



Smart Infrastructure: Supporting Policies and Regulations for M2M Communications

Robert MacDougall, Vodafone Group Public Policy

DoT M2M Conference, New Delhi

12 May 2015

M2M is already transforming industry across the globe and has huge potential for India



Automotive



Finance



Energy and utilities



Health



Public services



Security



Consumer electronics



Transport and logistics



Manufacturing



Consumer goods



M2M applications can further Digital India policy objectives

Enable

Power-up customers and assets with fresh 'connected' functionality, tailored to need

Digitally empowering Indian citizens

Monitor

Get up-to-the-minute data on condition or status from all connected assets

India has Aggregate Technical and Commercial (AT&C) power losses of up to 30%

Control

Remotely control how connected assets react to changes in condition or status

Indian businesses still write off too many business critical assets due to lack of visibility and control

Track

Know exactly where connected assets are, anytime, all the time

A payload truck completes on average 2.8 Delhi-Mumbai-Delhi roundtrips per month, covering a distance of 2,814 KM



International case study – eCall in the European Union

EU legislative process complete given positive vote at European Parliament on 28 April 2015

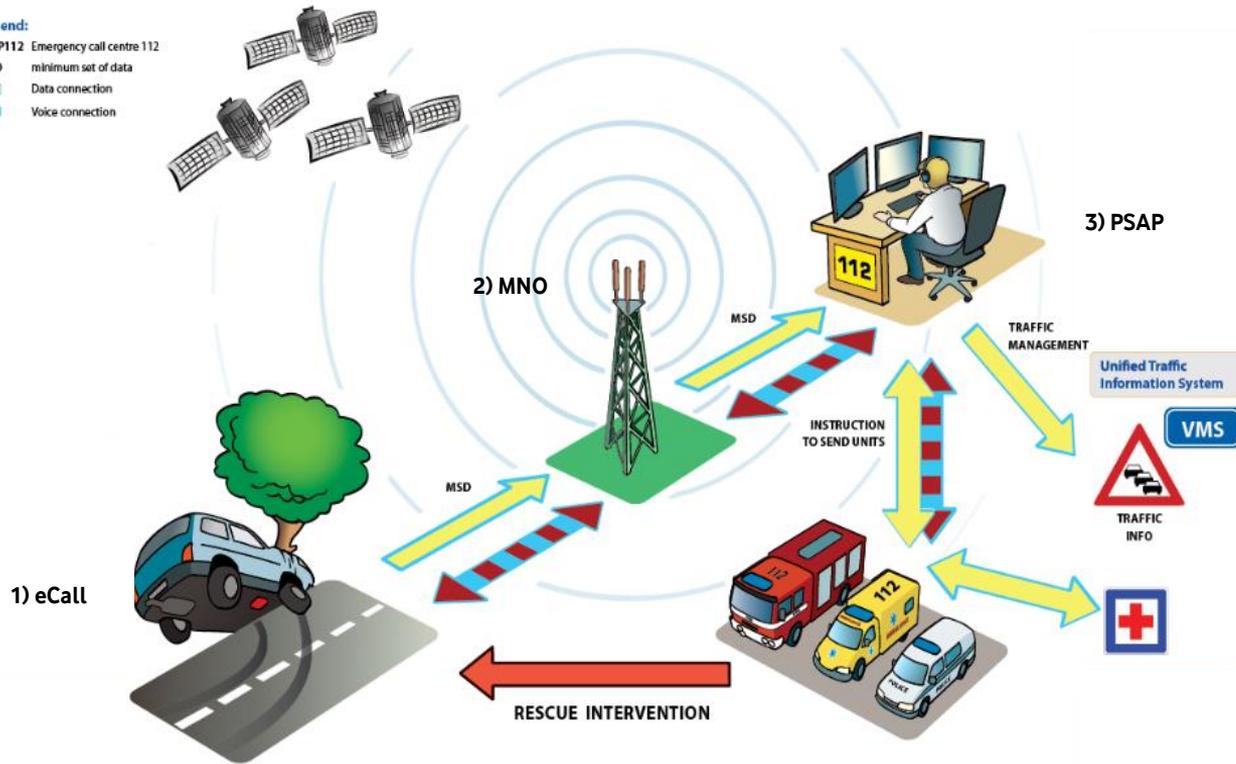
Legend:

PSAP112 Emergency call centre 112

MSD minimum set of data

Yellow arrow Data connection

Red and blue striped arrow Voice connection



In the event of a crash, an eCall-equipped vehicle will automatically trigger an emergency call, which sends information on the accident, including location, to the emergency services. eCall cuts emergency services response time by 50% in the countryside and 60% in built-up areas.

- 1) eCall functionality has to be fitted to all new models of cars and light vans in the EU by 31 March 2018.
- 2) Mobile Operators must be able to recognise the eCall 'flag' in their networks.
- 3) EU member states must be able to process eCalls via their emergency call centre (PSAP) by 1 October 2017.



International case study – smart metering in New Zealand

ASB Bank cuts energy costs with smart metering solution



Need:

- As part of New Zealand’s government schemes to reduce energy consumption among businesses in the country, ASB Bank wanted to install a network of smart meters throughout its offices and branches in order to monitor and control energy consumption.
- To be effective, it needed an experienced M2M partner, a reliable nationwide communication infrastructure and, with security in mind, a solution that was independent of the bank’s data network..

Solution:

- Vodafone Global M2M delivered a comprehensive smart metering solution to ASB Bank, amongst one of the first in the country.

Business benefits:

- In three years, ASB Bank has been able to reduce its energy consumption by 23%, equivalent to NZ\$2,650,000 (approximately €1,625,000) over three years.
- In terms of CO2 savings, this equates to over 1,000 tonnes per year, equivalent to a person flying from Auckland to Sydney, Australia, and back almost 1,923 times.

“We had committed to make savings by certain dates and, though it was difficult meeting that deadline. With Vodafone and ESP we achieved our goals, I’m really happy with the result.”

Leo de Graaf,
Senior Services Engineer,
ASB Bank



Policy and regulatory recommendations for M2M

- **Set government policy to realise the benefits of M2M:** Supportive government policy across key industry sectors via roll-out targets can realise the benefits of M2M in India. We welcome the DoT's focus in this area.
- **Standardisation and interoperability:** There is unlikely to be a 'one-size fits all' approach, given the many technologies involved. Government should facilitate industry led initiatives. The European Commission's recently established 'Alliance for Internet of Things Innovation' is a good example of such an approach.
- **Privacy & Security:** Industry must proactively respond to any perceived concerns associated with M2M and the Internet of Things through use of established tools such as Privacy by Design, Security by Design & Privacy Impact Assessments
- **Regulation:** Developing a proportionate, technologically neutral approach is vital. Regulate to promote economies of scale for M2M.
- **Facilitating M2M Pilot projects:** development of pilot programmes can promote innovation and help develop business models, given long 'lead to cash' periods for M2M projects.

