



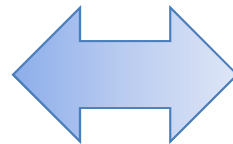
Agenda Item 4.2: TIA Engaging Verticals

**M2M Consolidation
17-18 August 2011
Washington, DC**

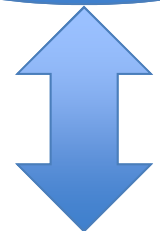


Business Needs from M2M Verticals

***Enlarge Business
Economic Scale***



***Expand Business
Service Scope***



***Enhance Business
Operational Strength***



Business Needs from M2M Verticals

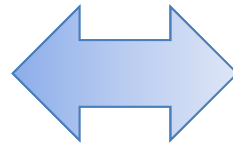
*Enlarge Business
Economic Scale*



**Opportunities to participate in
Regional, National and, International
level of Work.**



**Vehicular
Telematics**



*Expand Business
Service Scope*

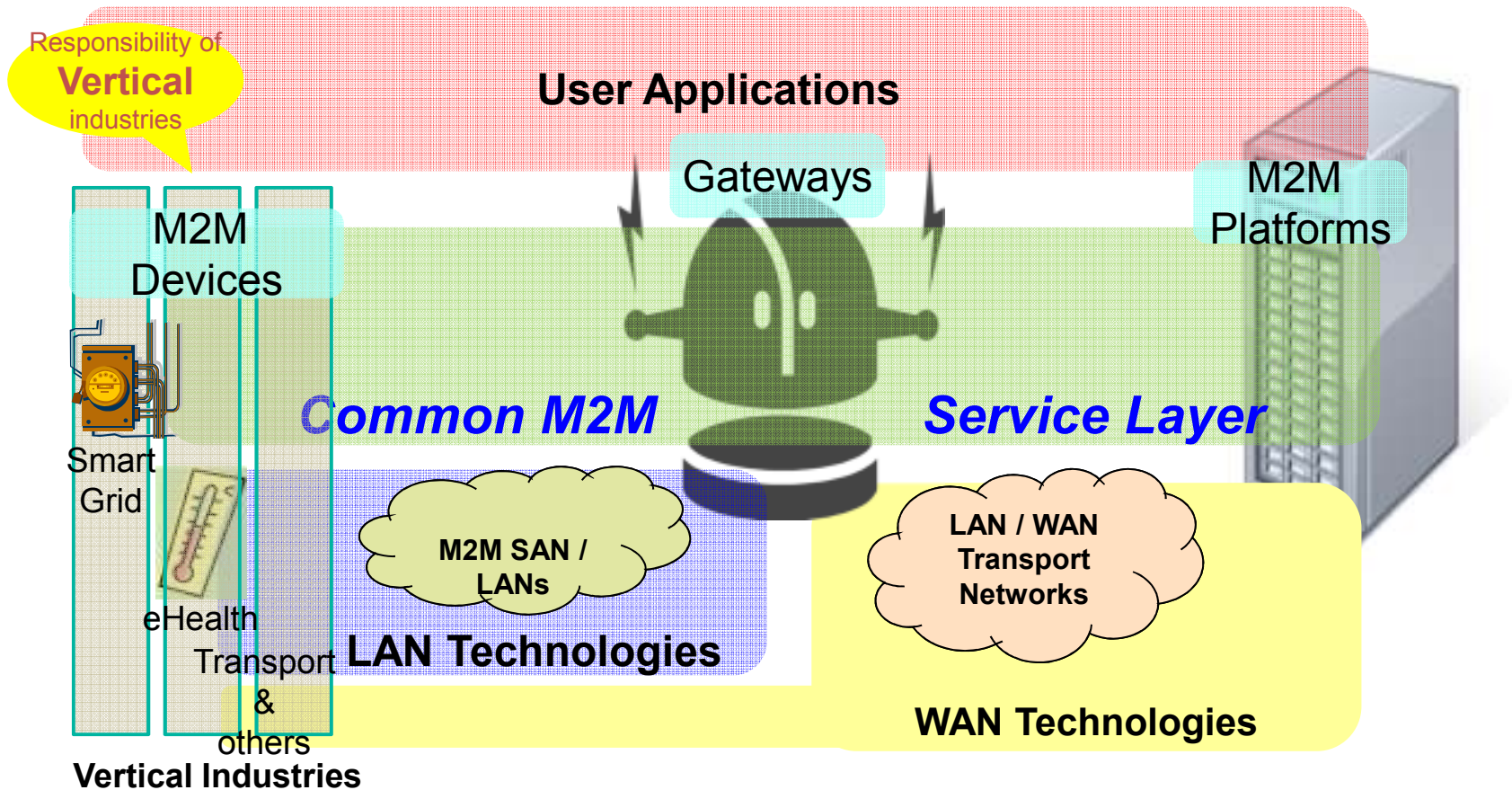


**Provide Value-Riched Services through
Horizontal Services Integration
e.g. Fleet Management + eHealth = Mobile Triage
Fleet Management + ePayment = Mobile PoS**

*Enhance Business
Operational Strength*

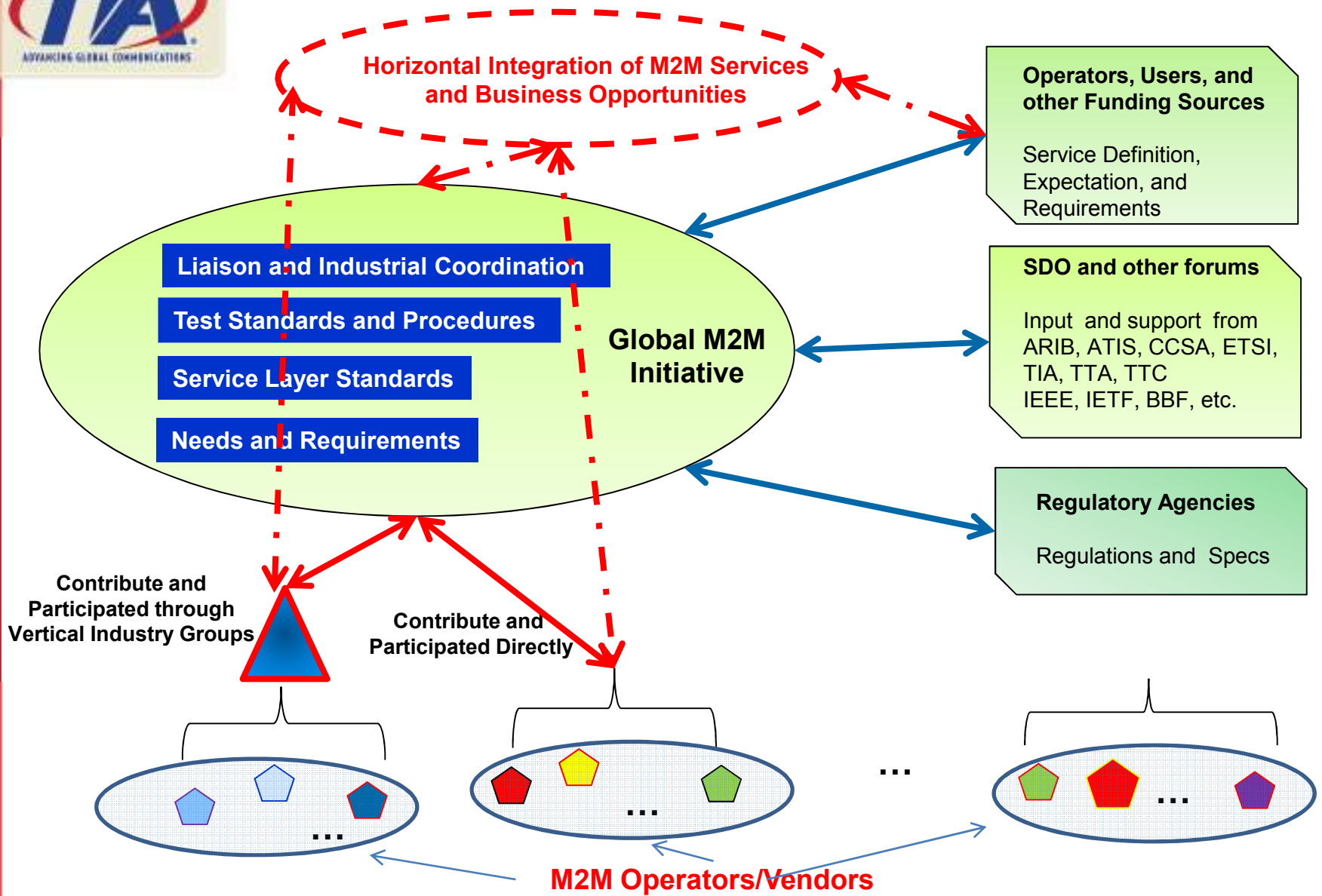
**Lower CAPEX and OPEX through
standardization and interact
with Global M2M Community**

Benefited from Common Service Layer



Despite the variability in M2M networks, a **standardized common framework** will be built, laying the groundwork for **rapid application development**, reduced **time-to-market**, and favorable economies of scale.

Opportunity to Foster Business Expansion





Business Drivers to Participate a Global M2M Initiative

- **Opportunities to Boost Global M2M Economy of Scale**
 - Develop standardized and reusable Service Layer modules and elements for vertical applications to ease the work on both Service development and deployment;
 - Expand vertical industries to boost business scopes to global M2M Services.
- **Opportunities to Expand Business**
 - Develop steps to expand scope of services by working with other verticals directly
 - Foster partnership with other vertical vendors on joint applications.
- **Opportunities to get strong support from Telecom and ICT Industry**
 - Leveraging the expertise on connectivity, network, and device aspects from the Telecom/Wireless industry to enhance service quality and expand service portfolio from single to across multiple accesses;
 - Work directly with operators, users, and funding sources on defining the requirements and operations of the M2M services to jointly exploit the best means of collaborations;
 - Opportunities to discover new business models using cutting edge ICTs.
- **Opportunities to connect with International, National, or Regional Level M2M Services Developments**
 - Leveraging the M2M Global Initiative's liaison relationship to discover opportunities and establish working relationships with International, National, or Regional M2M project development agencies.



Related Information

- The following embedded document, while not representing a coordinated TIA view, may be useful to the meeting.

Enhancing Machine-to-Machine Communications Through an Industry Collaboration

Current Situation

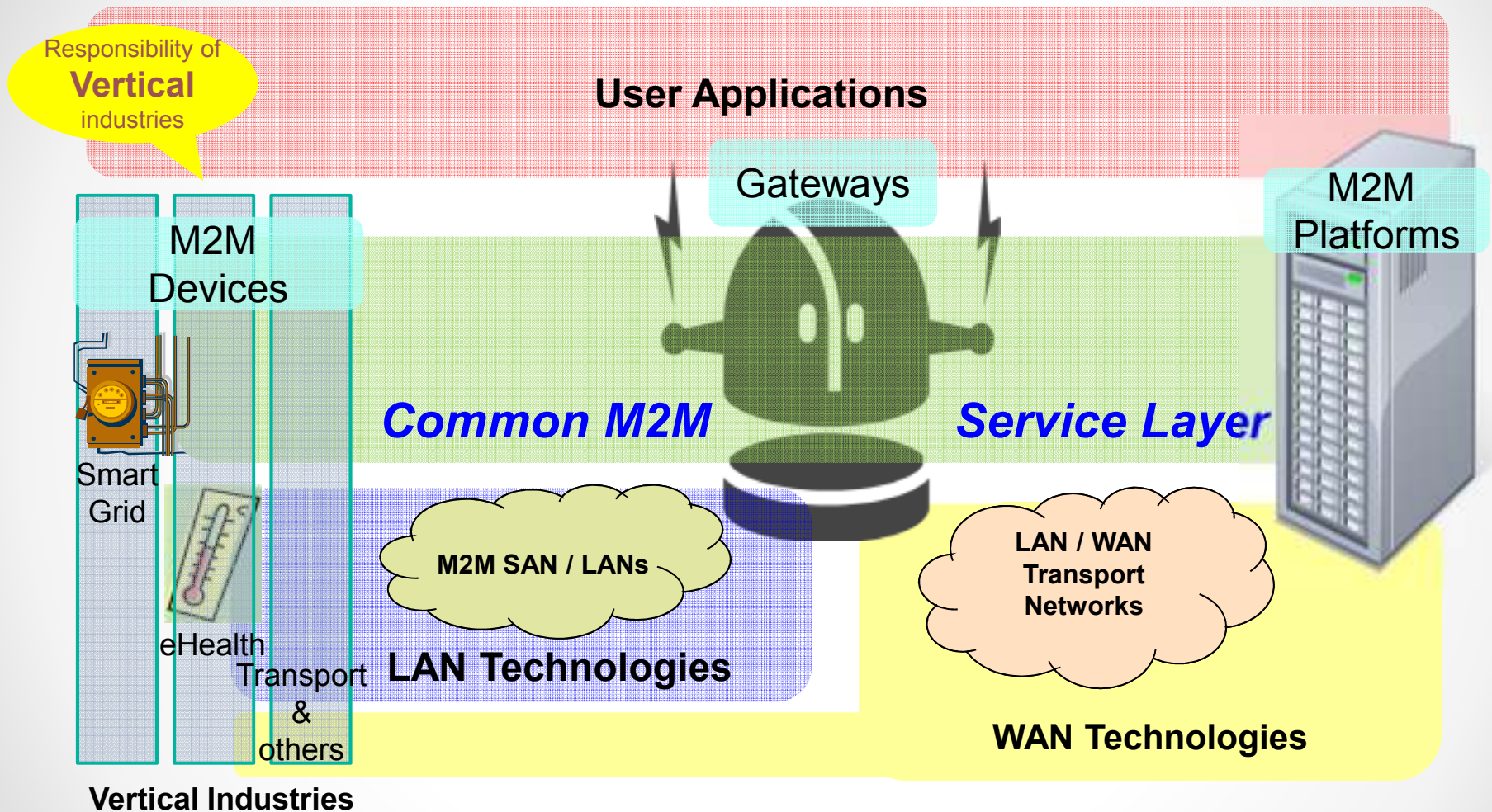
- **Fragmented Industry:**
 - most industries are solving their M2M needs on their own;
 - often converging upon similar architectures and elements;
 - the M2M “wheel” is reinvented from industry to industry.
- **Customized Solutions Abound:**
 - since solutions are on an industry-by-industry basis, each solution requires its own design, production, and implementation cycle;
 - unique solutions often result in sole-sourcing of customized hardware;
 - software design is limited to a small group of developers who understand the architecture and API’s for a particular industry or platform, thus leading to high development costs and high costs for ongoing support.
- **Lack of scale for components:**
 - economies of scale are difficult to achieve in any given industry since solutions are so varied and unique.

Proposed Solution:

A Global M2M Consolidation Initiative

- **The global initiative will create:**
 - partnership between industries with business-critical M2M needs and global standards development organizations for M2M communications to standardize;
 - common M2M architecture;
 - common set of Service Layer API's.
- **A common M2M architecture and Service Layer API's will lead to:**
 - reduction of component pricing (i.e. reduced capex);
 - lower development costs and ongoing maintenance costs (i.e. reduced opex);
 - increased addressable market;
 - faster time to market;
 - facilitation of interoperability between elements, thus affording an expansion of the M2M marketplace;
 - allowing companies to focus on their core business and not worry about solving their M2M challenges on their own;
 - flexibility to utilize the best transport network to meet their business needs.

Layers of a generic M2M architecture



Despite the variability in M2M networks, a **common framework** will be built, laying the groundwork for rapid application development, reduced time-to-market, and favorable economies of scale.

Why create this initiative now?

The conditions seem right:

- **Surge of interest in M2M communication**
 - Network Operators
 - Developers
 - System Integrators
 - Service Providers
- **Governmental and industry initiatives**
 - Smart grid
 - eHealth
 - Connected home
 - Connected vehicle
- **Quality commercial data networks have become ubiquitous**
 - Cellular data networks are providing high quality data services and are rapidly expanding in supported capabilities (data rates, coverage, etc);
 - Tremendous worldwide base of fixed networks.
- **Hardware has become increasingly available and more affordable**
 - Cellular modules and short range wireless are widely available and mature;
 - Generic M2M platforms are becoming available;
 - Handsets are becoming generic user interfaces.
- **Standardization**
 - Many activities to enhance systems to better support M2M;
 - Many Standards Development Organizations addressing the need;
 - Work program in some groups seems at an opportune time for consolidation.

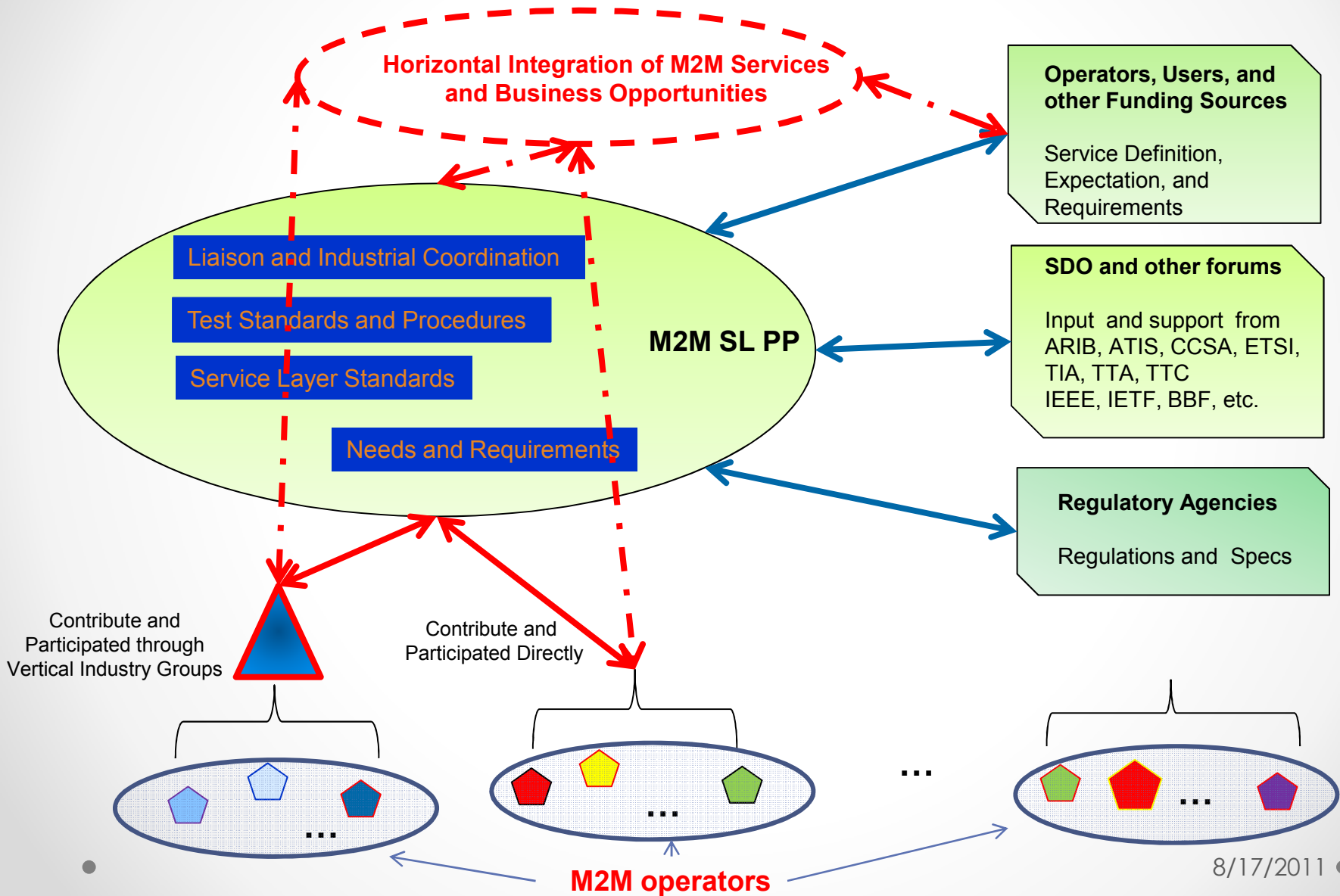
The Consolidation Vision

- **We need your help**
 - In order to develop a widely useful M2M standard, we need your valued input and participation
- **Our vision is a partnership that involves all interested parties**
 - Currently in formative stages.
- **Spearheading a worldwide effort**
 - To bring industries involved in M2M together;
 - To create a partnership to advance standards development;
 - Thus providing a more common platform for deployment of M2M services.
- **Interested organizations are invited to help formulate**
 - The objectives;
 - The structure, rules, and procedures of the organization.
- **Partnership to include**
 - M2M standards organizations, industry fora, and consortia;
 - Other standards organizations, industry fora and consortia;
 - Telecom SDOs.

Some Preliminary Characteristics:

- **Organizations can participate as**
 - Full partner
 - Associate partner
 - Liaison relationship
- **Members of any organization which is a partner are allowed to participate**
- **A common set of operating rules and procedures will be developed**
 - A partner or member must subscribe to them in order to participate
- **Organization (*Preliminary*)**
 - Steering board
 - Technical body with various working groups
 - Secretariat
 - All partners and members will be allowed to participate in the steering board and technical groups
- **Will initially focus on Service Layer**

M2M SL PP Can Foster Business Expansion



Business Drivers

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