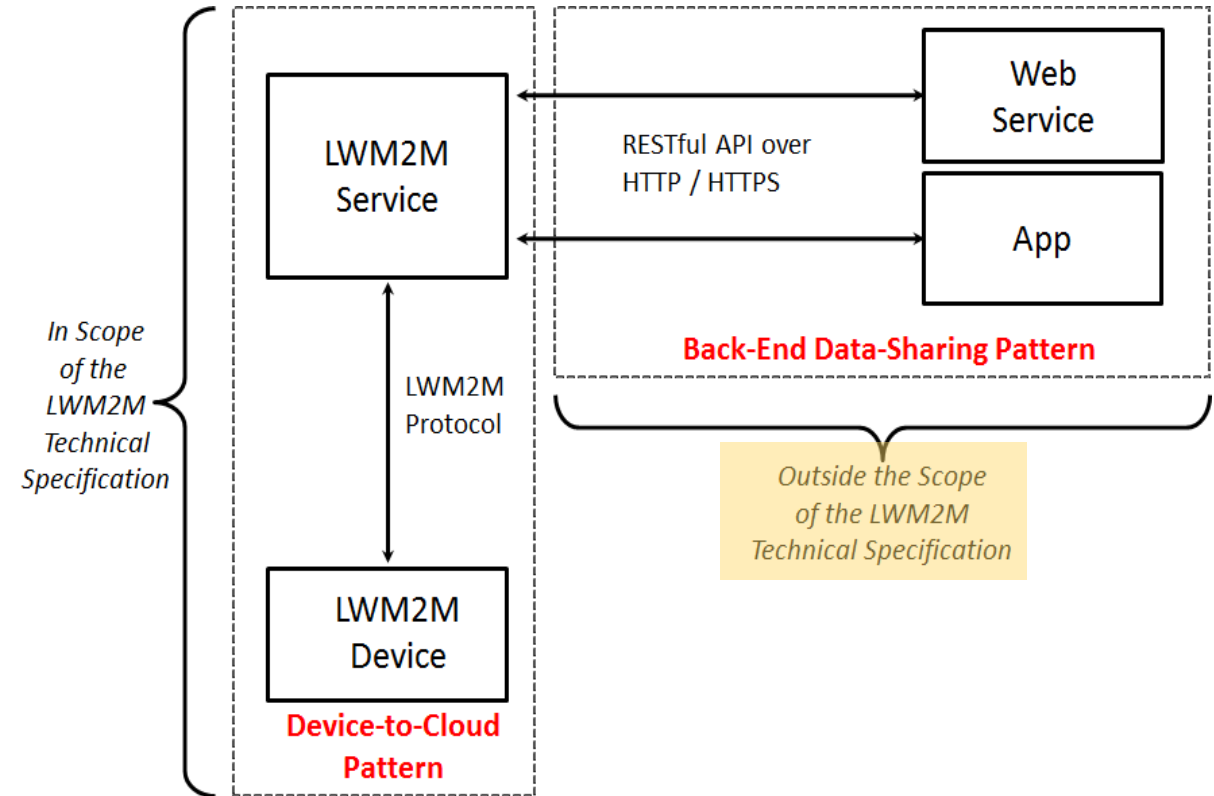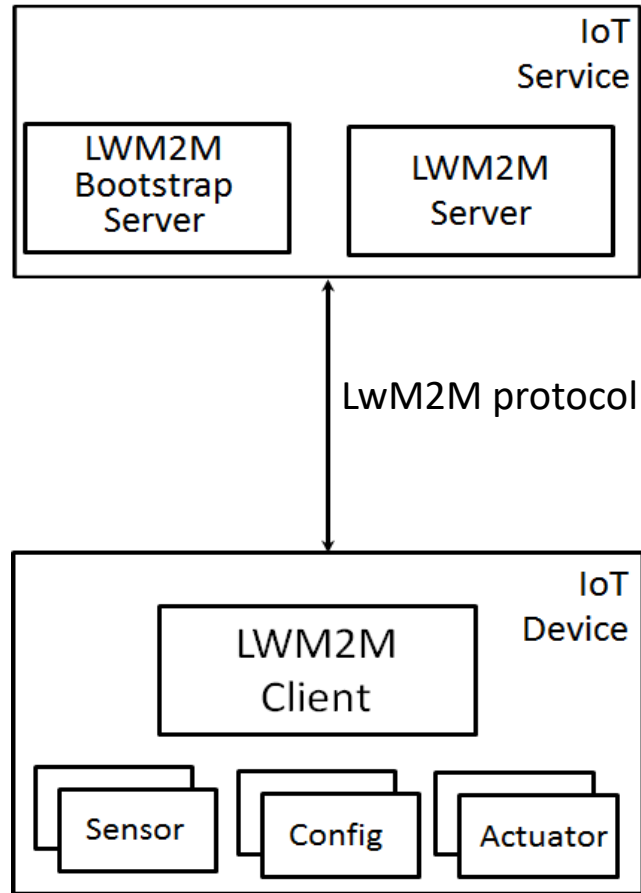# LwM2M Status Update

Joint IETF / OMA call, 26th Feb. 2019
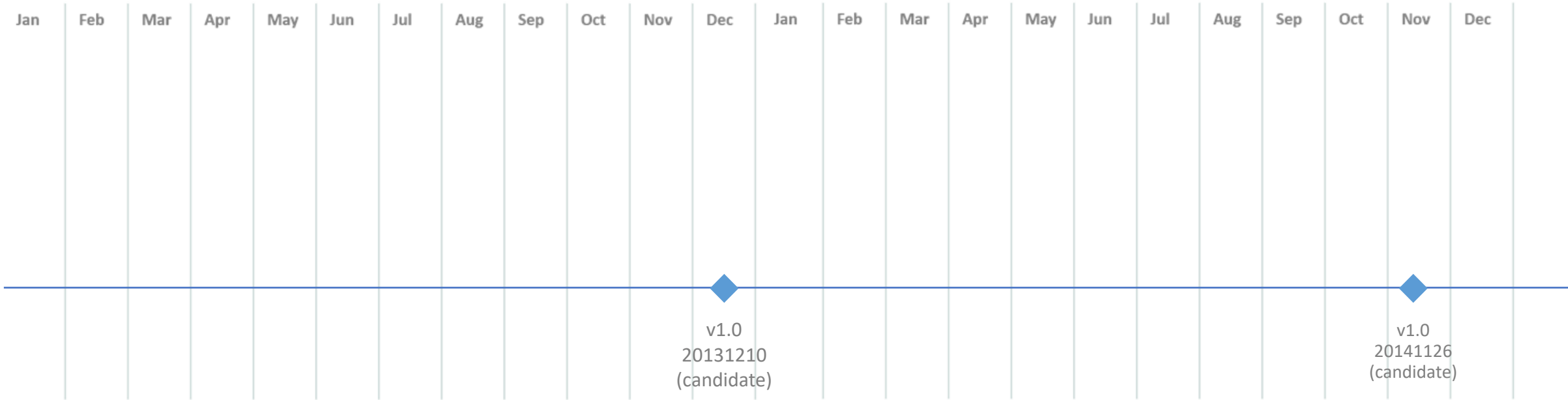
LwM2M Architecture

Specification Evolution

2013   2014

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

v1.0
20131210
(candidate)

v1.0
20141126
(candidate)

Legend
◆ Specification Release
◆ Testfest

Specification Evolution, cont.

Specification Evolution, cont.
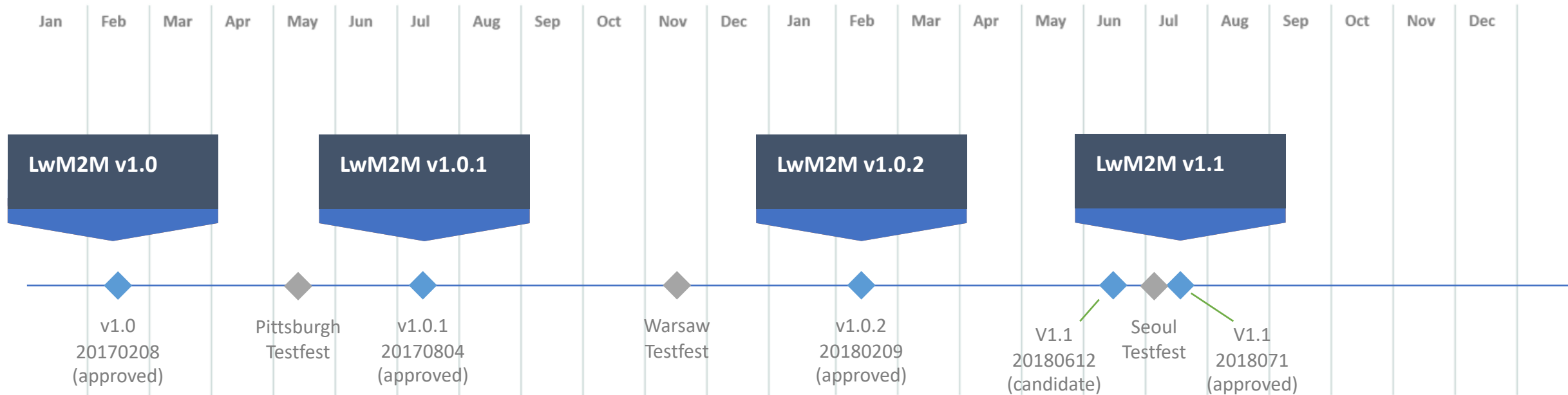
Takeaways:

- LwM2M is around for some time already and many testfests have taken place already.
- There are 4 approved LwM2M spec versions: v1.0, v1.0.1, v1.0.2, v1.1
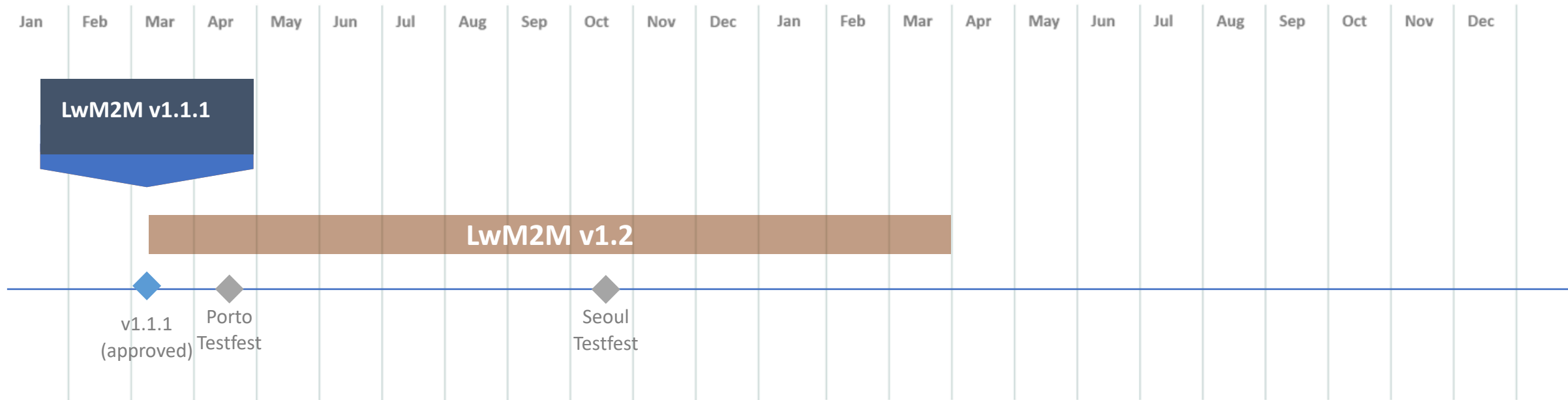- LwM2M is a mature protocol used in deployments today.

Plan

Takeaways:

- Bugfix release of v1.1 getting out of the door right now.
- Work on v1.2 has been started; requirements are published at http://www.openmobilealliance.org/release/LightweightM2M/V1_2-20190124-C/
- Future testfests will focus on testing v1.1 features.

Useful Resources

Public LwM2M Github repository:

https://github.com/OpenMobileAlliance/OMA_LwM2M_for_Developers/issues

Specifications:

http://www.openmobilealliance.org/release/LightweightM2M/

Object and Resource Registry:

http://www.openmobilealliance.org/wp/OMNA/LwM2M/LwM2MRegistry.html

Protocol Stack

LwM2M v1.0, v1.0.1, v1.0.2

| Objects |
| LWM2M |
| CoAP |

| DTLS | UDP | SMS |
| UDP | SMS | IP |
| IP |

LwM2M v1.1

| LwM2M |
| CoAP |
| OSCORE |

| DTLS | | | SMS on-Device (no Sec) | SMS on-Smartcard | UDP | TCP | TLS / TCP | LoRa WAN | CIoT |
| UDP | SMS on-Device | CIoT | | | | | | | |
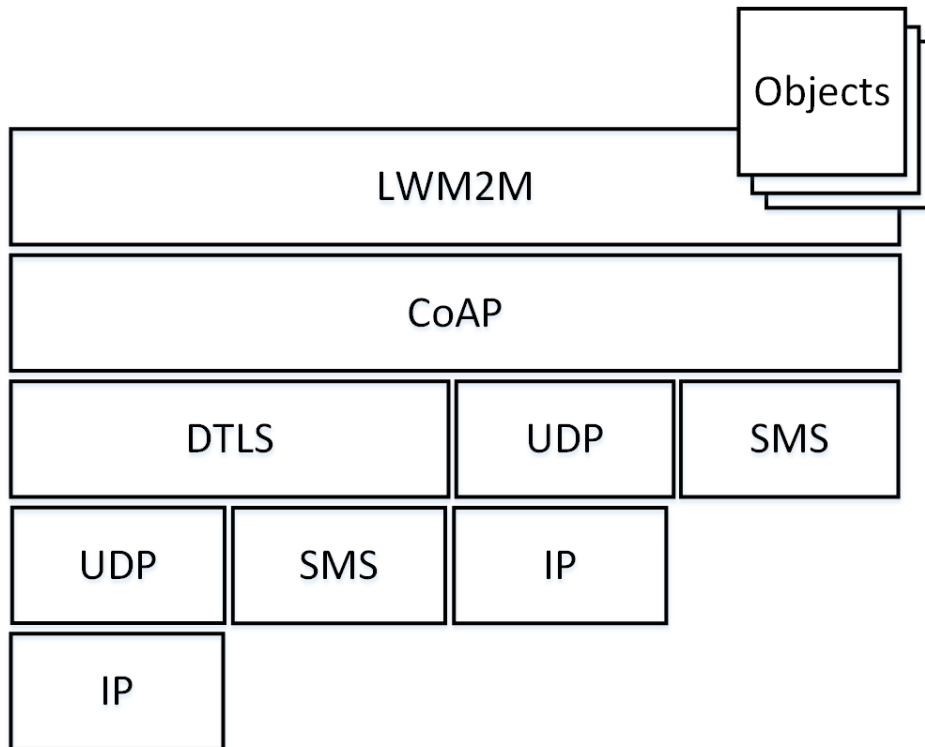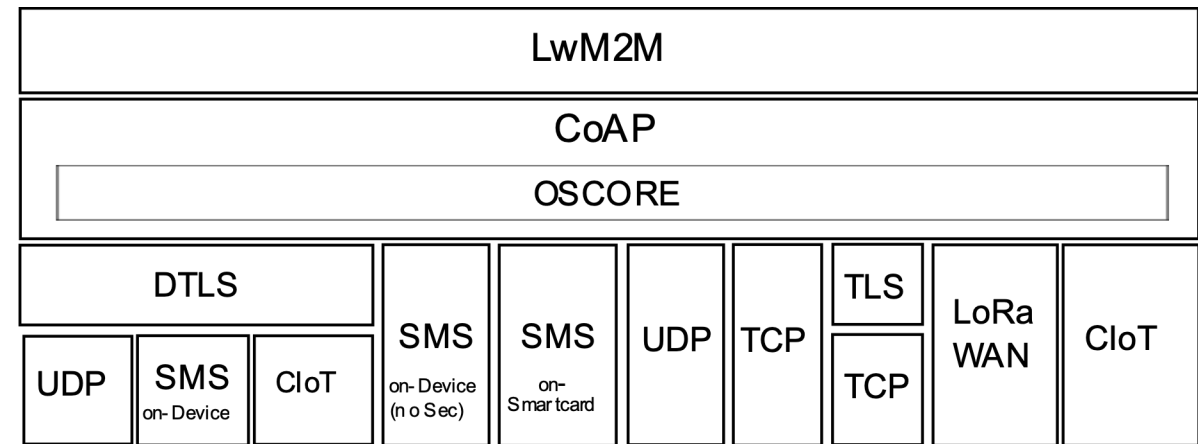
- We are planning to make the split between LwM2M message and transport even clearer by adding additional transports to v1.2, such as MQTT, and HTTP.

Our Work Style and Challenges

- We prefer to re-use IETF specifications.

- We receive implementers questions via our public Github repo.

- We test our specifications.

- IETF groups operate at different timescales. This has created interoperability problems since LwM2M specifications refer to drafts instead of RFCs.

- Sometimes they relate to IETF specs more than to LwM2M. How can we connect the right people?

- Since we build on IETF specifications it would be great to have test specifications for specifications.