

Quarterly Report No. 2

Standards, Policy and Regulation

('October – December' 2019)

Jan 2020

SESEI IV– Dinesh Chand Sharma

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1. Executive Summary

At the outset, I would like to wish you a very Happy New Year 2020. We are proud to present the second quarterly report of the Project SESEI IV covering the quarter period of “October to December 2019”.

One of the most significant objective of Project SESEI is to propel harmony and synergies between the Indian and European standardization bodies to work together in areas of common interest. CEN CENELEC along with Bureau of Indian Standards (BIS) organized a two-day workshop in India on 26th & 27th November 2019, towards creating close working relationship and to understand the commonalities and gaps on standardization strategy and standards development process between India and Europe. The interactions between the stakeholders from both sides were highly engaging and result oriented creating an active roadmap for CEN CENELEC and BIS to follow.

SESEI is also actively working with Telecom Engineering Centre (TEC) and other ICT stakeholders in India towards adoption of oneM2M specifications transposed by TSDSI as a National Standard for IoT/M2M ecosystem in India. Significant progress has been made and the Project partners are updated regularly in the said matter.

Similar efforts are being invested by SESEI in the adoption of EN301 549 by the Indian authorities for promotion of providing ICT access to persons with disabilities (PwD). SESEI is contributing input on EN 301549 latest updates to get incorporated as part of pre-standardization report on Active Assisted Living (AAL) being drafted by working group at BIS.

National Institution for Transforming India (NITI Aayog), policy think tank of the Government of India had constituted a “**Technical Committee’ on ‘Strategies for Ropeways in India’**, to Standardize the construction, maintenance and the operation of Ropeway in India. SESEI prepared comparison of BIS v/s CEN standards and submitted to the technical committee.

SESEI also got the opportunity to represent ESO’s at the International Railway Summit in India and made a presentation on CEN CENELEC Railways standards, Standardisation strategy of Europe for Railways. This has provided a perspective on the opportunities in this sector for harmonization of standards for the Indian Railways.

As regards, the new policies and market updates, policy & regulatory decisions and standards development activities being carried out in India around our project priority sectors. Some key developments of this quarter were:

- BIS being directed to set quality standards to ensure Indian items are not rejected in global market. The authority of international quality standards for products and services has been recognized to increase the trade and services. BIS will work to ensure that all standards are in line with global standards.
- BIS has also been directed to implement stricter technical regulations and standards to increase the exports and curbing imports of non-essential items through stricter technical regulations and standards.

In the Smart City sector not, much activity is witnessed. As the Smart City mission will be completing five years on June 25, 2020, the ministry has created a live dashboard, housed in the National Urban



Observatory in ministry office. This would help keep track of live updates from the smart cities' progress. The ministry has also decided to hold regional conferences to involve startups and use their innovation.

The revision of EV Charging guidelines is currently under process and to address the range of issues of the EV owners, a phase-wise installation of a network of charging infrastructure throughout the country has been envisaged in the new guidelines to ensure that at least one charging station should be available in a grid of 3 km X 3 km in the cities and one charging station at every 25 km on both sides of highways and roads. Testing facilities for the EV and hybrid vehicles has also been recently setup by International Centre for Automotive Technology (ICAT), the automotive R&D and testing agency. All these efforts are being executed to ensure that an ecosystem and infrastructure is in place for introduction of all Electrical Vehicles by 2030.

In the ICT domain, Department of Telecommunications (DoT) is getting ready to auction the spectrum for 5G by mid-2020. The high-powered committee constituted by DoT has decided in favour of Telecom Regulator (TRAI)'s recommended base price. However, the cellular operators have indicated reluctance in picking up 5G spectrum in the upcoming government-organized sale of radio waves, due to concern over high prices and less-than-adequate quantum. This seems to be delaying the introduction of 5G services in the country.

DoT has also constituted a committee for standardization of Artificial Intelligence technology. This Committee has invited papers on the different aspects of AI such as – functional network architecture, AI architecture, data structures required, etc.

In the Electrical and Consumer Electronic section, India is making significant progress in the power generation through renewable energy sources. India would significantly exceed its 2015 Paris Agreement target of a 40% share of installed power capacity from non-fossil fuel sources by 2030. The NITI Aayog is also in the process of finalizing new energy policy for the country. This new policy will address the issues of accessibility and affordability, energy security, thrust on clean source energy and the overall requirement of energy.

In this report, you will also find details of the various notifications issued by the Ministries concerning priority sectors. As always, we have also provided details of the various meeting, queries and events addressed and participated by SESEI.

List of draft standards released by Indian Standards organizations during this quarter is also available as **Annexure-1** with this quarterly report.

Detailed activity tracker including list of queries, events and meetings is submitted as "**Annexure -2** to this quarterly report.

We wish you a very happy and productive 2020 once again.

Happy reading!!!

Dinesh Chand Sharma
(Seconded European Standardization Expert in India)



2. Key Meetings, Event Participation and Queries

SESEI formally stated working from 15th July 2019 for the SESEI IV Project. This quarterly report captures various important meetings attended, event / workshop participation and queries addressed by the SESEI expert during this quarter period of (October – December 2019). A quick dashboard of the activity summary is provided below:

Sr. No.	Description	Total Until now
1	External Meetings	56
2	Internal Meetings	20
3	Events/Seminar/Workshop/Roundtable	37
Total		113
4	No of Queries	22

Detail of few key meetings and event/workshop participation is briefly summarized below which are essential to help achieving the objectives of the SESEI project. For detailed information on these key meetings, events/workshop participations and list of queries addressed, please refer Activity Tracker report submitted as “Annexure -2_Activity Tracker.

Key Meetings:

Following are the list of key meetings, SESEI expert addressed during the last quarter.

Meetings with Niti Aayog

- **First meeting of the ‘Technical Committee’ on ‘Strategies for Ropeways in India’ organized by NITI Aayog** to Standardize the construction, maintenance and the operation of Ropeway in India. SESEI presented comparison of BIS v/s CEN standards. Currently, we are in the process of preparing a comparison between EN and BIS standards with their latest portfolio.
- **Follow-up meeting to discuss CEN and BIS standards for Ropeways -by NITI Aayog:** SESEI expert clarified that technical detailed comparison have not been carried out by CEN. If technical comparison is desired/needed, CEN will be happy to discuss setting up a joint technical committee and it’s a long term exercise.

Meetings with BIS

- **Meetings of the BIS TC/28 Working Group on Active Assisted Living (AAL):** A conference call of LITD 28 AAL Work Group was organized to finalize the Study Report & discuss the next steps for AAL work Group. SESEI highlighted a faster adoption of EN 301 549. SESEI is promoting adoption of EN 301 549 in India.



- **11th Meeting of Intelligent Transport Systems Sectional Committee, TED 28:** SESEI has become an important member of the BIS TC on ITS-TED 28 and promoting EU work around ITS.
- **Meeting with Ms Nishat S. Haque, Scientist-F, Certification, Bureau of Indian Standards:** SESEI organized a meeting between Registration and certification officials from BIS and CEN CENELEC delegation to discuss industry challenges on the CRO / CRS issues
- **High Level Meeting with DG BIS and Standardisation Head with the CEN CENELEC delegation:** On the sidelines of the Joint workshop organized by CEN CENELEC and BIS, A high-level meeting was organized to discuss the close working relation between CEN CENELEC and BIS, status of the MoU which is currently with the Ministry of External Affairs for clearance and the key learnings from European Standardization system and process.

Meetings with TEC/ DoT and other Govt. Bodies:

ICT - IoT and M2M:

- **Periodic Meetings of the TEC Consultative Committee formed for oneM2M adoption process:** TEC is in the process of adoption of oneM2M standards for IoT/ M2M in India, specifically for the Common Service Layer for Smart Cities. SESEI is a member of the Consultative Committee formed by TEC to study, support and help in finalisation of IoT Standards and participates and contributes towards the IoT standardisation in India. Continuous workshops and meetings are being held by TEC to discuss the adoption of Onem2m specifications. A draft document of the concerns raised on the various aspects of finalisation of standards for M2M in India for IoT and Smart Cities.
 - The adoption process mentioned in the standardization guide, requires to examine the national requirements which may include the aspects such as National Security, Human health and safety, environment protection, geographic and technical reasons etc., have been taken care at during the standardisation process.
 - It is required to be examined at all levels i.e. by TSDSI, CC, TSAC etc.
 - All these points are discussed in the various conference calls. SESEI is closely working with TEC on this subject as oneM2M adoption as a National Standards is an important activity of SESEI project and it is well moving on track.
- **Meeting with Smt. Asha Nangia, Scientist F, Industrial Promotion - Electronics & Hardware Manufacturing Division, Meity:** A meeting between concerned officials from Meity and CEN CENELEC delegation was organised by SESEI to discuss industry challenges on the CRO / CRS issues.

Green passport/ Sustainable ICT

- **TEC meetings and Review Meetings on 'Formulation and adoption of Volunteer Code of practice (VCP) under Approach towards Sustainable Telecommunications.** SESEI is contributing towards finalisation of the adoption and measurement process with TEC.



Meetings with EU delegates, EU project officers & officials from EU delegation in India:

- **Meeting with GIZ Officials on Resource Efficiency Standards:** to discuss and exchange status on the Resource Efficiency Standards and Circular Economy. SESEI provided list of EN on Resource efficiency. GIZ is working closely with Ministry of Environment, Forest and Climate Change (MoEFCC) to work on Resource Efficiency standards.
- **Meeting with EBTC Officials on Data Protection Bill:** to discuss the current state of Data Protection Bill and the open issues such as data localisation, cross-border data transfers, scope of personal data & data portability, etc. and to support the industry issues through platform such as advocacy project of EBTC. SESEI is a member of European Economic Group (EEG).

Meetings with Industry & Associations:

ICT:

- **Various Conference call meetings of the Broadband India Forum (BIF) Committee on ICT inclusion of Persons with Disabilities (PWD):** to discuss the update on the action points from the last meeting.
- **EBG Telecom Sector Committee Meeting:** To review on Telecom Industry Issues, TRAI consultation paper on Interconnect charges & Cloud Providers, etc.
- **Meeting with Indian Officials of Eurovent Certification:** to understand the certification process/policy undertaken in India and introduce Eurovent certification as a company and their role for India including their contributions to Indian Standards (IS).
- **Meeting with Manufacturers Association for Information Technology (MAIT) members:** to discuss Draft list of items for notification in Phase IV of Compulsory Registration Order (CRO). MeitY has sought inputs on the draft list of items for notification in Phase IV of CRO. SESEI contributed towards making the process simpler and make product compulsory for registration only which has a safety issue around it.

Meetings with Project Partners:

- **Meeting with Joaquim Nunes De Alemida, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (GROW):** SESEI provided updates on the progress of the Project SESEI 3, achievements and milestones of Project SESEI3, way forward for SESEI IV.
- **Meeting with officials from DG Connect, European Commission:** SESEI discussed ToR, Project Objectives and way forward for SESEI IV.
- **Meeting with CEN CENELEC official responsible for Transport and Cable ways:** SESEI discussed the latest development on RAIL Standards and Ropeways/Cableways in Europe.



- **Meeting with Ms. Joanna from CEN CENELEC:** to discuss the latest updates on the Machine Safety & Lift, Safety Standards and lift & Escalators (EN115) and exchange on latest policy initiatives in India on Machine Safety.
- **Meeting with Official at International Unit at DG Grows responsible for India:** to provide status update on the new initiatives, Policy and legislation updates for the Indian markets. SESEI expert during the meeting shared update on SESEI-3 achievements, and proposed work plan for the SESEI-IV.
- **Meeting with Ms. Ines for CEN CENELEC:** to discuss the bilateral meeting between BIS and CEN CENELEC during the IEC GM.
- **Conference Call of the Preparatory Committee for CEN-CENELEC-BIS Joint Workshop:** Various conference call meetings of the preparatory committee for organising the Joint workshop of BIS - CEN CENELEC to be held in New Delhi, India on 26th and 27th November 2019 were held for finalization of agenda, topics, speakers and other logistical details.
- **India Task Force Meetings** to discuss the upcoming workshop in India with BIS and market access related issues and presentations and discussions to be held with the Indian officials.

Key Event Participations:

Generic:

- **BIS-CEN-CENELEC Joint Workshop on Emerging challenges in new era of standardization: Exchange of best practices:** A close cooperation first Joint Workshop was organised between BIS, CEN & CENELEC on 26th & 27th Nov 2019 at New Delhi. The two -day workshop solidified the need to work together by way of sharing best practices and approaching challenges in a collaborative manner.
- **ISO/IEC JTC 1 Plenary Meeting, 4-8 November 2019 in New Delhi:** Bureau of Indian Standards (BIS) is a “Participating” member in JTC 1. SESEI was invited by BIS to attend this meeting.
- **Tech Talk on IoT at GLA University, Mathura and SGT University, Gurgaon.** SESEI give a Tech Talk on Standards - IoT and Smart Cities, importance of standards and in the IoT domain and the need for Common Service Layer.
- **FICCI organized 92nd AGM and Annual Business Convention**

Automotive:

- **GIZ organised Indo-German Exchange on Cooperation in the Automotive Sector:** Within the framework of the Indo-German Working Group on Quality Infrastructure, aspects such as standards, technical regulations, and market surveillance were discussed.



- **Seminar on “Exploring cost reduction strategies for Electric Vehicle (EV) batteries” by (ICRIER).** Dissemination event to discuss the results of ICRIER study titled ‘Exploring Cost-reduction Strategies for Electric Vehicle (EV) Batteries’.
- **EU - India: Technical seminar on rail issues, New Delhi:** European Commission together with the Indian Ministry of Railways, organized a Technical seminar on common rail issues. SESEI made a detailed presentation on the Harmonization of Standards for Railways.
- **8th International Railway Summit (IRS):** SESEI made a detailed presentation on the CEN CENELEC Railways standards, Standardisation strategy of Europe for Railways, integration with the global SDO's and need for Harmonization of Standards for Railways.

ICT:

- **India Mobile Congress 2019:** COAI organized third edition of India Mobile Congress 2019. TSDSI held a standardisation focused workshop during the IMC 2019 called Tech Deep Dive workshop. Mr. Adrian Scrase, CTO ETSI and SESEI participated in the IMC. It was an important opportunity to connect with Industry officials and booths showcasing 5G equipment and demos.
 - Mr. Adrian Scrase as CTO ETSI and Head Mobile Competence Centre (MCC), gave presentation on Global Standardization and also on 5G Reality Check Context: 3GPP standards (Done -R15, Ongoing -R16, Planned -R17)
 - SESEI gave presentation on the "Overview of ETSI initiatives on 5G and beyond with focus on Multi Access Edge Computing".
- **The EU-India Think Tanks Twinning Initiative (TTTI) workshop:** The EU-India Think Tanks Twinning Initiative (TTTI), a European Union Delegation to India supported project designed to foster ideas to further strengthen European and Indian cooperation, organized a Think Tank Twinning Initiative workshop in Delhi.
- **TSDSI-IIT Delhi workshop on ML in Future Networks and Role of Standardization with support from India EU Cooperation on ICT Related Standardization, Policy and Legislation.** SESEI in his presentation provided an overview of AI, EU strategy for AI and AI/ML related activities at CEN-CENELEC & ETSI.
- **NCPEDP-Mindtree Helen Keller Awards 2019:** National Centre for Promotion of Employment for Disabled People (NEPEDP) organized the 20th edition of the NCPEDP- Mindtree Helen Keller Awards.

Key Queries addressed:

ICT:

- Shared information on uses cases, pertaining to IoT/M2M sector for its consideration to include them as part of terms of reference of the Committee report: MAIT



- Provided Assistant to CNLABS officer in connecting with ETSI official responsible for oneM2M affairs: CNLABS
- Provide information on ETSI Industry Specification Group (ISG) on Blockchain/Permissioned Distributed Ledger (PDL) and its Standardization activities: European Commission
- Shared information regarding ETSI adoption/transposition of 3GPP standards: TRAI
- Provided information regarding ETSI GS ECI 001 (01-06) standards. SESEI also provided the latest ECI report to the ETSI OCG as well as a white paper from 2014: TRAI

Automotive:

- Shared report on Automotive Industry, prepared and released by SESEI in December 2018

Railway:

- Prepared and shared a short article on railway industry: IRITS

Machinery:

- Shared list of CEN/CENELEC standards relevant to Safety of Machinery directives draft: CEN CENELEC

Circular Economy:

- Shared list of EN standards relevant for resource efficiency or circular economy: GIZ

3. Generic Update

3.1 BIS, CEN – CENLEC Joint Workshop on “Emerging challenges in new era of standardization: Exchange of best practices” on 26th & 27th November 2019, New Delhi.

CEN and CENELEC Members have identified India as a key priority market. The objective of CEN and CENELEC is to cooperate more closely with the Bureau of Indian Standards (BIS) and other relevant Indian standardization bodies on various topics of mutual interest, in order to create synergies. As a first step towards creating a close working relationship with BIS and to understand the commonalities and gaps on standardization strategy and the standards development process, a two-day joint workshop was organised by BIS and CEN & CENELEC on 26th and 27th November 2019 in New Delhi, India.

Day one was a closed-door workshop, limited only to BIS officials and technical committee members, on **“Making standardization processes efficient and fast”**. The workshop was highly interactive, and the planned sessions helped to share best practices between Indian and international experts on “what the road blocks in the process of standardization are” and “how it can be made swifter to ensure benefits of standardised products reach markets quickly”. The workshop helped identify significant



common areas of mutual interest between BIS and CEN & CENELEC, which will be explored further for collaboration between the two regions.

One of the key areas of concern was low engagement with industry, academia, researchers and young entrepreneurs. It was agreed that CEN and CENELEC will provide information related to the usage of tools such as the SME Toolkit and the Societal Toolkit to increase stakeholder participation. BIS will also collaborate with CEN and CENELEC at international level on digital tools, to avoid development of different tools in future.

Day two of the workshop was focused on the need to increase **“Participation and Engagement in International Standardization Activities”**. The workshop saw the participation of industry stakeholders as well as other important SDOs in India. The need for harmonisation and integration with the Global standardization bodies was discussed at length.

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[Download all presentations made during day 1 & Day 2 here](#)

3.2 DPIIT launches website and mobile app for Intellectual Property Rights (IPR)

Secretary Department for Promotion of Industry and Internal Trade (DPIIT), launched the website and mobile application [**Learn to Protect, Secure and Maximize Your Innovation**] on Intellectual Property Rights (IPRs). The website and app have been developed by Cell for IPR Promotion and Management (CIPAM)-DPIIT in collaboration with Qualcomm and National Law University (NLU), Delhi.

The modules of this e-learning platform [**L2Pro India IP e-learning Platform and the L2Pro India Mobile App**] will aid and enable youth, innovators, entrepreneurs and small and medium industries (SMEs) in understanding IPRs for their ownership and protection, integrate IP into business models and obtain value for their R&D efforts. The L2Pro has been successfully implemented in Germany, United Kingdom, Italy and France, benefiting immensely from close collaboration with respective IP organizations and public research institutions. The learning app has been customized for India in order to ensure that innovation which is fundamental to startups are protected, managed and commercialised.

The L2Pro India IP e-learning platform will have 11 modules for three different levels: Basic, Intermediate and Advanced. Each module comprises of e-text for understanding concepts, short animated videos of the concepts, links to additional resources on the subject and quizzes for assessment and grading the learner’s knowledge and understanding of the subject. Learners will access the L2Pro IP e-learning platform through their desktop, laptop, mobile browser and mobile application (available on Android & iOS), and will be provided e-certificates by CIPAM-DPIIT and NLU Delhi and Qualcomm on successful completion of the e-learning modules.

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3.3 BIS to set quality standards to ensure Indian items are not rejected in global market

To boost exports, Bureau of Indian Standards (BIS) has been directed to set standards for export items, which get rejected for non-compliance of global quality norms, Consumer Affairs Minister said. BIS, a national body that prescribes standards for products and services, has been asked to set up testing facilities for export items.

The issue was discussed in a meeting with officials of BIS and other ministries like Commerce and Steel. "Our country's export is less. Whatever we export, much of it gets rejected. I am told it is because of non-compliance of global standards. Countries like Europe have new standards and parameters and our exporters are not able to comply with them," Minister told reporters after the meeting. At present, only 50% of standards are at par with international norms.

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3.4 Centre gears up to place restrictions on non-essential imports

India is set to finalize stricter quality standards for 371 items by March, a move primarily aimed at curbing imports of non-essential items such as toys, plastic goods, sports items and furniture, especially from China. The proposed rules, to be framed by ministries in coordination with the Bureau of Indian Standards (BIS), will also ensure stricter inspection of imports.

While the new rules, spearheaded by trade minister, are aimed at curbing imports from China and narrowing the trade deficit with India's northern neighbour, the rules will also apply to Indian producers so as to make the regulations World Trade Organization-compliant. Non-essential imports from China amount to ₹4 trillion a year, according to a commerce ministry estimate.

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3.5 As AI tech proliferates, India should update its patent laws: CII – TCS Report

The increased proliferation of artificial intelligence (AI) globally requires new policies for the enforcement of intellectual property rights, according to a joint report by India's largest software services exporter Tata Consultancy Services and the Confederation of Indian Industry (CII).

"Current patent laws treat AI software inventions as logical algorithms implemented on the computer. While patent eligibility of algorithms is valid, there is little about how to deal with inventions that are heuristic in nature," it said. In AI, a 'heuristic' is a technique used to solve a problem faster than classic methods. Software is no longer limited to traditional rule-based systems and has increasingly turned heuristic, showing higher intelligence than rule-based systems, it said.

Currently, patent law states that someone, typically a natural person (in legal terms, an individual, rather than one associated with a private or public body) who merely applies the logic to make something workable cannot be an inventor. However, machines are increasingly deriving solutions to problems

independently or in conjunction with a natural person, which has brought into question the definition of a 'natural person'. This is a problem that may have to be addressed by state laws and by enterprises, the report stated. "To accelerate growth to become a \$5 trillion economy, India will require sustained innovation using technologies like AI, and its adoption and scaling across social strata.

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4 SMART CITIES

4.1 Smart City Mission (SCM) put on fast Track

The Centre has got into a mission rethink mode to speed up the implementation of projects under the Smart City Mission. In the fifth and final year of 'Smart City Mission', the Centre has set a new target — Mission Rs 2 lakh crore (€25 bn). With the current trajectory of project tendering and completion, the government would have awarded contracts till 2022. However, in the last mile, the ministry of housing and urban affairs has decided to issue tenders for all projects under the mission over the next six months that is till March 2020. The projects would be worth Rs 2 lakh crore (€25 bn).

As the mission would complete five years on June 25, 2020, the Centre has set another target for its fifth anniversary celebrations — to award all works and begin work on projects worth Rs 2 lakh crore (€25 bn) on the ground. The Rs 2 lakh-crore (€25 bn) target would involve completely turning around the mission. According to sources, the first target of the ministry is the first batch of 20 cities selected through a competitive process in January 2016. The ministry has created a live dashboard, housed in the National Urban Observatory in Nirman Bhawan. This would help keep track of live updates from the smart cities' progress. The ministry has also decided to hold regional conferences to involve startups and use their innovation.

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4.2 India joins G20 Global Alliance on responsible use of Smart City technologies

India has joined the league of 15 of the world's leading city networks and technology governance organisations that will work towards advancing the responsible and ethical use of smart city technologies. The G20 Global Smart Cities Alliance on Technology Governance will create global norms and policy standards for the use of connected devices in public spaces, a World Economic Forum (WEF) release said.

The Global Smart Cities Alliance's founding set of institutional partners include the presidents and host nations of the Group of 20 (G20) in 2019 and 2020; Japan and the Kingdom of Saudi Arabia; the Smart City Mission of India; Cities for All; Cities Today Institute; Commonwealth Local Government Forum; Commonwealth Sustainable Cities Network among others.



"Smart city technologies offer huge promise, but they can be a Pandora's box. Today's announcement is a critical first step to accelerate global best practices, mitigate risks, and foster greater openness and public trust regarding the collection of data in public spaces," said Jeff Merritt, Head of Internet of Things (IoT), Robotics and Smart Cities at the World Economic Forum (WEF).

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5 Electrical Equipment including Consumer Electronics

5.1 Govt. In Process of Finalising New Energy Policy: NITI Official

NITI Aayog Additional Secretary (Energy) said that the government is in the process of finalizing an energy policy for the country. The new policy will address the issues of accessibility and affordability, energy security, thrust on clean source energy and the overall requirement of energy. Highlighting the potential of energy storage in India, the policy will also focus on Make in India for cells used in battery in electric vehicles along with policy for demand creation and measures to incentivize investments.

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5.2 Ministry of New and Renewable Energy (MNRE) released guidelines for development of Decentralised Solar Power Plants

With a view to promote decentralized use of solar energy and availability of affordable and reliable solar power in the rural areas, Ministry of New and Renewable Energy (MNRE) has formulated draft Guidelines for Development of Decentralised Solar Power Plants.

The draft Guidelines are placed on Ministry's website for stakeholder consultation. The suggestions received from different stakeholders have been suitably incorporated and final Guidelines are being issued to facilitate development of Decentralised Solar Power Plants in the country.

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5.3 India to sell connected consumer devices worth Rs 3.25 lakh crore in 2020: Report

Connected consumer device market in India is expected to record a 11% growth by selling devices worth Rs 3.25 lakh crore (€40.6 bn) in 2020, as per a forecast by research firm TechArc. "Users in India are moving beyond smartphone connectivity and moving to other connected solutions which apart from making them 'smart' substantially increase the utility of such devices," said Faisal Kawoosa, Founder & Chief Analyst techARC, while releasing the 1st edition of 'India Connected Consumer Report.

"Fundamentally, this is being driven by two trends of creating a connected cluster around smartphones, being the hub and adding connectivity in consumer electronics led by smart TVs and smart speakers," Smartphones will continue to lead the sales of connected devices both in value and volume. However,



with normal growth outlook for smartphones, equipment manufacturers will explore adjacent products where there is still a lot of headroom for growth, the report said.

TechArc expects smart wearables led by wireless buds to see ultra-growth with many brands likely to foray in the segment after Apple's success in the category.

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5.4 TERI develops blockchain-enabled prototype for solar power Trading

The Energy and Resources Institute (TERI) has developed a blockchain-powered platform to facilitate peer-to-peer transactions of solar energy among consumers in the same neighbourhood. Developed in partnership with Noida-based blockchain and IoT start-up Sofocle Technologies Limited, the platform uses blockchain technology to ensure security, transparency and efficiency in the transactions that will take place among consumers.

The platform—developed as a prototype for enabling a peer-to-peer transactional control—allows electricity consumers such as residential premises, malls, schools, or even small and medium enterprises to trade local power generation from rooftop solar plants among themselves.

The platform will help to promote the adoption of rooftop solar PV systems, particularly in the residential consumer segment, as it will incentivise consumers by providing additional incentives of trading among themselves, in addition to selling to the distribution utility.

[Read More>>](#)

5.5 IIT Delhi Researchers develop small, medium scale energy storage devices

Researchers at the Indian Institute of Technology (IIT) here have produced a small and medium scale energy storage device. According to the team at IIT Delhi, various energy storage options are available currently with associated advantages and disadvantages depending upon geographical location and need. "One of the storage options that is currently showing significant potential is the vanadium redox flow battery (VRFB). It has some unique characteristics of independent power and energy capacity tunability, complete discharge without damage, and easy replacement of liquid electrolyte having active ingredient," said Anil Verma, department of chemical engineering, IIT Delhi.

"It is considered that VRFB would be a competent device to store renewable energy. However, in the Indian scenario, where we need to serve a large number of isolated pockets of population, small and medium energy storage and utilization is more important. VRFB combines a battery's efficiency and fuel cell's independent energy storage capacity and works by moving an electrolyte containing suitable vanadium ion through VRFB that converts chemical energy to electrical energy and vice-versa," he added.



The project will address design of the battery pack, which will be in-line with the requirement for home light systems given by the Indian Renewable Energy Development Agency (IREDA).

[Read More>>](#)

5.6 Office Memorandums (OMs)/Notifications issued by Ministry of Power (MoP) and Ministry of New and Renewable Energy (MNRE)

- Amendments to the Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects. [Read more](#)
- Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power From Grid Connected Wind Solar Hybrid Projects - Reg. [Read more](#)
- An online portal for processing applications for including and updating wind turbine models in Revised List of Models and Manufacturers (RLMM). [Read more](#)
- Year End Review 2018 [Read more](#)

6 Automotive

6.1 Power Ministry (MoP) issues revised norms for EV Charging infra to boost e-mobility

To promote electric vehicles (EV), Power Minister approved amendments in guidelines and specifications for charging infrastructure. These revised guidelines and specifications shall supersede the earlier guidelines and standards issued by the Ministry of Power on December 14, 2018, according to a statement by the Power Ministry. The revised guidelines are more consumer friendly, as they incorporate a number of suggestions received from various stakeholders.

"We have tried to address the concerns of EV owners in new guidelines," he added and expressed hope that the new guidelines will encourage faster adoption of EVs in the country.

To address the range of issues of the EV owners, a phase-wise installation of a network of charging infrastructure throughout the country has been envisaged in the new guidelines to ensure that at least one charging station should be available in a grid of 3 km X 3 km in the cities and one charging station at every 25 km on both sides of highways and roads.

It has been envisaged that in the first phase (i.e. 1-3 years), all mega cities with a population of over four million as per Census 2011, all existing expressways connected to these mega cities and important highways connected with each of these mega cities may be taken up for coverage, while in the second phase (3-5 years), big cities such as state capitals, Union territory (UT) headquarters may be covered for distributed and demonstrative effect.

[Read More>>](#)

For downloading revised guidelines please [click here](#)



6.2 ICAT Launches new Testing and development facility in Manesar

International Centre for Automotive Technology (ICAT), the automotive R&D and testing agency under Government of India has launched a new testing and development facility in Manesar. Union Minister for Heavy Industries and Public Enterprises, inaugurated the new facility.

As the agency claims, this new facility will help in bringing out the technical advantages of hybrid electric vehicles. The minister stated at the event that India should focus on the local requirements of the customer and industry while developing a policy framework for India. He also emphasized that the solutions which are relevant for other countries may not be relevant for Indian context on an as-is-where-is basis.

[Read More>>](#)

6.3 Government spends Rs. 175 Crores for Purchase of Heavy Electric Vehicles

The Government of India has spent Rs 175 crore (€22 million) for the purchase of electric buses under the second phase of Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme.

The Ministry of Heavy Industries & Public Enterprises (MHI & PE) said in a notification that, the expenditure on purchase of these electric buses (e-buses) is being borne by the [Department of Heavy Industries](#) itself.

Under the second phase of FAME India scheme, the Government has sanctioned 5,095 e-buses for intra-city operation in sixty-four cities / State Transport Corporations (STCs). Besides, four hundred e-buses were sanctioned by the government for the inter-city operation and hundred e-buses were sanctioned for the last mile connectivity to Delhi Metro Rail Corporation (DMRC).

[Read more>>](#)

6.4 Draft norms for setting up vehicle scrapping facility

Ministry of Road Transport and Highways (MoRTH) has issued draft guidelines for setting up authorised vehicle scrapping facilities, a move that will legalise the industry in India. Entities setting up these facilities should meet the minimal technical requirements for collection and dismantling centres specified in guidelines issued by the Central Pollution Control Board. Environment, quality management and occupational health and safety certification must be obtained within six months of starting operations.

[Read More>>](#)

[Download Draft Guidelines for Vehicle Scrapping](#)



6.5 Ministry of Road Transport and Highway has issued following notifications:

- Ministry of Road Transport and Highways (MoRTH) amends MV Rules Mandating Adherence to AIS-155 to Enhance Vehicular Security. [Read more](#)
- Ministry of Road Transport and Highways (MoRTH) has invited suggestions and comments for mandating BS VI level Emission Norms for Quadricycles. [Read more](#)

7. ICT

7.1 Adoption of oneM2M specifications as National Standards for IoT/M2M ecosystem in India

The Consultative Committee of the TEC on adoption of OneM2M specifications has submitted their draft report with final following recommendation is going to be submitted to TSAC (Telecom Standards Advisory Committee) for endorsement and further release.

- oneM2M Release 2 documents (as detailed in Table-1) transposed by TSDSI having basic features may be adopted by TEC as a National Standard for IoT/M2M ecosystem in India.
- TS-0003 Security solutions, which is under discussion in ITU-T SG-20 shall be discussed in CC again, if there are any changes recommended in the specifications.
- TSDSI should transpose oneM2M Release 3, which is having more features, on priority and submit to TEC for further consideration for adoption.
- OCF India Forum should ensure practical implementation of interworking with oneM2M by engaging with organizations as shall be proposed by TEC and submit report for discussion in CC. This shall be coordinated by TEC.
- oneM2M specifications with its interworking proxy capabilities is designed as a glue between variety of IoT Devices/Systems including legacy systems. It is necessary to develop a framework for seamless interworking of oneM2M with proprietary platforms / legacy IoT applications for ensuring interoperability especially in Smart cities.
- An ecosystem may be created to develop a oneM2M standard based framework for the Smart Cities, which will allow them to have standardised implementations, for secure data sharing and interoperability.

Whilst all such National Standards are voluntary, it is expected that, following the TSAC approval and the formal adoption of National Standards, the Ministries and Authorities sponsoring IoT / M2M / Smart Cities Solutions may promote the proposed National Standard in related areas of requirements in pursuit of a standardised, inter-operable, secure, transferable and orderly deployment of IoT and M2M solutions. As only few Smart City platforms deployed in India are based on oneM2M specifications, it is required to have large scale pilot projects preferably in Smart cities to showcase the capabilities of oneM2M standard. C-DOT may be provided a suitable site and resources to carry out the pilot(s) on priority.

National requirements like National security, human health and safety, environment protection or fundamental climatic, geographic and technological reasons as mentioned in [para 6.2.1 of the Standardization Guide of TEC](#), have been discussed in CC meeting. It should be mentioned as a



mandatory condition in the standards while giving it as a TEC number for seeking compliance from the product developer.

7.2 DoT calls for papers to develop Indian AI Stack

A committee under the DoT formed for the standardization of Artificial Intelligence (AI) has invited papers on AI. These original papers should address different aspects of AI such as – functional network architecture, AI architecture, data structures required, etc. DoT said that as the proliferation of AI increases, there is a need to develop an Indian AI stack so as to bring interoperability, among other things. Papers have been invited from academia, research, and technical industries, telecom service providers, application service providers.

[Call for papers in Artificial Intelligence by TEC](#)

7.3 Govt. launched National Broadband Mission to provide broadband access to all villages by 2022

The government of India has launched National Broadband Mission (NBM) with an aim to provide an internet connection to all villages by 2022. The affiliated parties will invest Rs 7 lakh crore (€87.5 billion) in the coming years. In rural areas, broadband access will be made available on a universal and equal basis.

The vision of the NBM is to fast track growth of digital communications infrastructure, bridge the digital divide, facilitate digital empowerment and inclusion and provide affordable and universal access of broadband for all. Some of the objectives of the Mission which is structured with strong emphasis on the three principles of universality, affordability and quality are:

- Broadband access to all villages by 2022
- Facilitate universal and equitable access to broadband services for across the country and especially in rural and remote areas
- Laying of incremental 30 lakhs route km of Optical Fiber Cable and increase in tower density from 0.42 to 1.0 tower per thousand of population by 2024
- Significantly improve quality of services for mobile and internet
- Develop innovative implementation models for Right of Way (RoW) and to work with States/UTs for having consistent policies pertaining to expansion of digital infrastructure including for RoW approvals required for laying of OFC
- Develop a Broadband Readiness Index (BRI) to measure the availability of digital communications infrastructure and conducive policy ecosystem within a State/UT.
- Creation of a digital fiber map of the Digital Communications network and infrastructure, including Optical Fiber Cables and Towers, across the country.

[Read more>>](#)



7.4 LoRa Alliance announces First Authorized Test Houses in India

The LoRa Alliance, the global association of companies backing the open LoRaWAN standard for the Internet of Things (IoT) low-power wide-area networks (LPWANs), announced that LoRa Alliance Authorized Test House TÜV Rheinland has opened a LoRaWAN Certification testing site in India, and that DEKRA will also offer local certification testing by the end of the year. Both company's sites in India will provide local testing of LoRaWAN devices seeking to become LoRaWAN CertifiedCM.

At the same time, the LoRa Alliance announced that the LoRaWAN Certification Test Tool (LCTT), introduced this past June, is now available to LoRa Alliance members globally. These two developments offer strong support to the India market making it easier and more cost-effective than ever before to certify LoRaWAN devices.

DEKRA and TÜV Rheinland's presence as local test houses in India means that companies seeking to certify their devices can do so with greater efficiency than ever before. The time and cost savings are achieved by not having to ship devices internationally. Further, LoRa Alliance members can now utilize the LCTT before officially engaging in the certification process, further accelerating development roadmaps and timelines.

[Read More>>](#)

7.5 Govt. invites suggestions from Citizens as part of Cyber Security Strategy 2020

As a first step towards formulating the new futuristic document titled National Cyber Security Strategy 2020, the National Security Council Secretariat has asked citizens to give suggestions as part of updating the cybersecurity policy of the country. The Indian Government under the aegis of National Security Council Secretariat through a well-represented Task Force is in the process of formulating the National Cyber Security Strategy 2020 (NCSS 2020) to cater for a time horizon of five years (2020-25).

[Read More>>](#)

7.6 Notifications: Ministry of Electronics and Information Technology (Meity)

- Meity has issued a notification that gave preference to locally made cybersecurity products for public procurement. [Read more/Download](#)
- Meity has released "Guidelines for Procurement of Cloud Services" [Read more/Download](#)
- **Meity's four committees on Artificial Intelligence (AI) have published following reports:**
 - Report of committee - A on platforms and data on AI [Read more/Download](#)
 - Report of committee - B on leveraging AI for identifying national missions in key sectors [Read more/Download](#)
 - Report of committee - C on mapping technological capabilities, key policy enablers required across sectors, skilling, reskill [Read more/Download](#)
 - Report of committee - D on cyber security, safety, legal and ethical issues [Read more/Download](#)



7.7 Reports/White Papers/Recommendations and Consultation Papers by TRAI

- Consultation Paper on Cloud Services [Read more/Download](#)
- Consultation Paper on Review of Interconnection Usage Charges. [Read more](#)
- Recommendations on Allotment of spectrum to Indian Railways for Public Safety and Security services [Read more/Download](#)
- Recommendations on Review of Terms and Conditions for registration of Other Service Providers (OSPs) [Read more/Download](#)
- The Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) (Second Amendment) Regulations, 2019 [Read more/Download](#)
- TRAI releases The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Seventh Amendment) Regulations, 2019 [Read more/Download](#)

8. Planned Activities for Next Quarters

- Preparation for Steering Committee #2 and planned meetings for SESEI
- End of Year financial closure & Regulatory Compliances (Europe: Jan'19 to Dec'19)
- Continue working with TEC for adoption of oneM2M standards as National standards
- Policy & NEWS Updates
- Follow-up on the India Taskforce workshop action points
- Representing CEN/CENELEC & ETSI at the CII National Standards Conclave 2020
- Participation in the important conferences and events
- Technical synergy and support to the EU projects such as Indico and EU-India ICT project

9. Glossary

Sr. No.	Acronym	Expansion
1	NEPEDP	National Centre for Promotion of Employment for Disabled People
2	3GPP	3rd Generation Partnership Project
3	5G	Fifth Generation
4	AAL	Active Assisted Living
5	AI	Artificial Intelligence
6	BIF	Broadband India Forum
7	BIS	Bureau of Indian Standards
8	CC	Consultative Committee
9	CDoT	Centre for Development of Telematics



10	CEN	European Committee for Standardization
11	CENELEC	European Committee for Electro-technical Standardization
12	CII	Confederation of Indian Industry
13	COAI	Cellular Operators Association of India
14	CRS	Compulsory Registration Scheme
15	DCC	Digital Communications Commission
16	DoT	Department of Telecommunications
17	DPIIT	Department for Promotion of Industry and Internal Trade
18	EBTC	European Business and Technology Centre
19	ETD	Electro-Technical Department
20	ETSI	European Telecommunications Standards Institute
21	EU	European Union
22	EV	Electric Vehicle
23	FAME	Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles
24	FICCI	Federation of Indian Chambers of Commerce & Industry
25	GIZ	German Society for International Cooperation
26	ICAT	International Centre for Automotive Technology
27	ICRIER	Indian Council for Research on International Economic Relations
28	ICT	Information and Communication Technology
29	IEC	International Electro-Technical Commission
30	IIT	Indian Institute of Technology
31	IoT	Internet of Things
32	IPR	Intellectual Property Rights
33	IREDA	Indian Renewable Energy Development Agency
34	ISO	International Organization for Standardization
35	ITS	Intelligent Transport Systems
36	JTC	Joint Technical Committee
37	LITDC	Electronics and Information Technology Division Council
38	M2M	Machine to Machine
39	MAIT	Manufacturers' Association for Information Technology
40	MEITY	Ministry of Electronics and Information Technology
41	ML	Machine Learning
42	MNRE	Ministry of new and renewable energy

43	MoEFCC	Ministry of Environment, Forest and Climate Change
44	MoHUA	Ministry of Housing and Urban Affairs
45	MoP	Ministry of Power
46	MoRTH	Ministry of Road Transport and Highways
47	NBM	National Broadband Mission
48	PWDs	Persons with Disabilities
49	R&D	Research and Development
50	SDO	Standards Developing Organization
51	SMEs	Small and Medium Enterprises
52	TCS	Tata Consultancy Services
53	TEC	Telecom Engineering Centre
54	TERI	The Energy and Resources Institute
55	TRAI	Telecom Regulatory Authority of India
56	TSDSI	Telecommunications Standards Development Society India
57	VCP	Volunteer Code of practice
58	WEF	World Economic Forum