

Ask Me Anything Webinar hosted by the Smart City Working Group March 6, 2025





Today's Program Goals

For uCIFI-heritage members

- A welcome to OMA
- Demonstrate OMA's commitment to the uCIFIwork
- How to engage with the new Smart City Working Group

For LwM2M implementers

- Explain how the combination of OMA and uCIFI expands the use cases and opportunities for implementers.
- Describe the uCIFI work
- Updates about LwM2M and Smart Objects

For contributing companies

- How the merger enhances value for OMA members
- Single membership
- Efficient use engineering contributors
- Single place to influence the direction of the specifications.





Participation

- Introductory remarks to explain the basics of uCIFI work and of OMA work
- Question and Answer period (panel format)
- Please use the Q&A button at the bottom of your screen to post your questions.
- We will answer them during the Q&A period
- We will be sending the attendees a follow-up link to the presentation.
- Please reach out to us at openmobilealliance.org for more information.





- Seth Newberry: General Manager of the OMA
- Matthew Gillmore: Chair of the LwM2M Working Group
- Nicola Crespi: Chair of the Smart Cities Working Group
- · Valentina Taddeo: Executive Director uCIFI, OMA Director





OMA & IOT Standardization

OMA's Role in Standardization

- Developing application-layer specifications for mobile networks since the early 2000s.
- Formed by merging smaller standards consortia to create comprehensive, deployable specifications.
- Successful in driving industry-wide interoperability.

Key Milestones

- 2017: Published LwM2M 1.0 a protocol for managing constrained IoT devices.
- 2018: Merged IPSO Alliance, enhancing IoT data models & interoperability.
- 2024: uCIFI joins OMA, expanding smart city data models for street lighting, water metering, waste management, and more.





Key Milestones

Impact on Smart Cities & Infrastructure

- Enables multi-vendor interoperability prevents vendor lock-in.
- Scalable & future-proof supports long-term infrastructure investments.
- Ensures reliability & efficiency essential for public utilities and IoT networks.

Real-World Applications

- Powering electrical grids, water distribution, and gas networks.
- Optimizing public lighting, smart meters, and sensor networks.
- Supporting global infrastructure investment with standards-based solutions.





The role of uCIFI in Smart Cities

uCIFI Mission:

 Make sure cities' investments are future-proof and can seamlessly integrate with new technologies as they emerge

uCIFI Achievements:

 Develop and publish an open unified data model leveraging existing standards





Reasons for a change

- Leverage a strong and well-established alliance
- Combine technical expertise
- Reduce the presence of too many standards and reduce complexity and costs of integrating different vendor's systems





Be part of the Future Now

SCWG goals:

- Build a complete end-to-end proposal together with and for smart cities
- Become the reference for cities and product developers by leading the evolution of the LwM2M-based data model to support more and more use cases for smart cities





More and Better Together

- Compliance testing environment to validate the entire implementation of the data model application stack
- Evolution of the data model, its integration with LwM2M
- Collaboration with other OMA working groups

Collaboration with other well-established organizations





Introduction to LightWeightM2M (LwM2M)

LwM2M and Its Role in Device Management

- LwM2M: A device management protocol
- Core Specification: Defines device management
- Transport Flexability: Works over TCP, UDP, MQTT, SMS, etc.
- Designed for efficient IoT communication





Why LwM2M Matters

Key Benefits:

- Transport-Agnostic: Works across multiple networks
- Latency-Tolerant: Devices communicate asynchronously
- Optimized for IoT: Efficient in low-bandwidth environments
- Seamlessly integrates with modern cloud infrastructure
- Supports diverse IoT applications, including smart cities





The Role of the DMSO Working Group

Key Responsibilities:

- Maintains Object Registry (3,000+ standardized objects)
- Develops profiles and use cases for smart city applications
- Defining a northbound API for cloud integration
- Supports developers via GitHub and feedback loops





Ask Me Anything Q&A

Please use the Q&A button at the bottom of your screen to post your questions.





Valentina Taddeo works as Marketing and Communication Leader and Strategic Relationship Coordinator at Paradox Engineering SA.

Valentina has held the position of Executive Director of the uCIFI Alliance until the alliance merged into the Open Mobile Alliance. Currently she is collaborating closely with OMA and the newly created Smart City Working Group to support the further development of a unified datamodel for smart cities.







Nicola Crespi works as CTO and R&D Manager at Paradox Engineering SA, the R&D centre for the Japanese Group Minebea Mitsumi. He has extensive experience in IoT platforms, from device to cloud, and has participated in various alliances and initiatives for standardization.

Nicola has held the position of Chair of Technical Working Group of the uCIFI Alliance from 2018 until December 2024, when the alliance merged into the Open Mobile Alliance. Currently he is collaborating closely with OMA and he has been chosen to chair the newly created Smart City Working Group to support the further development of a unified data model for smart cities.







Matthew Gillmore works in the Strategic Industry Standards Organization at Itron. Roles include Chairman of the Board of the Open Mobile Alliance, Chair of the Device Management Smart Object working group in OMA.

Matthew has been involved in various IIoT projects including Smart Grid along with industry alliances including IPSO, IETF, IEEE 802, Zigbee, and Wi-SUN.







AMA Meeting Follow-up

Attendees will receive a follow-up link to the presentation.

For additional information, please contact us at openmobilealliance.org membership@omaorg.org



