



Showcase

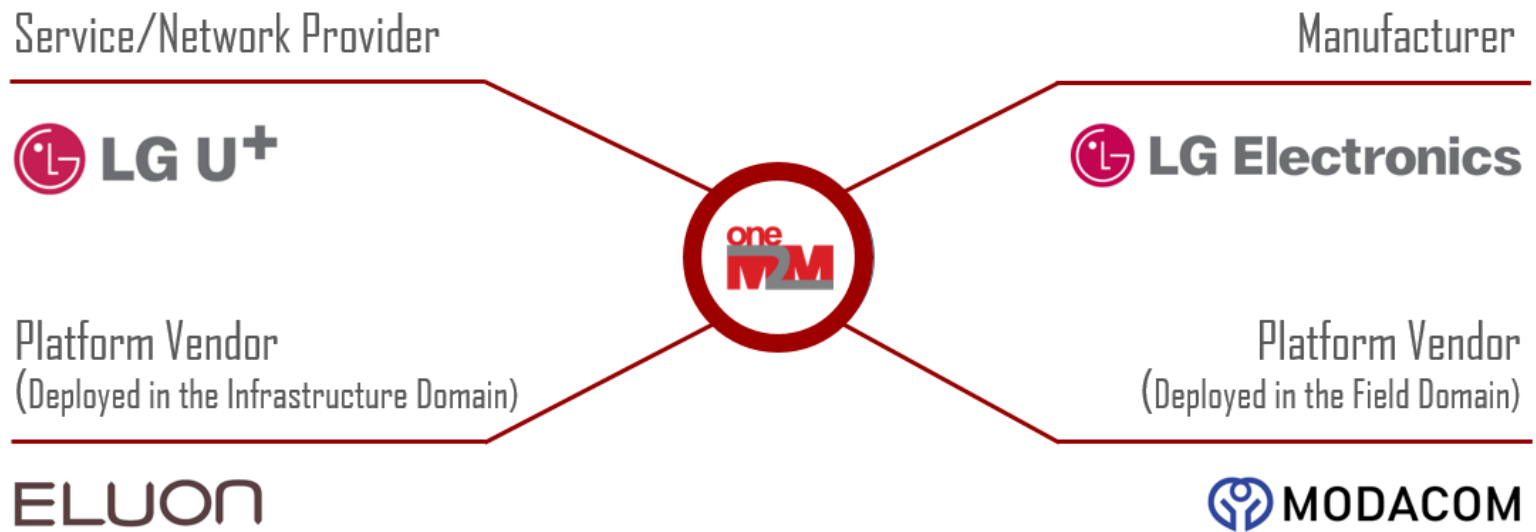
Showcase B: Vehicle to Home (V2H) Application based on oneM2M

oneM2M Showcase, 2014-12-09

Source: LG Electronics, LG U+, Eluon, MODACOM

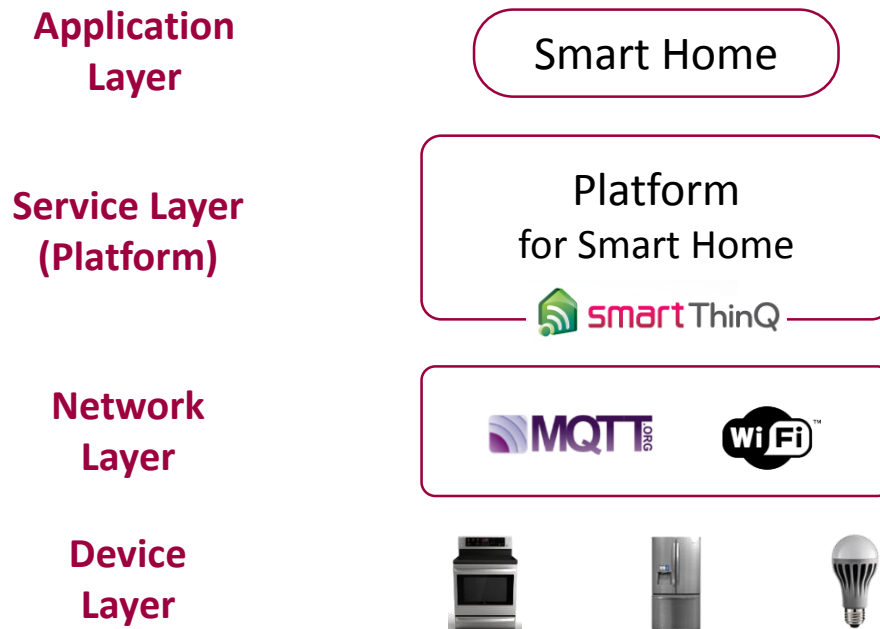
Our Team

- **oneM2M Platform makes IoT Market Players collaborative easily**
 - APND – Application / Platform / Network / Device
 - Standardized Platforms can lead to more collaborations and economy of scale in the IoT market



Current IoT Model - Vertical

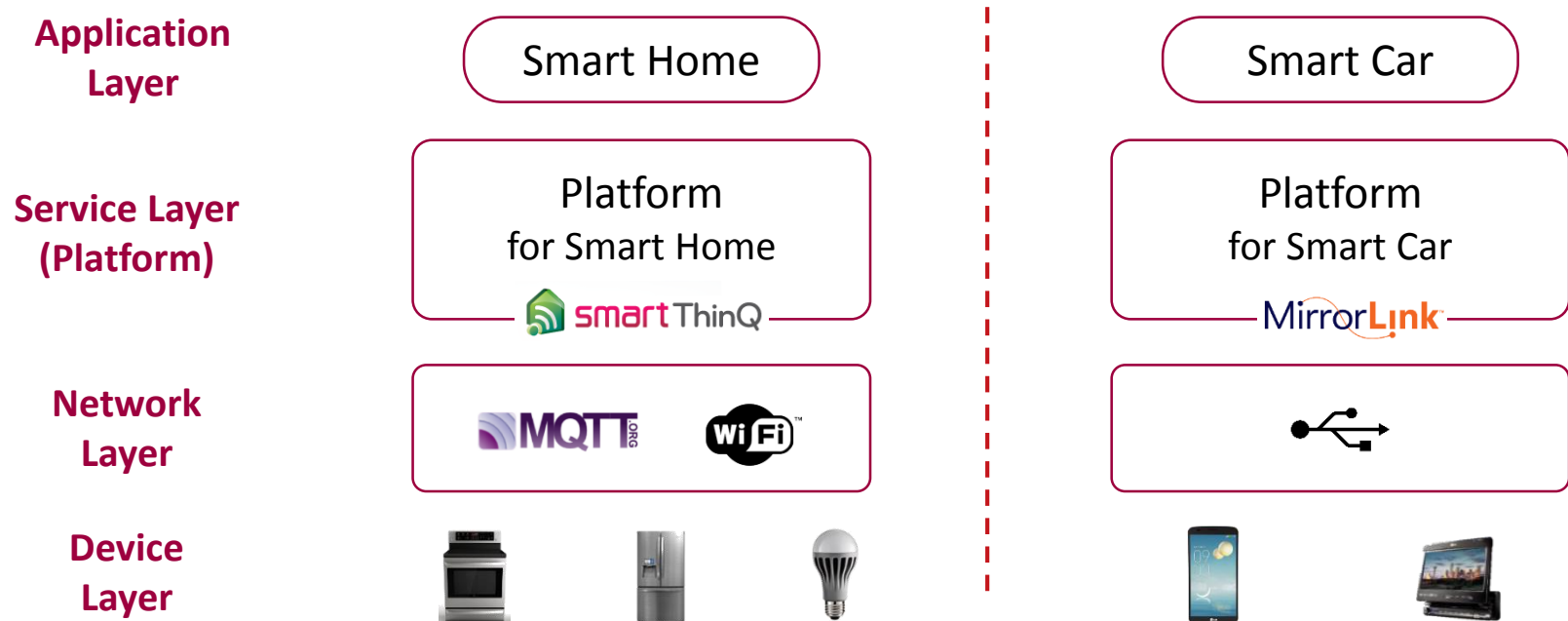
- **Vertical IoT Model**
 - Each IoT application is fit with specialized P/N/D for the application



Current IoT Model - Vertical

- Vertical IoT Model**

- Each IoT application is fit with specialized P/N/D for the application
- When a service provider combines the exiting applications, the platform needs to be modified to interwork with a new connectivity and devices



Current IoT Model - Why

- **The specialized/customized requirements for a platform**
 - The specialized platform is designed for a special target application that has its unique requirements
 - Different connectivity, services and functional requirements

Applications

Smart Home

Smart Car

Requirements

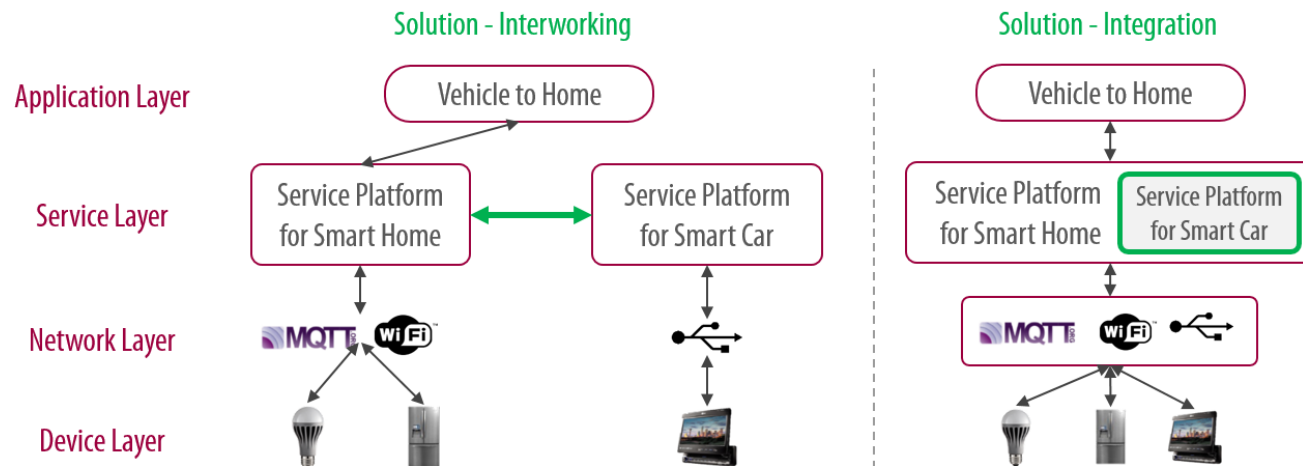
- Wireless Connectivity
- Remote Device Control
(Diagnostics/Management)
- Security / Privacy
- Plug and Play

- Wireless/Wired Connectivity
(Wired for Charging)
- High Bandwidth (N-Screens)
- Low Latency
- V2X¹⁾ Applications

1) Vehicle to Everything – Vehicle to Vehicle, Vehicle to Home, Vehicle to Pedestrian

Current IoT Model – Converged Applications

- **Solutions to support the converged IoT applications by vertical model**
 - Converged IoT applications (i.e. Vehicle to Home) will be dominant in the market
 - Vertical model can result in users needing several different systems to achieve a spectrum of tasks or a converged IoT applications
 - The solutions, Interworking between Platforms, Integrated Platform, cause development cost anyway.
 - More interworking and integration, More cost and Fragementation



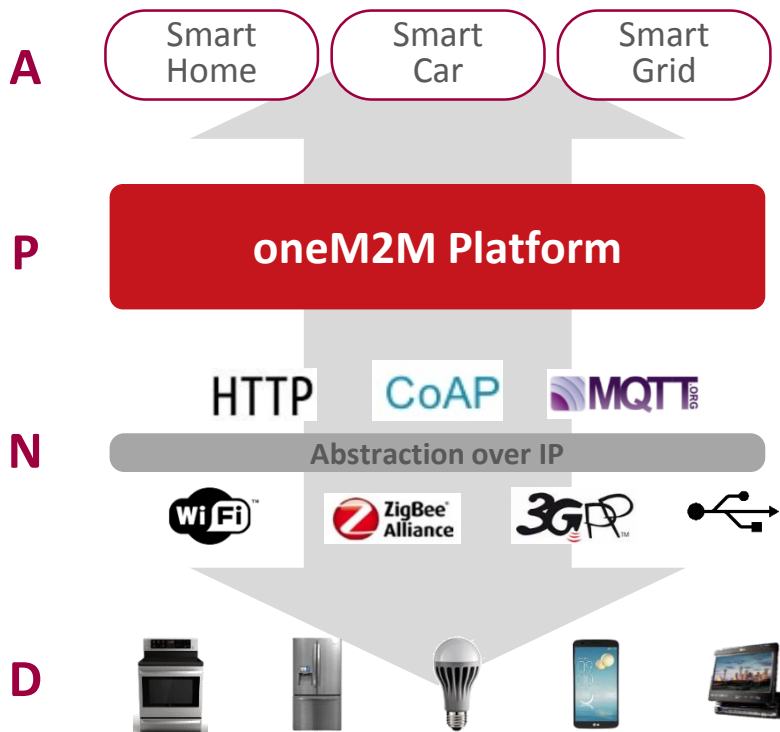
Current IoT Model



- Future-Oriented approach for supporting the converged and emerging IoT application well
- Low CAPEX / OPEX
- Harmonizing the IoT Players
- Economy of scale

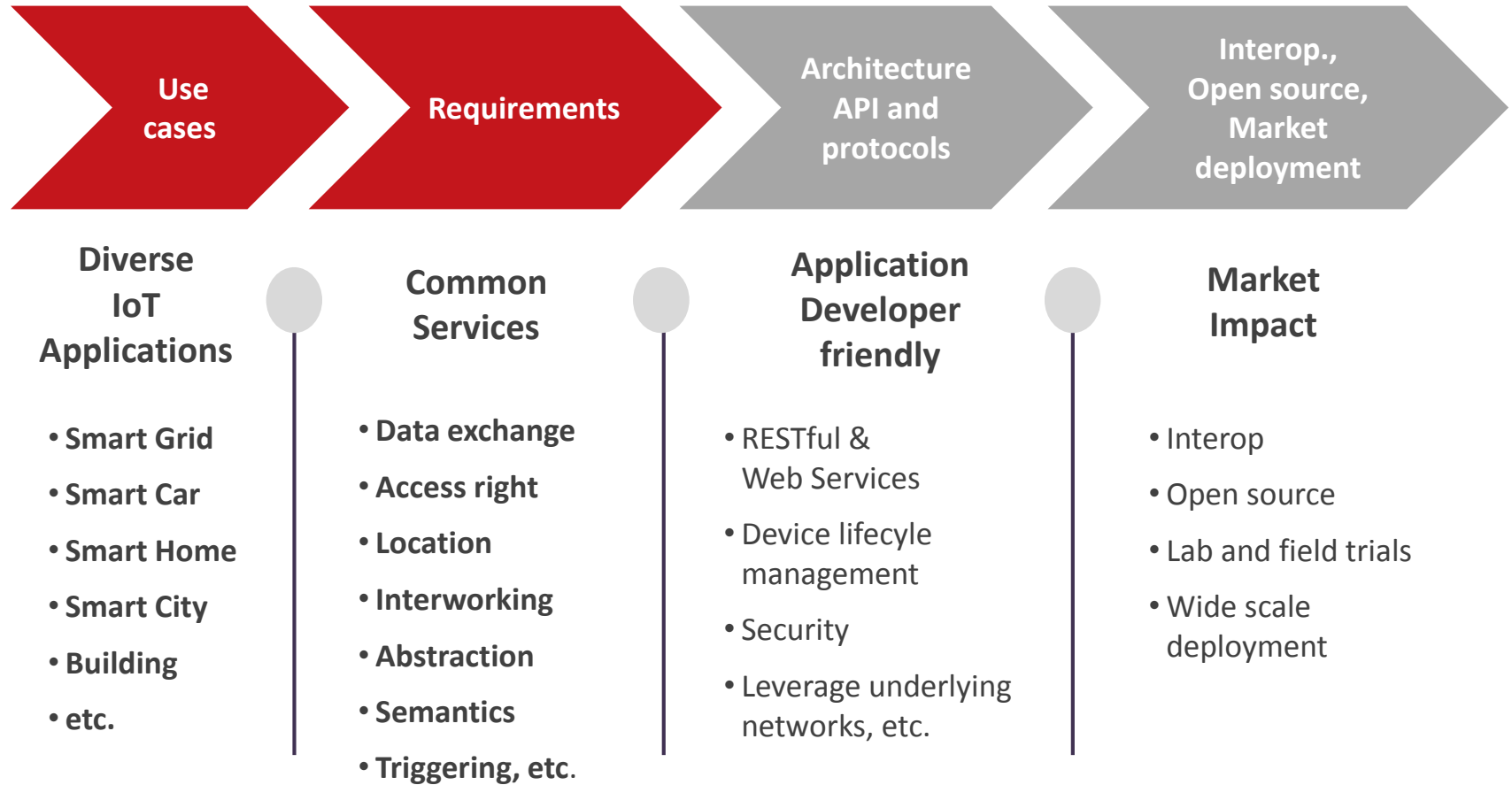
oneM2M As a Horizontal Standard IoT Service Platform

- oneM2M is a practical solution to prepare for the future



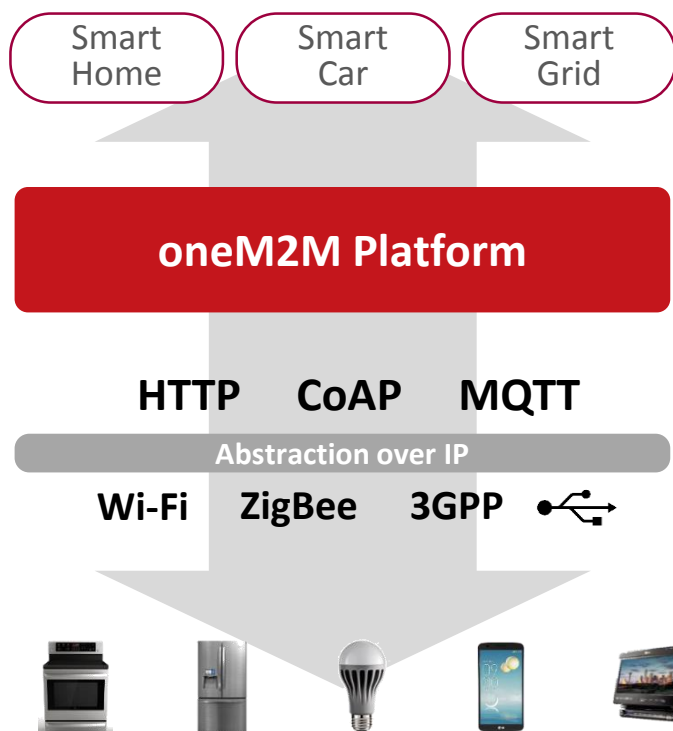
- Designed for fulfilling the requirements of diverse IoT requirements
- Overlay Architecture Based on Web Service Approach
- Integration with existing solutions
- Cross Layering for better performance and network management

oneM2M As a Horizontal Standard IoT Service Platform



oneM2M As a Horizontal Standard IoT Service Platform

- oneM2M is a practical solution to prepare for the future



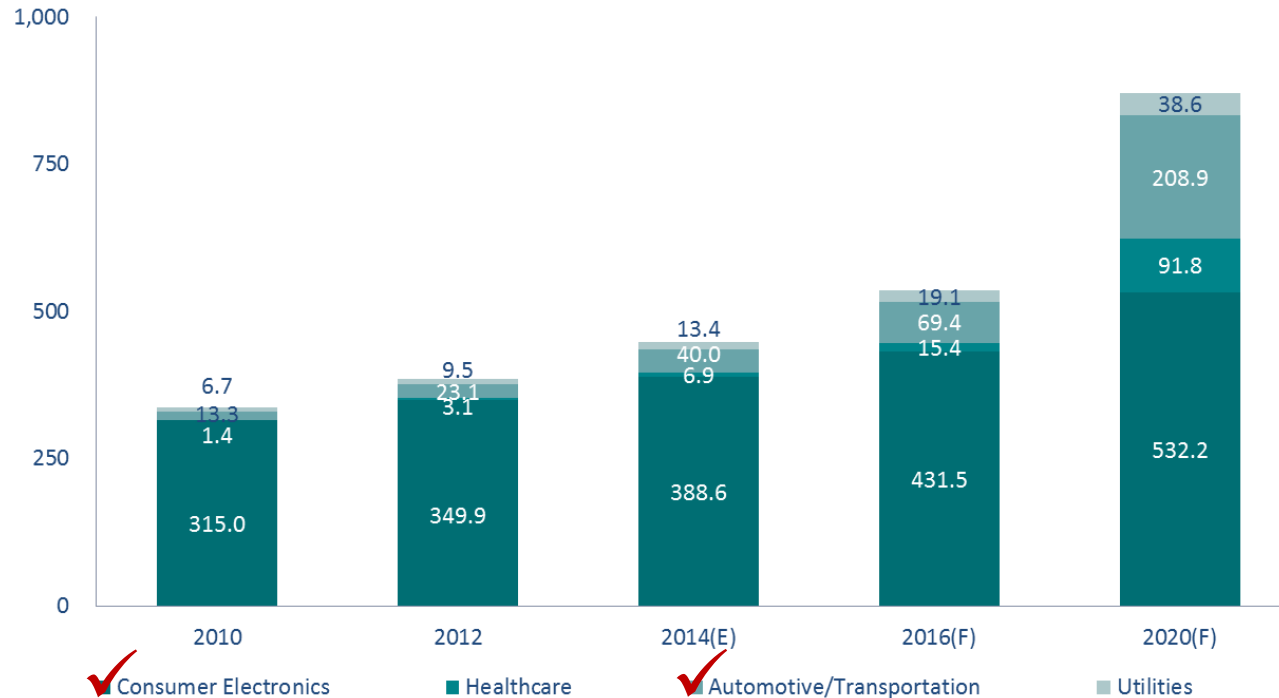
- International Standard
 - A partnership project
 - Preventing local fragmentation



V2H Application Market Outlook

- **Future value of the main IoT applications**
 - Smart home and Smart Car may be the most valuable IoT applications

(in B USD) **Global Market Size of IoT Devices by Main Vertical: Value**



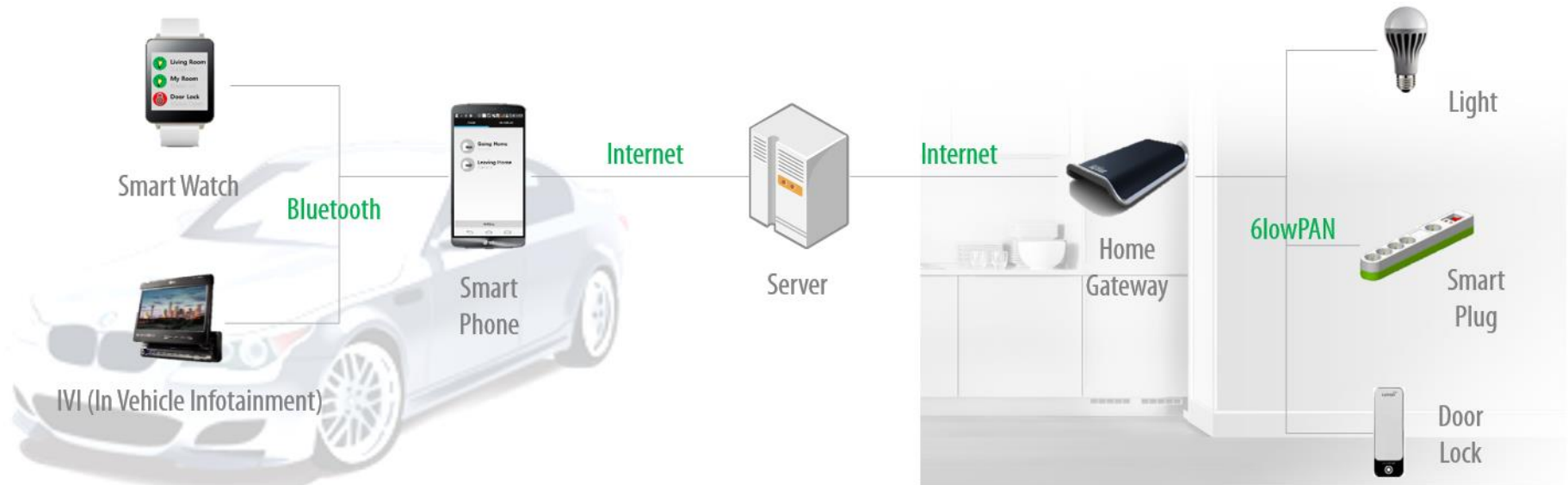
Source: University of Jyväskylä: IoT State of the Art Report (2013)

V2H Application

Our Big Picture

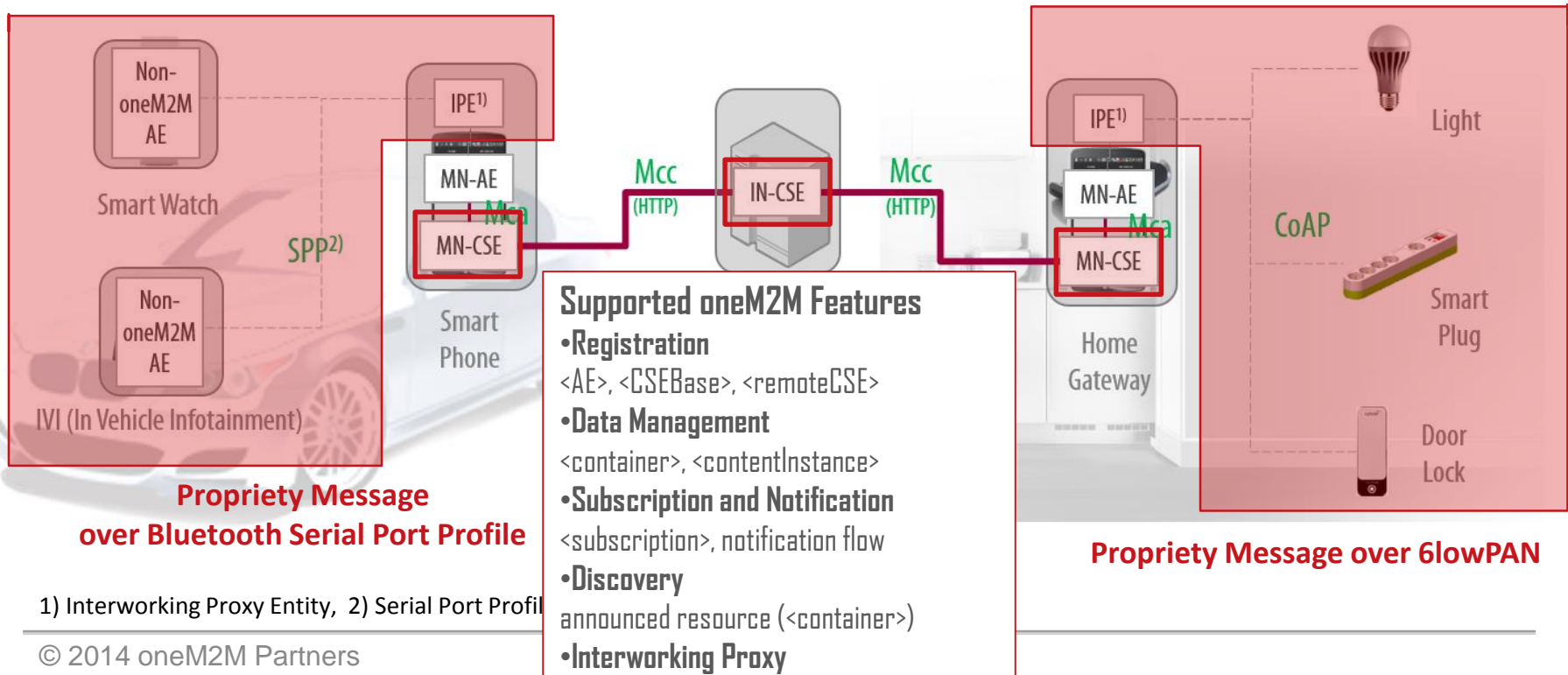
V2H Application Configuration

- The prototype configuration is designed for
 - A commercial V2H application (as an initial version)
 - Infrastructure and field domain
 - Considering smart phones as a Personal Gateway



V2H Application Configuration

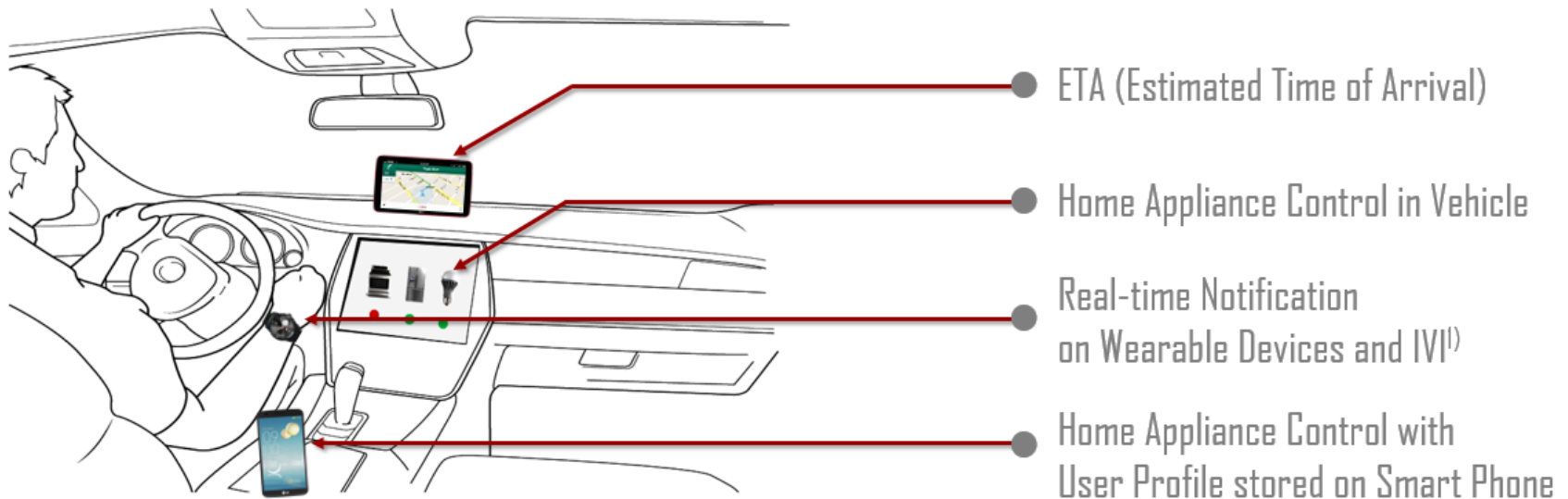
- The system configuration is designed for (oneM2M viewpoint)
 - Legacy support by using IPE¹⁾
 - Support basic oneM2M features (to be updated)

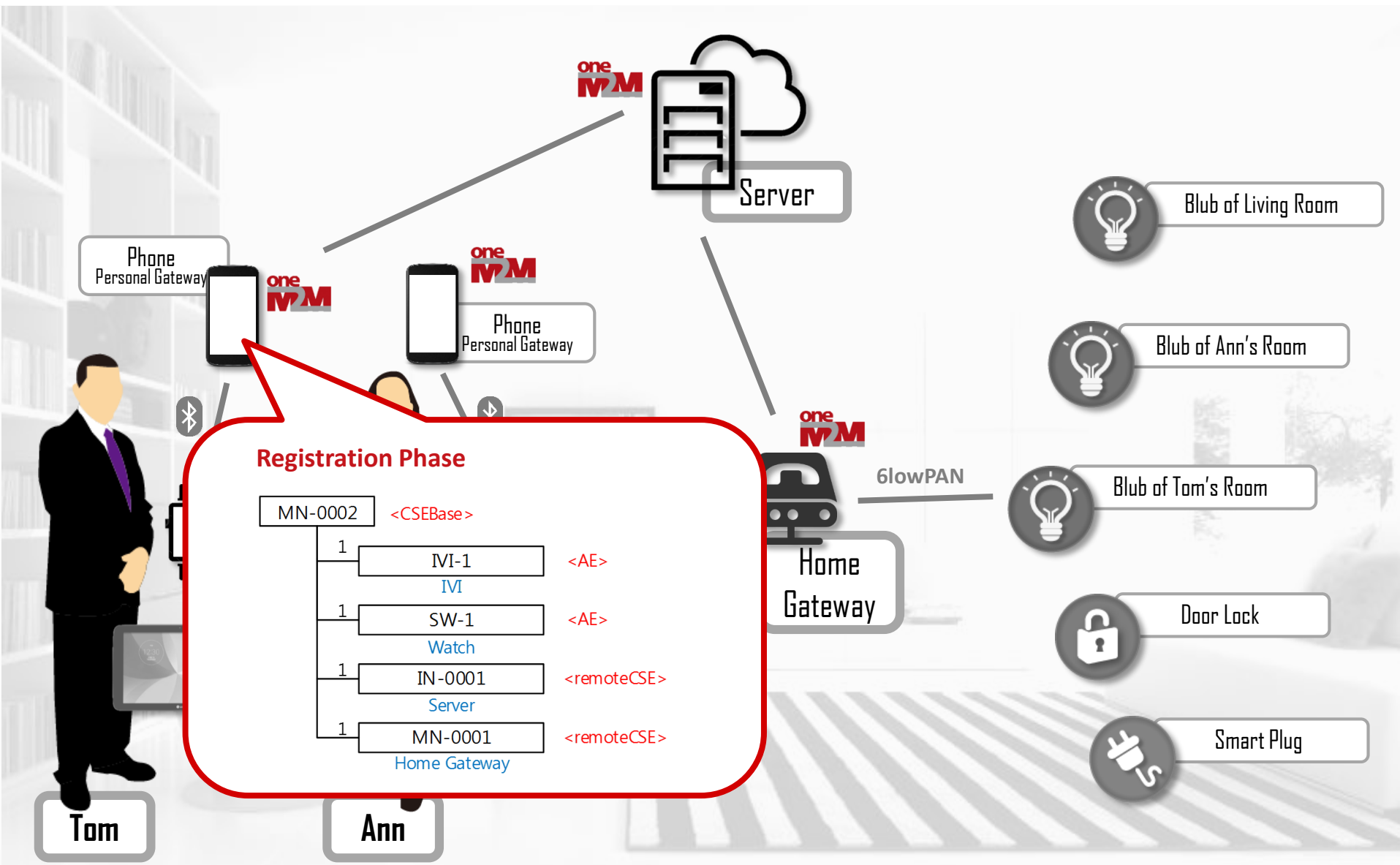


V2H Application

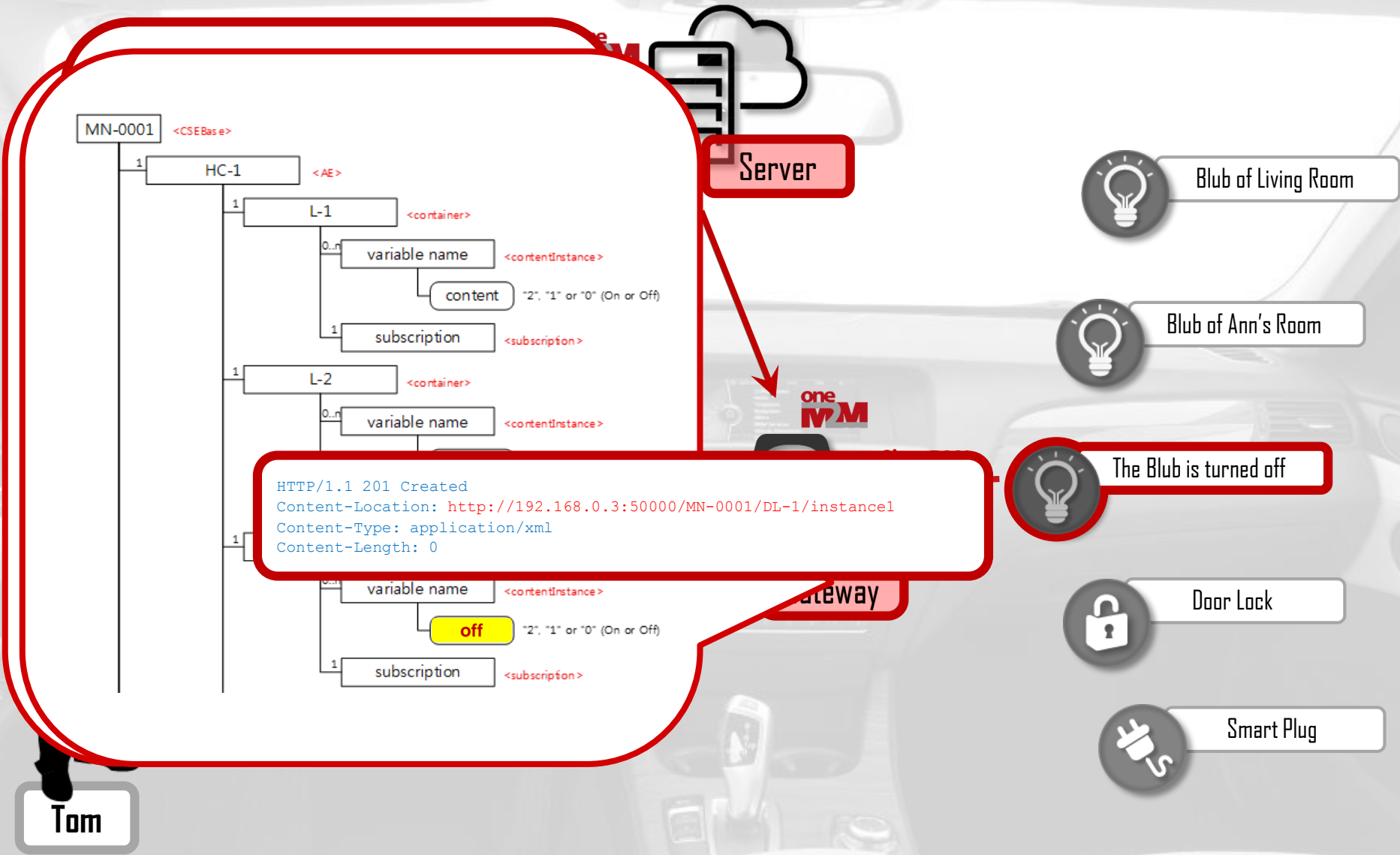
Scenarios for this showcase

- **Main Scenarios from this showcase are:**

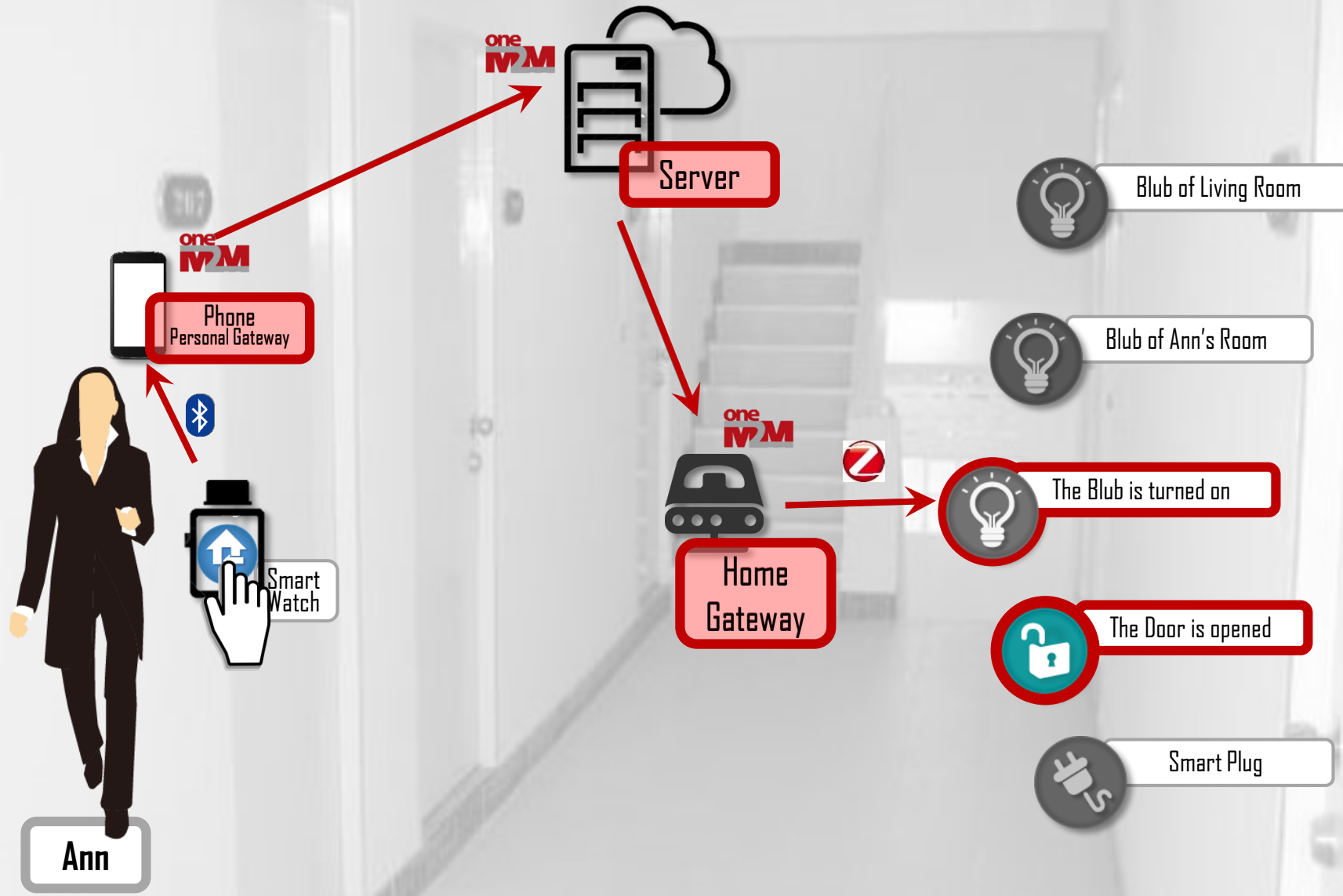


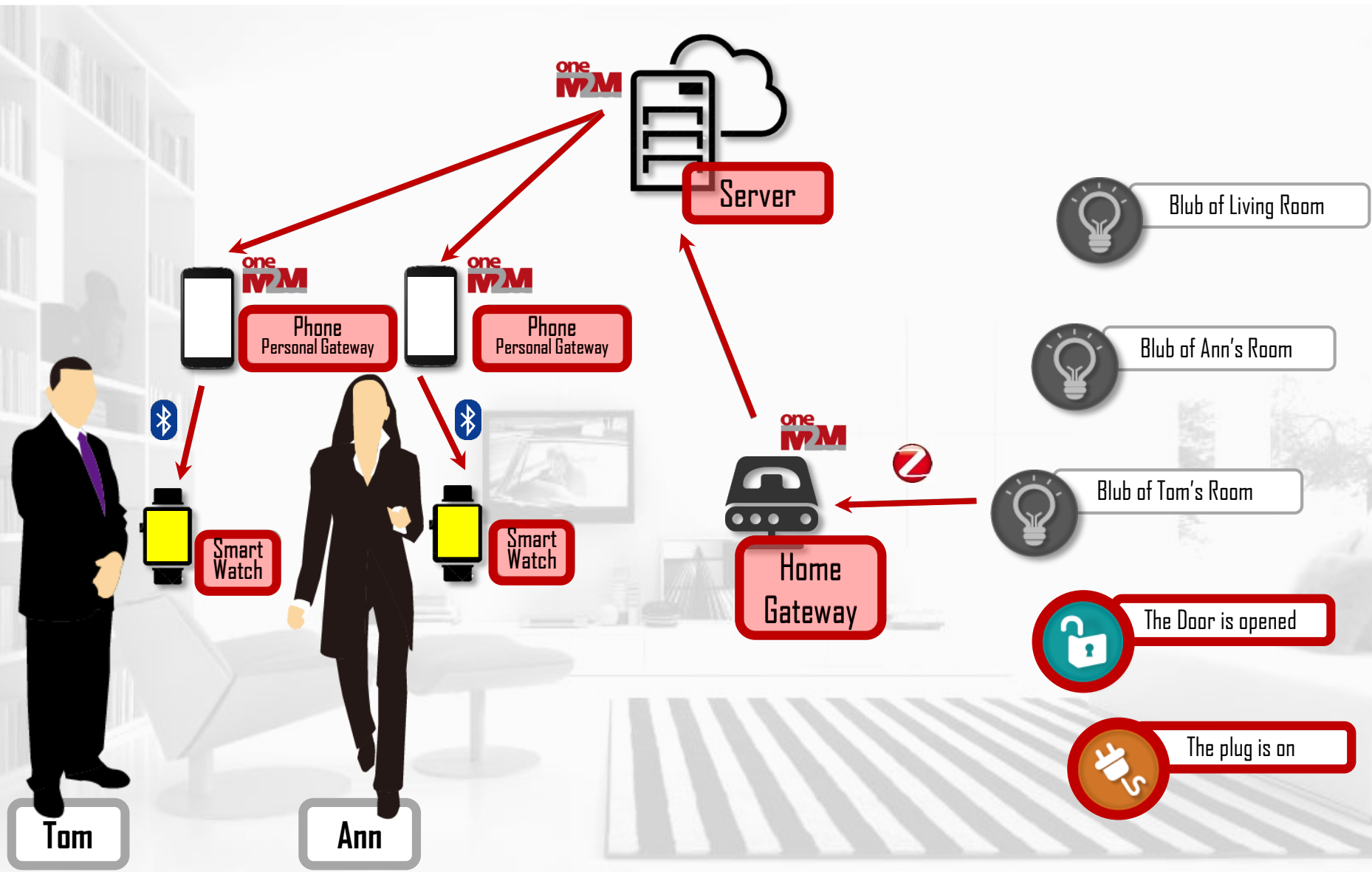


Scenario A. Home Appliance Control



Scenario B. Home Appliance Control with User Profile





Thank You

Q&A
