

2nd Indo-European Dialogue on ICT Standards & Emerging Technologies

4th November 2015 • Shangri-La's - Eros Hotel, New Delhi, INDIA



Government Initiative towards M2M

- Digital India programme of the Government is aimed to take the power to the next level. It has the power to empower the people for enriching the
- Machine to Machine (M2M) is going to be a key enabler and particularly in view of Government resolve to Digital India, Make in India and to develop Smart Cities.
- It will impact every aspect of life of common man, resulting in substantial tangible social and economic benefits to consumers, businesses, and government.

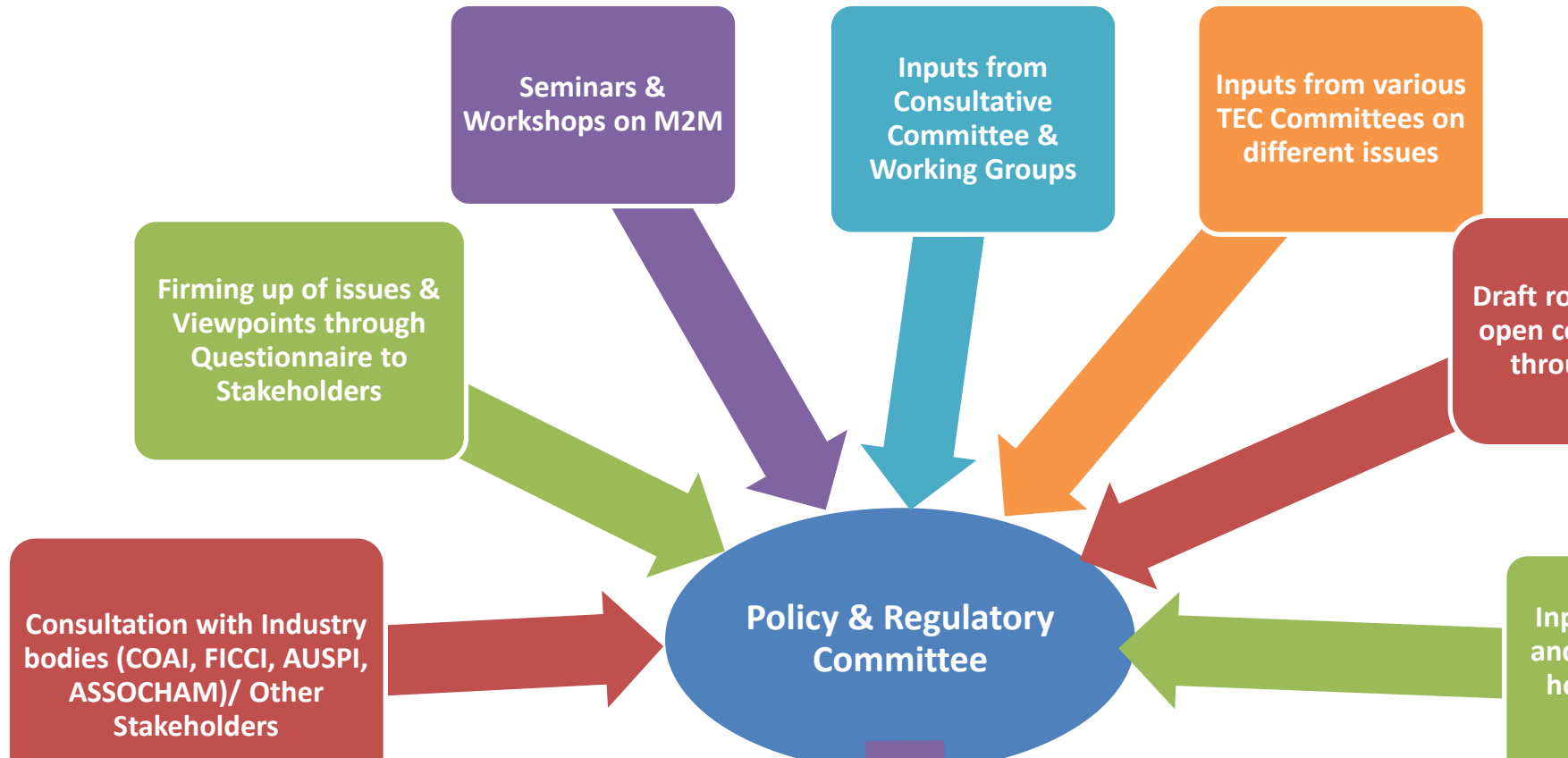
Government Initiative towards M2M

- Government is making all possible efforts to bring complete eco-system for M2M and high speed Broadband
- The Bhartnet project of DoT will get telecom infrastructure in place up to panchayat making them ready to get full advantage of M2M.
- Government is working towards bringing favourable policies and standards for M2M to boost the growth
- DoT released the '**National Telecom M2M Roadmap**' with the objective to provide the impetus to growth of M2M ecosystem

Challenges to M2M Rollout

- Treatment of physical and digital infrastructure as two distinct, disjoint
- Propriety implementations impeding full potential benefits from M2M
- Lack of Common Standards challenge to Economy of scale, interoperability, resulting in cost escalation
- Different set of Regulatory environment for M2M communication.
- Lack of Coordination among stakeholders

Process of M2M Roadmap Formulation



M2M Roadmap: Focus Areas

- Efforts towards Assimilation of various M2M standards
- Outline of policy and regulatory approaches for M2M
- Plans to boost M2M manufacturing as part of 'Make in India' initiative
- Building M2M Communication Infrastructure
- Road Ahead for M2M initiatives and Plans

Approach towards M2M Proliferation

- It is important that future M2M networks be built based on open, standards based, interoperable standards preferably on IP networks. Not only it results in easier maintenance but also infrastructure sharing becomes easy and simple.
- Radio spectrum will play an important role in enabling future M2M. The most suitable option for last mile connectivity. Home and neighbourhood networks are generally planned to use licence free bands to a greater extent.
- M2M deployment in general consists of large number of sensors and devices connected onto the network. This in itself brings lot many challenges and opportunities.

Approach towards M2M Proliferation

- In order to take advantage of the opportunities M2M presents, enterprises need to look beyond the “how” and instead think of “what-if” to find solutions to complex business problems
- The smart sustainable cities need convergence of physical infrastructure buildings, roads, transportation, power etc with digital infrastructure common smart management & common data centres
- Security and privacy has remained key concern in IT deployments adoption of standards and relevant enabling of IT act provisions for accountability becomes important

M2M Standardization activities

➤ Telecom Engineering Centre(TEC) an arm of DoT, is working on India's M2M standards/specifications in line with global standards

➤ For this purpose TEC had formed working groups in following verticals for finalization of standards

- ✓ Power
- ✓ Automotive
- ✓ Health
- ✓ Surveillance
- ✓ M2M Gateway and Architecture
- ✓ Home Appliances

Coordination among all stakeholders for M2M Proliferation in India

- DoT has constituted committees for coordination across various stakeholders engaged in M2M activities to have holistic view & synchronize the activities of ministries / industry / standards organizations etc as a single window coordination
 - ❑ An apex Committee chaired by Hon'ble MOC&IT to address inter-ministry coordination
 - ❑ A Review Committee under Member (Technology) Telecom Commission to oversee the policy and regulatory issues
 - ❑ A Consultative committee under Advisor(Technology) for interaction with various industry associations/ academia/ standards organizations to develop guidelines

Future Action Plan of DoT

- To facilitate M2M communication standards from Indian Perspective and recognize such standards for India
- To address M2M policy and regulatory aspects related to MSP Registration and M2M specific KYC guidelines
- Support Human Resource and Capacity Building through making available relevant technical content
- Technically support Pilots and/ or Proof of concept

Thank you