# Standards Report

(July – September 2014)

## October ’2014

SESEI

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Note: Few documents in this report as hyperlink are password protected considering their confidentiality referred, please use password as “sesei2013” to open them.

1. Indian Standardization System

A pictorial view of the Indian Standardization System around Priority Sectors of SESEI is shown below;

For more information on Indian Standardization System, please refer our earlier report as available [here](#).
2. Bureau of Indian Standards (BIS)  
http://www.bis.org.in/index.asp

2.1. Update on the BIS ACT Amendment

As updated in our last quarterly report Bureau of Indian Standards (BIS) is in the process of amending the Bureau of Indian Standards Act, 1986. The BIS (Amendment) Bill 2012 was earlier introduced in the Lok Sabha on 3rd May 2012 that was referred by the Parliamentary Standing Committee on Food, Consumer Affairs and Public Distribution. It was not approved last time and now with the formation of new Government at the centre, the Bill needs to be re-introduced and has been revised further. The New BIS ACT Amendment draft is now available at Department of Consumer Affair Website. The following changed proposed are positive amendments:

- Proposed to be more clearer, transparent and possibly simplified
- Services included under the purview of BIS
- Standards Mark definition updated to include mark of International body or institution.
- Accreditation of International Body included
- Standard Mark is linked with each conformity assessment scheme which is broadened by including category of situation such as exports.
- Recognize the mark of other international body or institution at par with the BIS Standard Mark
- Include recognition, membership of the international organizations in addition to ISO and IEC; Obtain membership in regional, international and foreign bodies having objects similar to that of the Bureau and participate in international standards setting process;
- Open system of appointment of members by inviting applications for membership in committees: As per the decision of the Bureau, persons other than members of the Bureau can also become members of the Executive and Advisory Committees.
- Annual review of composition of committees based on evaluation of contributions made by members and system of replacing non-contributing members with those showing interest to participate. Creation of Standards Management Board for overseeing standards formulation activity
- Adoption of standards of other Standards Developing Organizations; as per the decision of the Bureau, persons other than members of the Bureau can also become members of the Executive and Advisory Committees, coordinate, interact and manage the international, multilateral and bilateral interaction with other international, regional or national standards bodies from other countries;
- Funding of R&D Projects for formulating standards: The Bureau shall undertake, support and promote such research as may be necessary for formulation of Indian Standards.
Update-1:

**Federation of Indian Chambers of Commerce and Industry submitted its response and recommendation to BIS for this Act amendment:** Key recommendations are as below while a complete copy is available at [http://eustandards.in/documents/2014/09/ficcis-recommendations-for-amendment-of-bis-act-1986.pdf](http://eustandards.in/documents/2014/09/ficcis-recommendations-for-amendment-of-bis-act-1986.pdf)

- Wherever, there is a regulatory authority or one is being set up by the Government, BIS Act need not cover those and their standards as suggested by these regulatory authorities should be followed/considered. This needs clarification in the Bill.

- Mechanisms need to be developed by Bureau for cooperation of public or private institutions with government inspection services under the overall control of statutory authorities. Inspection by specially trained/designated/notified agencies for third party inspection should be considered to supplement the inspection by the Government agencies for conformity hence; the definition of ‘inspecting officer’ needs to be redefined subject to acceptability of the above principles.

- Manufacturer need not be a licence or certificate holder in all cases as brand owners are now increasingly relying on contract manufacturing both within the country as well as outside. As per the current process, to obtain registration providing details of manufacturing units and processes becomes challenging.

- Self-declaration should be introduced in all sectors and registration could be exempted in those sectors where risks associated with non-compliance are low and industry sector has a high degree of compliance history. Provisions should be there in the Act to exempt industry from registration for self-declaration in future depending on certain criteria.

- Clarity is required to specify whether International bodies issuing the standard mark or International Bodies issuing other Marks, using BIS Standards, would be covered. The recognition/authorization process of the International bodies to issue such mark has to be defined in the Act. International practices of recognizing the certification bodies could be referred for such cases. ECOMARK could be introduced and encouraged as existing Hallmark scheme.

- May consider having Committee on ‘International Linkages’ & ‘environmental sustainability’

- Need to clarify the role of Bureau where sector specific regulators are existing or are going to be there in future. The prosed functions of the Bureau overlaps with the regulators, e.g. SEBI, IRDA, RBI, TRAI etc.

- Labs outside India shall also be included.

- Rules should be made such that it does not lead to inspector Raj and harassment for the industry. As far as possible, third party inspections should be followed.

- Mechanisms need to be developed by Bureau for cooperation of public or private institutions with government inspection services under the overall control of statutory authorities. Inspection by...
specially trained/ designated/notified agencies for third party inspection should be considered to supplement the inspection by the Government agencies for conformity. Inspections should not be carried out unless the inspecting officer or third party agency has proper order at least from the rank of ‘Joint Secretary’ official in the Bureau.

- The Rules should also provide for timelines for formulating the standards. Currently, the main cause of concern for the industry is the time taken to formulate standard, to print it and then finally notify is very long and takes many years. The Bureau should provide for timelines for each and every step for the formulation of standard in Act or Rules and keep it to the maximum of 15 months. Extension could be considered only in very rare cases.

**Update-2:**

**Enhanced scope of voluntary registration and Marking by BIS:** “The objective of the Amendment Bill for BIS Act of 1986 is to ensure that Indian products are acceptable in the international market, as the proposed National Standards Body will seek membership of similar international agencies. Furthermore, a large number of products, 19,000 to begin with, including handmade and imported, will have to have a BIS label to safeguard the interests of consumers,"

Also, the draft bill says that for articles or goods sold which do not conform to the relevant standard, the “Bureau shall give direction for rep-air/replacement; or pay compensation to the consumers; or be liable for the injury caused by non-conforming goods or articles”.

The draft bill also seeks a mandatory hologram on all goods sold under the BIS label in India. “No authorised seller shall sell any specified goods unless they are marked with a hologram in a manner that is specified.”

Through this Act amendment BIS also plan to strengthen the Market Surveillance, promote self-registration scheme and voluntary certification.

For more information on this please refer [Read 1](#), [Read 2](#) & [Read 3](#) NEWS articles

A copy of presentation on this update as shared by BIS official during an event on “INDIA STANDARDS – A STRONG ICT NATION” organized by MAIT is available [Here](#)

**Update 3:**
During the last ISO GA held in Brazil, a bilateral meeting was organized between BIS delegation and CEN-CENELEC at Windsor Barra hotel, the venue of the next ISO General Assembly to discuss the following agenda items;

- The potential cooperation framework between BIS and CEN-CENELEC: existing possibilities and way forward
- Adoption of ENs in India: existing possibilities and way forward
- LVDC in India
- SESEI Project: review of the project achievements and possible support to developing the BIS-CEN-CENELEC cooperation

SESEI along with CEN CENELEC office will continue working on action items came out from above meeting and follow-up.

**Update 4:**

List of Standards under wide circulation for comments around Priority Sectors after mapping them into corresponding ISO and IEC technical committees are available [here](http://www.tsdsi.org/).

For more information on List of Standards under wide circulation for comments please visit [here](http://www.tsdsi.org/)

3. **Telecom Standards Development Society, India (TSDSI)**

**Update:**

- A delegation from the Government of India participated in 18th meeting of the Global Standards Collaboration (GSC), and announced TSDSI as the new Indian recognized telecommunications standards organization. TSDSI was also accepted as a new GSC full member.

- TSDSI draft IPR policy appears to be majorly aligned with ETSI IPR policy except two new additions (clause 5.7 & 5.8) pasted below on which consensus are yet to be reached among the Industry members.
  
  - 5.7: To promote the licensing of and reduce the incidence of litigation over ESSENTIAL IPRs, the owners and potential licensees of ESSENTIAL IPRs subject to undertakings pursuant to clause 5.1 shall negotiate FRAND terms and conditions in good faith so as to reach an
agreement on a license for such ESSENTIAL IPRs in a [reasonable] period [of 6 to 12 months].
The parties to the negotiation may, however, mutually agree for extended time period.

- 5.8: During said period of negotiation, the parties will avoid resorting to any legal recourse
including injunctions for such ESSENTIAL IPRs. In case the parties fail to reach an agreement
on a license for such ESSENTIAL IPRs within said period, all legal remedies are available to the
parties in respect of such ESSENTIAL IPRs as per applicable law including injunctions pertaining
to alleged infringements.

- Recently concluded TSDSI GC [General Council] meeting on 9th September, did not reach a decision
on it. As a way forwards it appears that this will now be presented to the GB [General Body] meeting
scheduled along with next new GC election dated 15th October.

- TSDSI 1st General Body Meeting along with Election of Governing Council Members of TSDSI is
scheduled on 14th October. Read More

4. Electrical Equipment including Consumer Electronics

In absence of a formal agreement between BIS and CEN-CENELEC, and limitation of current provisions
of BIS ACT, Project SESEI is not able to establish a formal exchange of dialogue/updates with BIS. While we
are exploring a formal agreement with BIS, Project SESEI has requested BIS Electrotechnical division
council [ETD] for a possible participation as an observer or be a part of distribution of the technical
committees covering topics of Smart Grid, Smart Meter, and LVDC etc.

- ETD 13: Equipment for Electrical Energy Measurement and Load Control
- ETD 20: Electrical Installation
- ETD 32: Electrical Appliances
- Adhoc Group on LVDC

Update;

BIS has published following standards;

- IS/IEC 60479 : Part 2 - Effects of Current on Human Beings and Livestocks Part 2 Special Aspects

4.1 LVDC in India

In view of the challenges and opportunities in India for provision of electricity to millions of people, IEEE
formed the Indian Low-Voltage DC (LVDC) Forum under the auspices of the IEEE-SA Industry Connections (IC) program.

The activities of this IEEE sponsored LVDC Forum aims to drive the reduction of electricity demand by a combination of DC-based domestic appliances, minimizing AC-DC conversions, and judicious application of LVDC power distribution. Consequent reduction of electricity consumption and energy efficiencies is important globally, and is particularly critical in emerging economies and more so in India. India has a more fundamental challenge, which is to provide access to electricity for 100s of millions of its people who currently live without it & thereby transform lives.

LVDC Forum intent to facilitate technology application and demonstration projects to gain techno-economic information needed to evolve LVDC standards and catalyze the technology’s commercialization. This IEEE sponsored LVDC forum plan to facilitate and guide; the design & building of DC Micro grids, DC Power Distribution Networks in various types of buildings including data centers, and application of DC in homes as pilot projects in each of these three areas.

As part of this initiative, this IEEE sponsored LVDC Forum has partnered with the India Smart Grid Forum (ISGF)—a public private partnership of the Ministry of Power (MoP), Government of India for accelerated development of smart grid technologies in the Indian power sector. LVDC Forum [ IEEE] is also working very closely with CPRI (Central Power Research Institute) and Indian electrical body IEEMA through a MoU. More than 30 global technology manufacturers and suppliers, research organizations, academic institutions, industry consortia and government agencies have joined the LVDC Forum. IEEE is using every possible opportunity to ensure that they are the thought leased and better placed to form standards development on this subject of LVDC in India.

This LVDC Forum also plans to look at existing standards and provide recommendations for changes to existing standards or creation of new standards required to support Low Voltage DC deployment. Along with that, LVDC forum intends to take a look at safety and regulatory aspects for needed for implementing the use of DC across various applications.

The LVDC forum has identified 4 working groups in the areas of:

- DC in the home
- DC in commercial buildings
- DC in Microgrids
- DC indoor power distribution

It is obvious that the larger intent of the IEEE sponsored LVDC forum is to introduce and influence standards related to all these applications of LVDC.

Following up on activities by IEEE LVDC Forum in India, possible directive from Prime Minister Office and a strong political pressure to come up with fast solutions including standards to support the project electrification of India, BIS has established a working group to work on this subject of LVDC in India. Electrical Installations Sectional Committee, ET 20 under Electrotechnical Department of the Bureau of
Indian Standards has established “LVDC Panel” under their Sectional Committee ET 20 to focus on standardization activity in the field of LVDC.” Professor Jhunjunwala from IIT Chennai has been nominated to be convener of this working group in BIS. Professor Jhunjunwala is also Chairing IEEE Sponsored Working Group on DC indoor power distribution. Also quite recently his Q&A has been published in the media on this subject as available at Read More.

Project SESEI also produced a report and presentation on “LVDC in India covering Priorities and needs” for CENELEC Ad-Hoc Working Group on LVDC strategy in India. Copy of presentation is available here and report here.

4.2 Smart Energy [Smart Grid & Smart Meter]

Smart Grid and Smart Meter Standardization are addressed by BIS Electro technical Division Council no ETD 13 & newly established ETD 46;
- ETD 13: Equipment for Electrical Energy Measurement and Load Control
- ETD 46 GRID INTEGRATION

Central Power Research Institute [CPRI] along with India Smart Grid Forum (ISGF), India Smart Grid Task Force (ISGTF), Central Electrical Authority (CEA) and other state electricity boards, along with Industry members are working with BIS through above technical committee to study formulation and adoption of Global Standards for Smart Grid and Smart Metering.

Ministry of Power has shortlisted 14 Smart Grid Pilot Projects to be implemented by state-owned Distribution Utilities.

ISGF has published list of global standards on their portal as available here

Earlier Ministry of Power along with ISGF and ISGTF had also published a Smart Grid Vision and Roadmap for India available here

ISGF also carried out a survey of leading meter manufacturers to find out the communication technology and the standards being used. Report on this survey having below as a conclusion statement is available here

“Meter manufacturers in India are doing a tremendous job in transforming the vision of advanced metering infrastructure (AMI) into reality. On the communications front, several technologies are available to them. The type of communication technology to be used in India will depend on the geographical requirements and constraints of specific areas. It is evident that the meter manufacturers are using different protocols and specifications in the absence of standards. Therefor it is important for the Bureau of Indian Standards (BIS) to release Indian standards for smart meters and AMI on fast track”
4.3 **Mandatory Electronics and Information Technology Goods Registration Scheme by Deity**

As a part of National Policy on Electronics (NPE), the activity of developing and mandating standards has been initiated by the Government of India with a view to align with NPE.

DeitY has notified "Electronics and Information Technology Goods (Requirement for Compulsory Registration) Order, 2012" mandating fifteen categories of electronics items under the Compulsory Registration Scheme of Department of Consumer Affairs based on their compliance to Indian safety standards. This scheme has come into effect on 03rd July 2013. The goods covered under this are provided in the notification on this page. Details of various clarifications issued on the subject are also provided. Governments have also approved a scheme for providing assistance for setting-up of laboratories for testing of electronic goods under the approved order. For more information please click [here](#).

**Update:**

In order to speed up the process of self-registration the department has started a Portal for [online](#) application for Compulsory Registration.

Department is considering to increase the list of item in consultation with BIS and industry.

5. **Automotive**

5.1. **Automotive at BIS**

In absence of a formal agreement between BIS and CEN-CENELEC, limitation of current provisions of BIS ACT, Project SESEI is not able to establish a formal exchange of dialogue(updates with BIS on this topic hence requested BIS Transport Engineering Division Council [TEC] for a possible participation as an observer or be a part of distribution of the technical committees as below.

- TED 26: Natural gas road vehicles
- TED 27: Electric road vehicles and electric industrial trucks
- TED 28: Intelligent transport Systems

**Update:**

BIS has published following standards;

- IS 13599:Automotive Vehicles - Instrument Systems - Temperature Gauges - Electrical and Electronic Type - Specification
- IS 13632:Ships and Marine Technology - Marine gyro compasses
5.2. **Automotive at Automotive Research Association of India (ARAI)**

List of draft standards published by ARAI are available [here](#);

6. **Machinery**

In absence of a formal agreement between BIS and CEN-CENELEC, limitation of current provisions of BIS ACT, Project SESEI is not able to establish a formal exchange of dialogue/updates with BIS on this topic. Project SESEI has requested BIS Mechanical Engineering division council [MED] and Production and General Engineering Division Council [PGD] for a possible participation as an observer or be a part of distribution of the technical committees as below.

- MED 01: BOILERS AND PRESSURE VESSELS
- MED 07: Earth-moving Machinery
- MED 18: RELATED EQUIPMENT CONSTRUCTION PLANT AND MACHINERY
- PGD 03: Machine Tools

6.1 **Lift & Escalators**

Following up on ongoing discussion with BIS on “potential adoption of EN 115-1 as a national standard” license agreement, responding to various queries and clarification raised by BIS, delegates from BIS and CEN had a bilateral meeting during the sidelines of ISO General Assembly during which they discussed the potential adoption of EN 115-1 in India. Following that meeting, it seems that BIS is indeed still considering the adoption of that EN, but with some modifications which BIS described as follows:

- The standard is divided in 3 parts
- BIS appears to have replaced the ENs included as references by national Indian standards, some of them been mandatory standards (e.g. structural steel standards)

These draft standards are available at:

1) Escalators and moving walks Part 1: Safety requirements: ET 25 (6607)
2) Escalators and moving walks Part 2: Guide for Planning and Selection: ET 25 (6608)
3) Escalators and moving walks Part 3: Construction and Installation: ET 25 (6609)

These standards are now under study by CEN Technical Committee to try determining answer to few following questions:

1. How different would the modified standard be from the current European one?
2. Do the modifications proposed create any technical barrier to trade (if compared to the EN)?
3. Would the modified standard require different technical solutions than those laid down in the EN?
4. In general, what is the impression given by the modified standard, compared to the EN, from the point of view of a European company/business?

BIS ETD 25 [Lift and Escalators] technical committee is responsible for making standards on this subject. While this agreement in under discussion, Project SESEI has requested for a possible participation as an observer or be a part of distribution of the technical committee.

6.2 Appraisal of Capital Goods including Heavy Electrical Equipment from the import perspective

Prime Minister’s office through Department of Commerce is seeking information regarding the appraisal of Auto Sector, Capital Goods including Heavy Electrical Equipment etc from the import perspective.

The list of 89 items whose import value is US $100 million and above is available here. Through Indian industry and association they are checking if it will be possible for indigenous industry to manufacture these items and if any strategies to be given in order to achieve short term, medium term and long term growth of the industry.

7. ICT

7.1 ICT at BIS

Following up on a request from BIS earlier to adopt Mobile Terminal Standards for RF and Emission a formal MoU draft was proposed by ETSI. This draft agreement has gone through a various rounds of discussions and updates. Final draft incorporating changes around dispute resolution, governing law, and distribution and/or use of the Adopted national Standards outside India etc. is submitted to BIS. BIS legal team is currently vetting the proposed changes.

Following are the list of standards BIS is interested for adoption and are listed as part of their current draft approved by the technical committee.

EMC
- General: EN 301 489-1
- NFC: EN 301 489-3
- 2G: EN 301 489-7
- BT, Wi-Fi: EN 301 489-17
- 3G, LTE: EN 301 489-24
- Common EPS (uUSB type): EN 301 489-34
Copy of this draft standard is available here.

Further in absence of a formal agreement between BIS and CEN-CENELEC or ETSI, and limitation of current provisions of BIS ACT, Project SESEI is not able to establish a formal exchange of dialogue/updates with BIS on this topic except Mobile Terminal Standards. Hence requested BIS Transport Engineering Division Council [TEC] for a possible participation as an observer or be a part of distribution of the technical committees as below.

- LITD 01: ENVIRONMENTAL TESTING PROCEDURE
- LITD 09: ELECTROMAGNETIC COMPATIBILITY
- LITD 12: TRANSMITTING EQUIPMENT FOR RADIO COMMUNICATION
- LITD 13: INFORMATION AND COMMUNICATION TECHNOLOGIES
- LITD 17: INFORMATION SYSTEMS SECURITY AND BIOMETRICS
- LITD 18: E-GOVERNANCE
- LITD 19: E-LEARNING
- LITD 20: INDIAN LANGUAGE TECHNOLOGIES AND PRODUCTS SECTIONAL COMMITTEE
- Committee handling AMI/AMR[SMART METER]

7.2. ICT at TSDSI

TSDSI has established following Working Groups;
- WG1 (CN): Core Network Evolution.
- WG2 (RNES): Radio network evolution and spectrum.
- WG3 (SIG): This is special Interest Group.
- WG4 (GE): Green Energy
- WG5 (TN): Transport and Backhaul Network.
- WG6 (Workshop): Includes all workshop items that are common to all working groups.
WG7 (TSDSI OAM): This group will host all documents that will enable OAM (operation, administration and management) of tsdsi. It will not contain technical specifications.

WG8 (M2M): This is a group for Machine to Machine and Internet Of Things

Of the above only three are active working groups (WG 8, 1 and 2) at this stage; others are gaining momentum. Members have also agreed to form a Working Group on “Security” to cover Telecom, Cyber and Mobile Security etc.

7.2.1. WG8 (M2M)

- This TSDSI WG on M2M was established in June 2014, until now 60 Individual & 18 Organization have joined this working group.
- Study topics cover verticals such as Utilities, Transportation, Remote Asset Monitoring, Health, Agriculture, Smart Energy, and Smart Cities etc. Naming & Addressing, Security & Privacy, Architecture, Interfaces and Protocols, Impact on Radio Active Network and Core Network are also included as study items.
- M2M Working Group Chair Mr. Anuj Ashokan and Dr Asok Chaterjee participated in 12th Technical Plenary of oneM2M hosted by ETSI and presented India’s status & progress around the topic of M2M. TSDSI plans to join oneM2M in the future.
- Gained Momentum, started capturing use cases, Finalized M2M use case capturing template for Standardized method for capturing use cases across Verticals. Template for capturing use case has been prepared with the help of oneM2M and ETSI templates.
- M2M WG is studying the oneM2M candidate release http://www.onem2m.org/candidate_release/ available for public comments and plans to submit its response timely.

Copy of template is available here and copy of presentation here.


7.2.2. WG1 (CN): Core Network Evolution

Working Group is discussing following topics;

- Ultra-Flash CSFB - (SRVCC based CSFB)

- Dedicated core Vs Enhance the present core for M2M, Needs to have specific policy control for M2M enabled SIM, Priority call handling in over load conditions, needs to understand M2M implications on core network (esp signaling)
- **vEPC and relation with NFV framework discussed;**
  - Airtel has done study on NFV. It’s not about sharing the infrastructure, it’s about deployment. The critical pain point is once it’s installed, and current issues are tied to particular HW vendor, and the capacity augmentation in subsequent years becomes difficult. The idea with NFV is to launch the services over the standard off the shelf high volume server hence the cost and augmenting services will become much easier. Airtel is already started mandating NFV already for their future product deployment. Plugins are needed to be discussed. We see no difference on NFV standardisation.
  - Ericsson: SDN, NFV, protection of investment is critical for service provider. Looks like more relevant for SDN and NFV for our local service provider since we are not migrating the infrastructure and lags behind one or more generation. Hence its right time for us to leapfrog and catch up with this new development, and paves way for migration into future generation while protecting the existing infrastructure. We are happy to help this cause and would like to join the study item WG with our service providers.
  - Huawei: NFV has been more on cost optimization, but profitability will also be more relevant from the benefits of accelerating new service deployment.
  - Intel: Most of the aspects have been addressed. Happy to help for the joint study item with our service provider.
  - Airtel: We would like to migrate to common hardware, which is the move away from existing proprietary hardware.
  - NEC: Reliability area for packet core elements in NFV could be the study aspects.
- **Review of IP Migration paper from TRAI**
- **Challenges for VoLTE in Indian Context: need for changes in Indian requirement & standards**
- **Jan Ellsberger Director - Network Technology Strategy at Ericsson Sweden presented insights on NFV/SDN standardization and a conducive approach for global harmonization and open standards.**
- **TATA Teleservices - Study proposal various core network elements particularly circuit related elements. Except MGW all other MSS can we consolidate by bringing in a cloud environment. Idea is to consolidate the MSS in two regions viz., north, and south. This might be an unique deployment scenario in India, since most other regions the cloud RAN solutions are targeting 4G/3G access.**
- **Discussion on list of ETSI drafts NFV standards going for final public publication in Dec 2014**
7.2.3. **WG2 (RNES): Radio network evolution and spectrum**

1. Intel submitted an issue statement with title “3G / LTE – WiFi interworking for seamless experience across HetNet deployments” and associated issue identification; the goal of the study is to identify effective solutions that can cover the following aspects:

   o Seamless data session continuity and also policy based network selections.
   
   o Ensure good user-experience when traffic is offloaded to overloaded WLAN network.
   
   o Improve battery utilization during such offload process, by looking into minimizing scanning procedures for example.

2. TEC has asked TSDSI for commissioning a study on the issue of interference and coexistence between LTE and CDMA in 900 MHz band. Copy of letter is available [here](#).

3. A **WID (work item)** addressing Indian operator requirement for supporting carrier aggregation between Band 3 and Band 40 submission by CEWiT to 3GPP RAN plenary. Group Chair also shared material on Licensed Shared Access for discussion as available [here 1](#) & [here 2](#). The group discussed if additional specifications are need to meet Indian requirements. The following issues were raised:

   a. CA in the uplink for band 3 and band 40 (need to collect further inputs from operators)
   
   b. CA in 900 MHz bands. The group decided to wait for requirement comes from operators

The group also discussed the issue of Inter operator TDD UL: DL ratio synchronization. In particular, for the case where one operators applies CA in band 3 and 40 where most of band 40 is used for DL and band 3 for both UL and DL, and another operator operates in band 40 with both DL and DL, DL:UL synchronization would be difficult. Need inputs from operators in this regard. Regarding LSA, the chair requested the members to study the documents circulated to them.

Group Chair informed members that The WID related to band 40 and band 3 CA has been approved as RP-141674. Please see copy [here](#).

7.3. **ICT at TEC/DoT**

**DoT – M2M;**

**Update:**
1. DoT has consolidated the responses to their list of questionnaire along with its recommendation as available [here](#).

2. DoT is in consultation with Industry and Association to formulate a M2M roadmap for India while addressing questions such as numbering plan for M2M, Security in M2M, Roaming etc.

**DoT - Plenipotentiary 14 Conference;**

Department of Telecom, India has prepared three proposals for submission towards the Plenipotentiary 14 Conference. The papers are on the following topics:

(i) **To promote early adoption of Software Defined Networking (SDN) in developing countries**

(ii) **The use of telecommunications/information and communication technologies for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief**

(iii) **ITU's role in realizing secure information society.**

### 7.3.1. M2M Working Groups at TEC

Following up DoT questionnaire on M2M and further instructions, Telecommunication Engineering Center (TEC) decided to work on this subject and formed working groups (WGs) on Automotive, Power, Health, Surveillance and Architecture in April’2014 to:

a) **Determine list of use cases applicable for India,**

b) **Study available standards for adoption and if needed to formulate standards while working in close co-operation with TSDSI.**

Project SESEi is working closely with all of these working groups and sharing all work done at ETSI SmartM2M and oneM2M for harmonization.

**Update;**

1. **During last few month each working group connected with respective Industry stakeholders, consolidated list of use cases, studied available standards globally.**
2. **M2M Joint Working Group (JWG)** gathering WGs on Automotive, Power, Health, Surveillance and Architecture held a Meeting on 29th & 30th September, where all the WG Chair presented the WG progress and agreed for a way forward. JWG Chairman also suggested forming a new WG on Security in M2M, which will work on studying existing security framework globally and formulate security guidelines in M2M. JWG Chair also suggested to WG Chairs to produce technical report before the next JWG planned for Dec’2014. During the meeting TSDSI highlighted that all work done here will be consolidated and put forward to oneM2M by TSDSI. TSDSI is at the final stage for getting the oneM2M membership soon.

   a. **Health WG**: While agreeing that restful architecture will be based on oneM2M, group chair presented the architecture based on Continue Health alliance. In order to address Privacy & Security HIPAA standards were discussed. Report “ITU-T H.810 Continua Design Guidelines” as approved by ITU-T SG16 in Sapporo, Japan, 11 July 2014 was shown and suggested for list of standards around conformance testing ready for adoption in India [This report and listed standards are under review at BIS and Ministry of Health]. This document is having detailed information about personal health devices and the use of IEEE 11073 standards Copy of eHealth. Debate and discussion will continue to decide “if Continua (ITU-T H.810) standards can be agreed standard for eHealth interoperability for India”. Working Document capturing use cases is available [here](#) and copy of presentation is available here [day 1 & day 2](#). Continua Health Alliance have also provided a copy of H.810 Series Test Suite mapping as available [here](#).

   b. **Automotive WG**: Chair presented the use case template as finalized by TSDSI WG and suggested all WG to capture use cases in this standards template, which was agreed by all. Copy of template is available [here](#) . Chair also presented Architecture, which was based on oneM2M architecture. Transportation use cases as consolidated and available [here](#) were discussed, members suggested to priorities the list and focus on few most important and urgent. Chair are proposed to standardize data communication protocol for automobile M2M use cases. It was agreed that Group will consider the Delhi Integrated Multi-Modal Transit System (DIMTS) framework and build on it. Representative from “Map My India” presented a white paper on Mapping for Automotive Telematics as available [here](#). Copy of presentation is available [here](#).

   c. **Architecture WG**: Chair presented a generic M2M architecture based on oneM2M highlighting the restful architecture beyond gateway. IPv6 at gateway and beyond aligning with DoT IPv6 roadmap. Other WG chair shall suggest if any application has an impact on this architecture such as Smart Meter, Continua health alliance architecture etc. oneM2M candidate release were highlighted for their review and comments. copy of presentation is available [here](#).
d. **Power WG**: Chair presented high level architecture, call flow, and study item “COMMUNICATION TECHNOLOGY FOR M2M POWER APPLICATIONS” for outlining the LAN and WAN communication technologies for M2M devices and gateways for Indian power Sector. Presented pros and cons of various communication technologies available and possible while also highlighting ISGF recommendation to use 6LoWPAN. Member highlighted availability of additional spectrum band as 864-866MHz is not enough. copy of presentation is available [here](#).

e. **Security and Surveillance WG**: Chair presented the status of the work done by WG and way forward. Use cases of city surveillance were presented and it was highlighted that wired connectivity is must for such projects. Typical bandwidth required for city surveillance projects is 4-5 Mbps. It was also highlighted that ONVIF is the Data protocol accepted by global bodies for IP camera. The group was suggested to focus on use cases such as ATM facility monitoring, Mobile surveillance, Smart Home. Members also agreed including Safety as part of this group scope and mentioned that the name should be changed to “Safety and Security” which will encompass surveillance and other sensors to meet the objective of safety and security. copy of presentation is available [here](#).

7.3.2. **Energy Efficiency**

**Update:**

Based on ETSI TS 102 706, TEC has finalized the draft document for “GUIDELINES ON MEASUREMENT METRICS AND MEASUREMENT METHODOLOGY FOR GSM BS IN STATIC MODE FOR GREEN PASSPORT” which is under review by Industry and ETSI TC EE.

8. **Activities by other standards development organization in India**

8.1. **IEEE**

IEEE has an early Establishment and Presence of nearly 38 years. IEEE India Council was established on 20th May 1976. There are currently 10 IEEE Sections in India and 9 Sub Section known as IEEE entity catering to the needs of specified geographical areas in India. IEEE-SA (Standards Association) has kick started activities through forums and working on the subject of SIG (Standards Interest Group) in India, Smart Grid, Smart Meter, Cloud Computing Innovation Council & LVDC. IEEE has also joined India Smart Grid Forum (ISGF) as associate member, Indian electrical body IEEMA (MoU). They have submitted their MoU to BIS (Bureau of Indian Standards) which is in final stages (legal approval at Ministry of External Affairs). IEEE-working is also very closely with CPRI (Central Power Research Institute).
### Glossary

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Acronym</th>
<th>Expansion</th>
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<tbody>
<tr>
<td>1</td>
<td>ARAI</td>
<td>Automotive Research Association of India</td>
</tr>
<tr>
<td>2</td>
<td>B2B2C</td>
<td>Business to Business to Consumer</td>
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<tr>
<td>3</td>
<td>BIS</td>
<td>Bureau of Indian Standards</td>
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<tr>
<td>4</td>
<td>CA</td>
<td>Chartered Accountant</td>
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<tr>
<td>5</td>
<td>CDAC</td>
<td>Centre for Development of Advanced Computing</td>
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<tr>
<td>6</td>
<td>CDoT</td>
<td>Centre for Development of Telematics</td>
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<tr>
<td>7</td>
<td>C-MET</td>
<td>Centre for Materials for Electronics Technology</td>
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<tr>
<td>8</td>
<td>COAI</td>
<td>Cellular Operators Association of India</td>
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<tr>
<td>9</td>
<td>DCC-G</td>
<td>DC Components and Grids</td>
</tr>
<tr>
<td>10</td>
<td>DeitY</td>
<td>Department of Electronics and Information Technology</td>
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<tr>
<td>11</td>
<td>DoT</td>
<td>Department of Telecommunications, (GoI)</td>
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<tr>
<td>12</td>
<td>EBG</td>
<td>European Business Group</td>
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<td>18</td>
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<td>European Telecommunications Standards Institute</td>
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<tr>
<td>19</td>
<td>ETD</td>
<td>Electrotechnical division</td>
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<td>FICCI</td>
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<tr>
<td>22</td>
<td>FTA</td>
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<td>33</td>
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<td>M2M</td>
<td>Machine to Machine</td>
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<td>37</td>
<td>MCC</td>
<td>Mobile Competence Core</td>
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<td>MEDC</td>
<td>Mechanical Engineering Division Council</td>
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<td>Media Lab Asia - Information Technology Research Academy (ITRA)</td>
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<td>PSB</td>
<td>Partner Standardization Body</td>
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<td>R&amp;TTE</td>
<td>Radio and Telecommunications Terminal Equipment</td>
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<tr>
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<td>Reserve Bank of India</td>
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<td>SESEI</td>
<td>Seconded European Standardization Expert in India</td>
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<td>Working Group</td>
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