

one

M2M



Introducing oneM2M

The Global Standards Initiative for
Machine to Machine Communications
and the Internet of Things

What is oneM2M?

oneM2M is a global standards initiative for Machine to Machine (M2M) communications and the Internet of Things (IoT).

It is developing globally agreed-upon, access-independent, end-to-end specifications for an M2M communications and management system that can be readily embedded within various hardware and software. It will make a major contribution towards connecting the billions of devices in the field with M2M application servers worldwide, powering the IoT.

oneM2M for cross sector standards

oneM2M's architecture and standards are designed to be applied to many different technologies in many different industries, and to take into account the needs of all sectors.

oneM2M specifications provide a common means for communications service providers to support applications and services as diverse as:

- Home automation
- eHealth and telemedicine
- Enterprise automation
- Transportaion including the connected car
- Energy including smart grid
- Public services

First Specifications

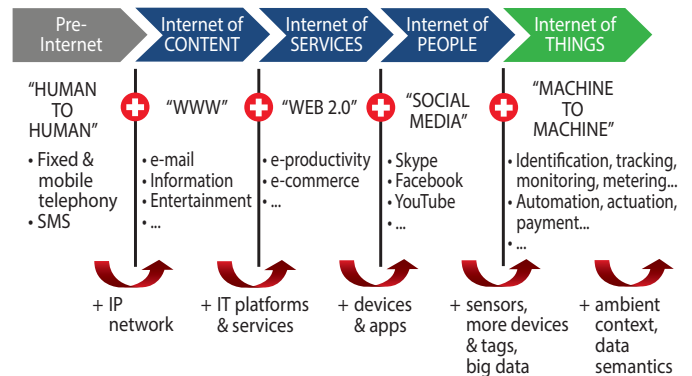
oneM2M Release 1 is now published. The set of ten specifications can be downloaded from www.onem2m.org/release1. These specifications provide:

- A common set of service layer capabilities
- An access-independent view of end-to-end services
- Open/standard interfaces, APIs and protocols
- Security, privacy and charging
- Reachability and discovery of applications
- Interoperability, including test and conformance specifications
- Identification and naming of devices and applications
- Management aspects (including the remote management of entities)

The evolution of the Internet

Today, we live in the age of the Internet of People – the use of social media has grown rapidly following the introduction of new devices and apps. Soon the integration of sensors, tags and big data will usher in the age of Machine to Machine, with identification, tracking, monitoring and automation opening up the Internet of Things. It will be powered by M2M communications.

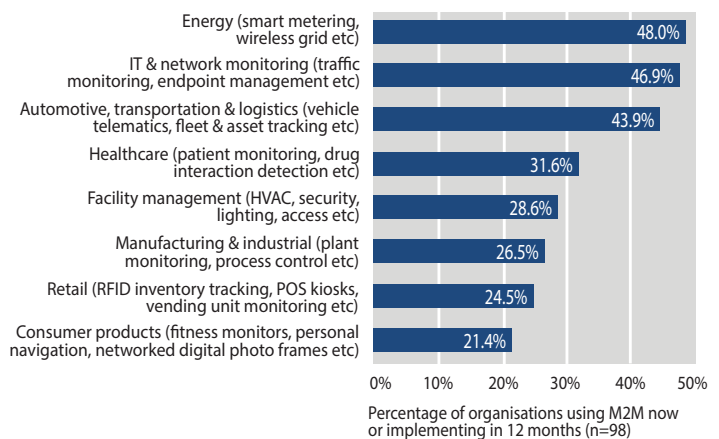
The next step in Internet evolution



Source: TechRepublic & ZDNet, 2013

Already M2M communications are used in numerous fields.

Where is M2M used today?



Source: Alcatel-Lucent

The Benefits of oneM2M

There is a strong market case for producing global specifications. The IoT offers unprecedented business opportunities for new devices and services. But if we are to fully exploit these opportunities and grow the market to the scale projected, we need common global standards to reduce complexity, facilitate the roll-out of new devices and services, and provide economies of scale.

The work of oneM2M will therefore:

- Boost economies of scale and shorten time-to-market for IoT products and services
- Reduce market fragmentation
- Simplify developments of IoT applications and the integration of services
- Leverage network interoperability for enhanced reach of services and expanded business opportunities
- Enhance IoT security and reliability
- Reduce standardisation overlap across vertical market segments

The Impact of M2M and the IoT

The potential of the IoT is enormous. To illustrate the range of possible applications – using oneM2M's first release of standards – the following example scenarios were demonstrated live at a recent showcase event:

- Home energy management
- Vehicle-to-home solutions
- Smart City services and multiple service layer platforms interworking
- A oneM2M-enriched personal life
- A oneM2M-based healthcare system
- Connected vehicle cloud
- A oneM2M business application across multiple use cases and market segments

The Internet of Things is going to be big – though nobody really knows how big. Estimates vary. But, considering the potential billions of devices that can be linked with M2M, the number of applications could be enormous. Most people agree that huge revenues could be generated.

The IoT is going to be big

(though nobody really knows how big...)

IDC

28.1 BILLION

"UNITS" IN 2020

\$7.1 TRILLION

GLOBAL SOLUTION
REVENUES BY 2020

Source: IDC, May 2014

Gartner

26 BILLION

"UNITS" BY 2020

\$300 BILLION

SERVICES REVENUES
IN 2020

\$1.9 TRILLION

GLOBAL ECONOMIC
VALUE IN 2020

Source: Gartner, March 2014

Machina Research

25 BILLION

M2M "CONNECTIONS"
BY 2022

OF WHICH

2.6 BILLION

ARE CELLULAR

\$1.2 TRILLION

GLOBAL OPPORTUNITY
BY 2022

Source: Machina Research, January 2013

oneM2M is a global initiative created by eight of the world's leading ICT standards bodies:



They are joined by six global ICT fora:



and more than 200 companies from a wide cross-section of related industrial sectors.



oneM2M is open to new members and partners who would like to become part of an important global technology project that will shape the future of the world we live in.

View the current list of oneM2M members at:
www.onem2m.org/membership/current-members.

For further information

oneM2M Secretariat: oneM2M_Secretariat@list.onem2m.org

www.onem2m.org



Membership of oneM2M is open to members of ARIB, ATIS, CCSA, ETSI, TIA, TSDSI, TTA and TTC.

All Members of ETSI are welcome to join oneM2M, at no additional cost.

To join oneM2M as an ETSI Member, please contact Gerry McAuley of the oneM2M support team, at Gerry.McAuley@etsi.org.

If you are not already an ETSI Member, please contact the ETSI Membership team at membership@etsi.org or apply online at www.etsi.org/membership, and request oneM2M membership at the same time.



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