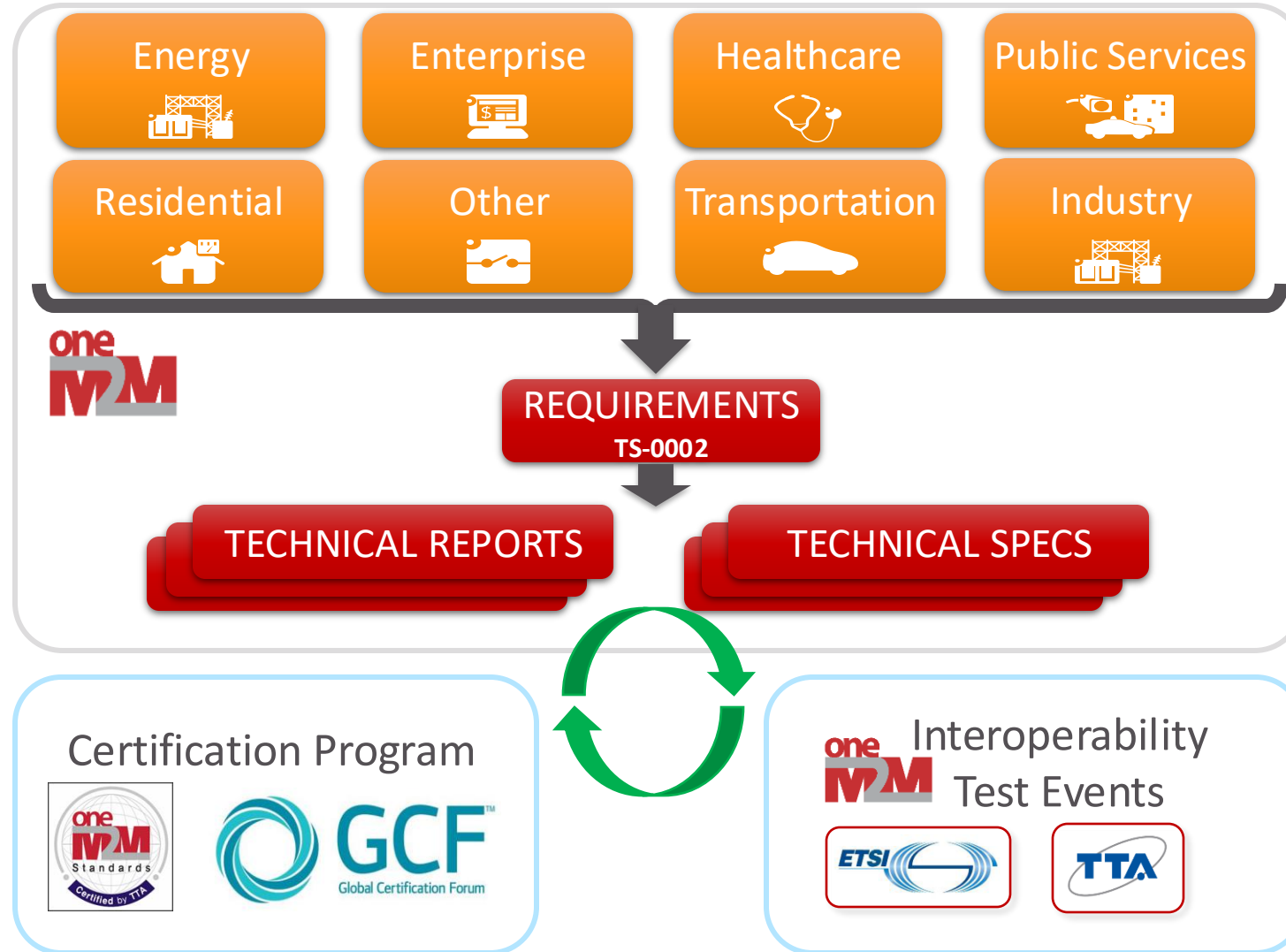
[1] [Partnership Agreement V 3.0](#) (Approved 2019)

# Organization

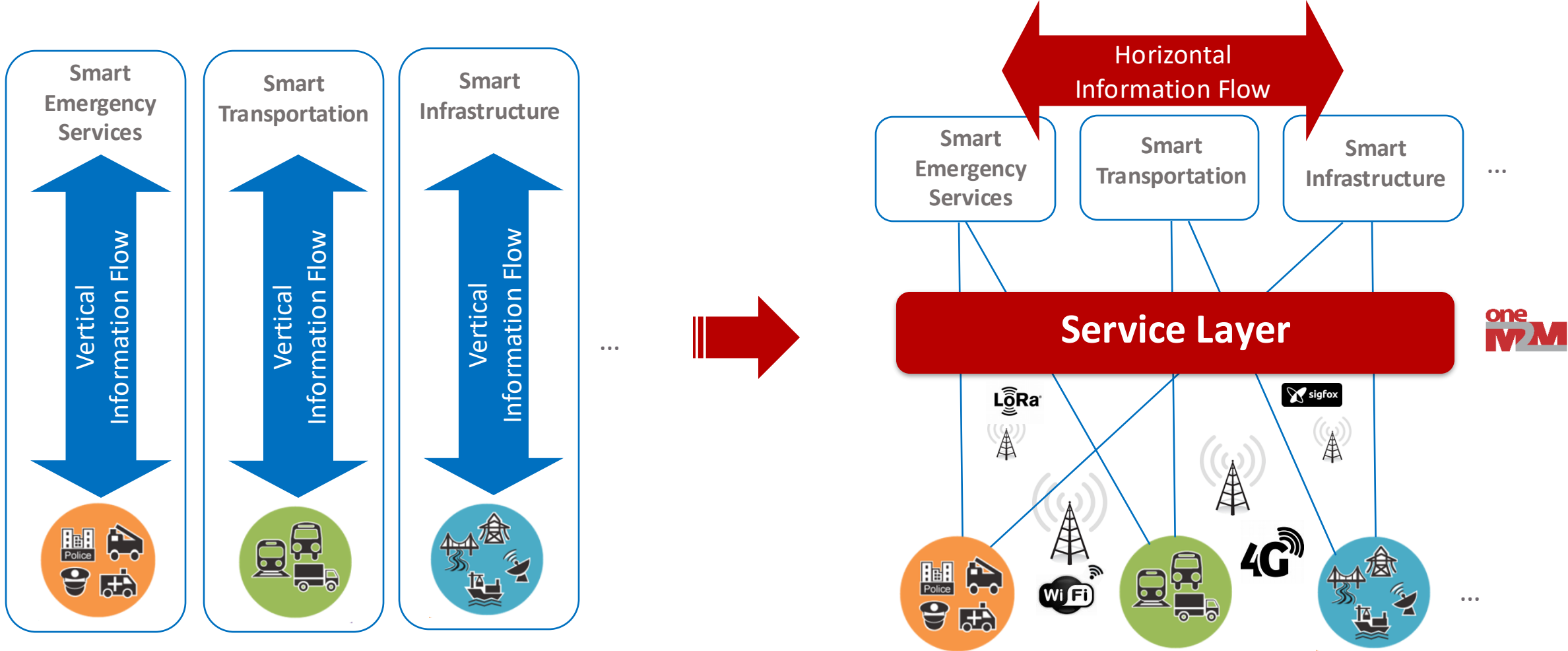
<http://onem2m.org/about-onem2m/organisation-and-structure>



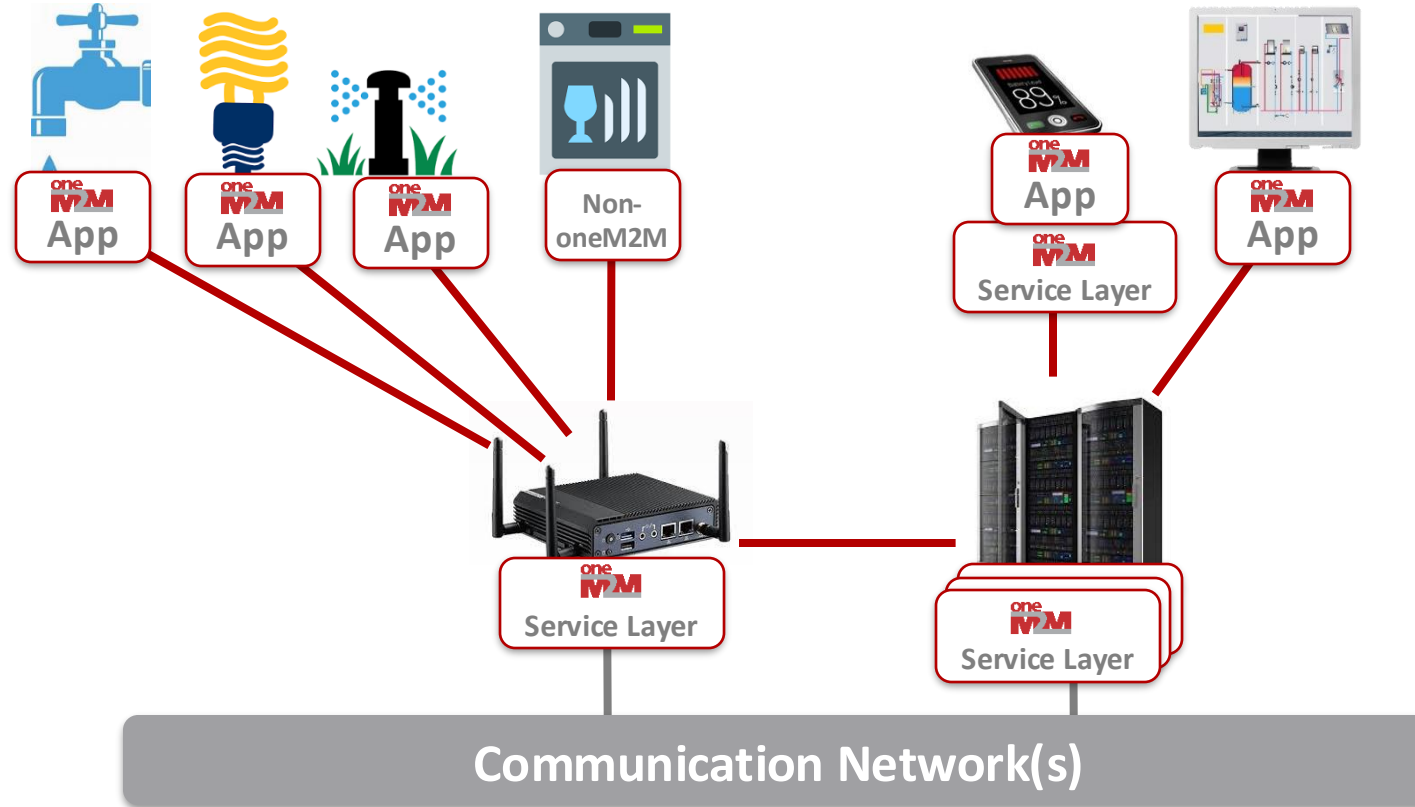
# Standard – Testing – Certification Program



# oneM2M Breaks Down the Silos



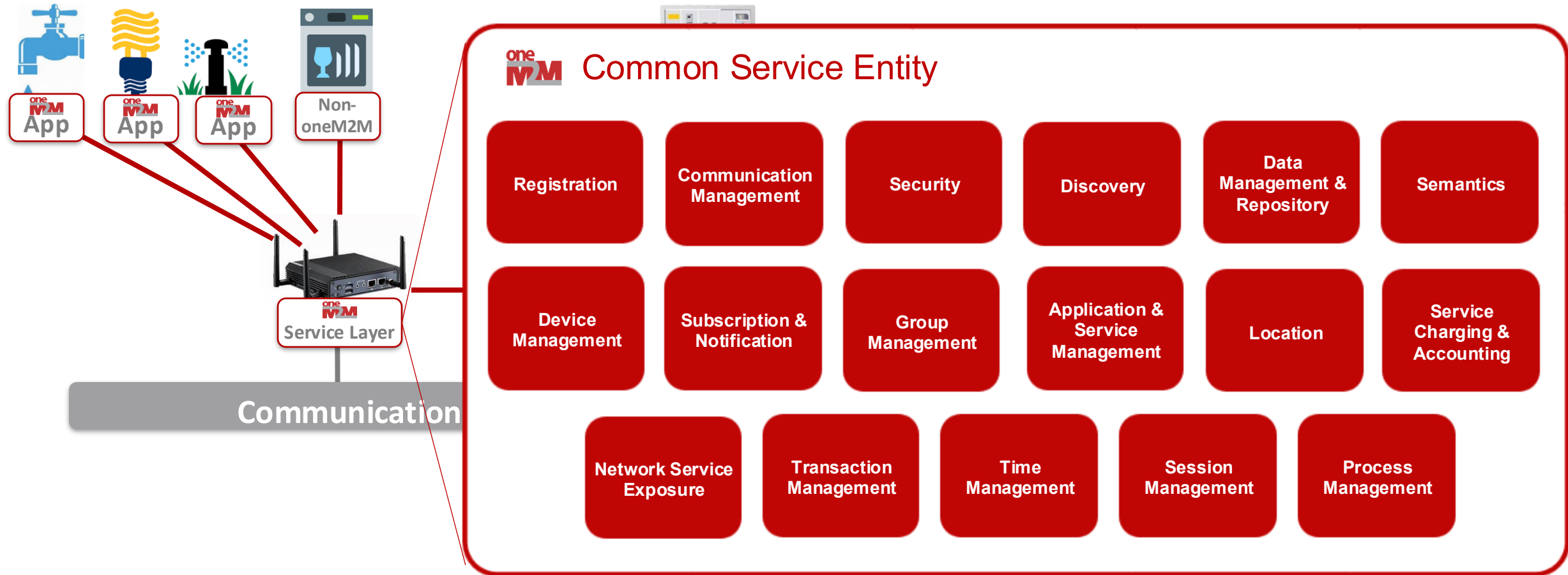
# oneM2M is an End-to-End IoT Technology



## Flexible Deployment Options

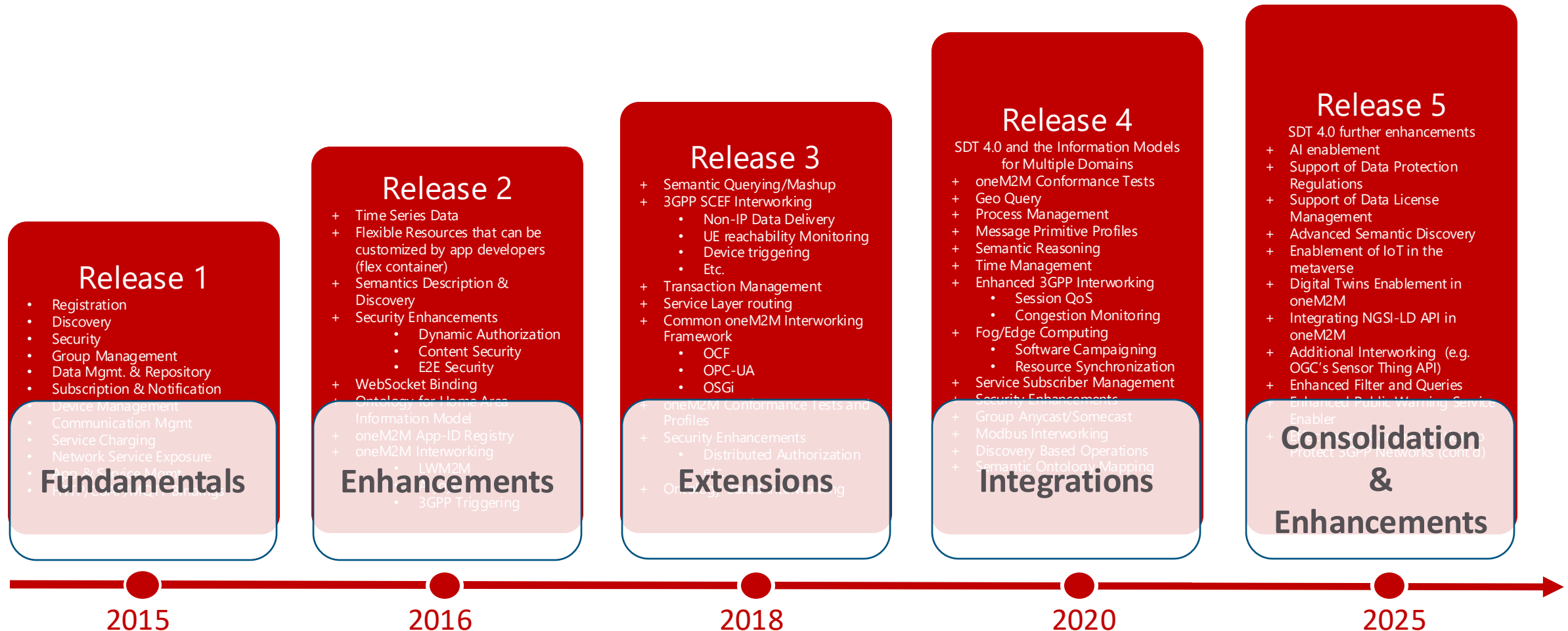
- IoT Cloud / Enterprise
- IoT Gateway
- IoT Edge Device
- IoT User Devices

# oneM2M's modular service functions fit into a coherent framework

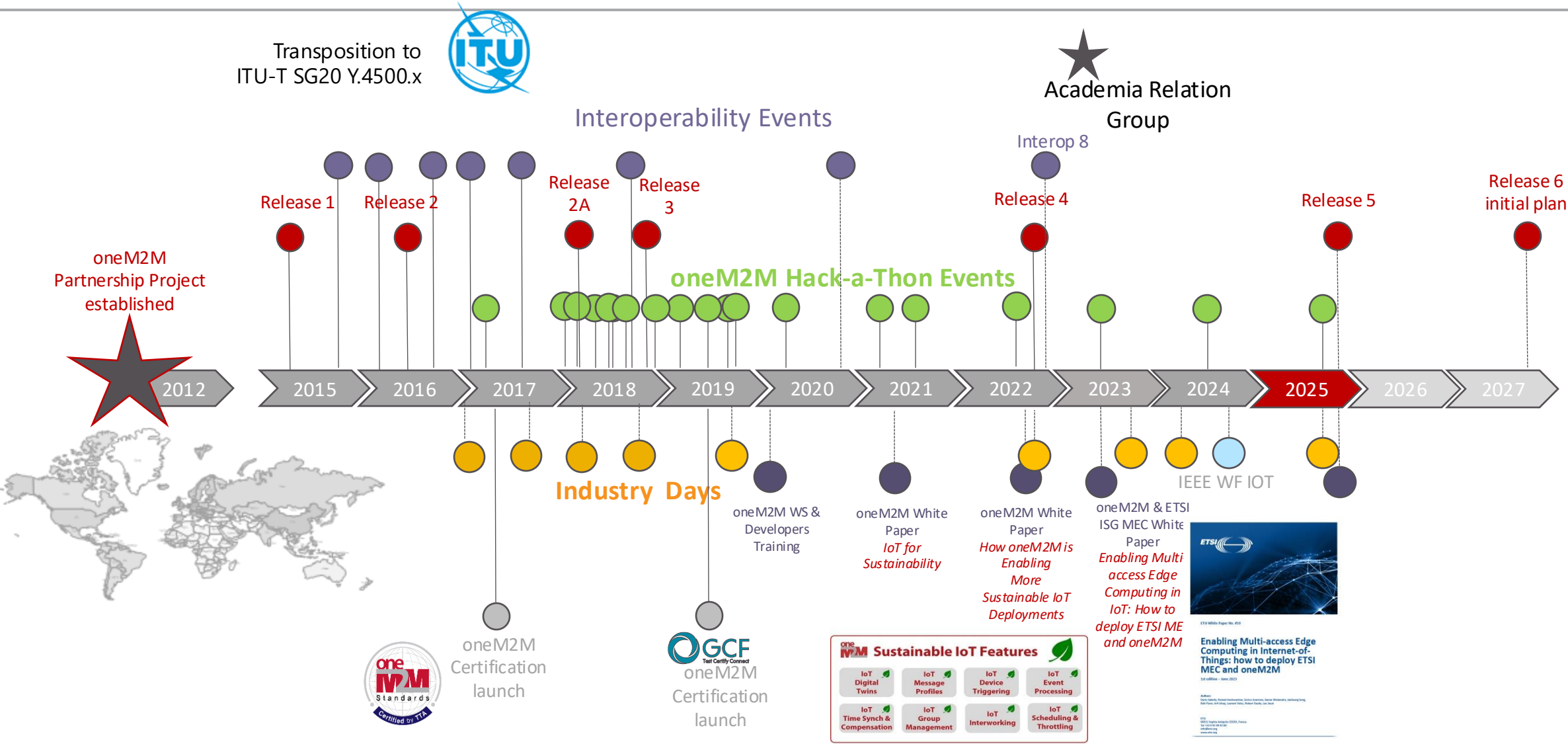




# oneM2M Feature Summary



# oneM2M Key-Events Timeline



# Insights...



"oneM2M provides a very solid architectural foundation in terms of interfaces and data structures. It is built for interoperability and is very flexible."

**Andre Dutra**, Deutsche Telekom



"Using oneM2M, our data hub collects and links data for a hundred different services. We plan to export it to other local governments."

**Seon-woo Yi**, nTels



"oneM2M has been evolving continually and solutions to common problems faced by the IoT industry are incorporated quickly in its specifications."

**Anupama Chopra**, C-DOT



"We rewrote our proprietary system to use oneM2M's open standard and now operate at scale, meeting over 99% of our customers' reporting metrics and delivering over 3 billion meter reads daily"

**Ray Bell**, Aethoros

Deployments



Executive Viewpoints



## Release 6

### Studies, Use Case and Requirements development

- System enhancements to support AI capabilities
  - Interworking with AI Agents - oneM2M and MCP
    - oneM2M-ROS Interworking
- Enhancements for Edge Deployment using ETSI MEC
- System enhancements to support Data License Management
  - oneM2M Enhanced Filter and Queries
- Effective IoT Communication to Protect 3GPP Networks *cont'*
  - 3GPP Interworking via NEF N33 API (=> R6)

TECHNICAL REPORTS

REQUIREMENTS  
TS-0002

TECHNICAL SPECS

## Join oneM2M

Work closed on  
oneM2M Release 5

Work commenced on  
oneM2M Release 6

## oneM2M

- is a global open standard, not controlled by a single private company
- specifies a common set of horizontal IoT services
  - architecture, common services functions,
- enables data interoperability
  - Information model, semantics, ontology-based interoperability
- interworks with existing IoT technologies
- has interoperability testing and a certification program
- standardized APIs simplify the life for IoT stakeholders
  - minimize development, deployment & maintenance costs
- is a mature and a commercially deployed technology



# Thank You!

Roland Hechwartner

Chair oneM2M Technical Plenary

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