SESEI IV

Seconded European Standardization Expert in India

Newsletter

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CEN - European Committee for Standardization
CENELEC - European Committee for Electrotechnical Standardization
ETSI - European Telecommunications Standards Institute

EC - European Commission
EFTA - European Free Trade Association

Greeting from SESEI!!!

Dear Readers,

I would like to begin by wishing you all a very Happy and safe 2022. I welcome you all to the tenth edition of the "SESEI newsletter - Europe." Sharing of information and latest updates is one of key characteristic of the SESEI Project. It allows stakeholders to understand, stay abreast and take informed action based on the news and information shared with our readers.

I am also very happy to inform you that Bureau of Indian Standards (BIS), national standard development body of India, has published Indian Standard IS 17802-"Accessibility for ICT Products and Services, Part 1: Requirements" which is a technical adoption of European Standard EN 301 549 v3.2.1 as developed by CEN, CENELEC and ETSI. The Telecom Engineering Centre (TEC) has notified WTO of Mandatory Testing and Certification of Telecommunication Systems (MTCTE) for Telephone sets, including telephones for cellular networks or for other wireless networks. Commerce and Industry Minister called for waiver of Intellectual Property Rights (IPR) in World Trade Organization (WTO) and dismantling new trade barriers in the global fight against the Covid-19 pandemic. The Government of India also launched National Intellectual Property Awareness Mission (NIPAM) to provide awareness on intellectual property and its rights to students.

The Smart Cities Mission has been falling behind the schedule and the covid pandemic has affected the completion of the projects. The Union Housing and Urban Affairs Ministry (MoUHA) has extended the timeline for the implementation of Smart Cities Mission to June 2023 due to the Covid pandemic and other reasons. Meanwhile, MoHUA in collaboration with Smart Cities Mission, National Institute of Urban Affairs and GIZ India organized a Smart Move Innovative Urban Mobility Challenge, which was won by Indian Institute of Technology (IIT) Roorkee for their interactive passenger information system to predict the crowding levels in the public transit system.

A comprehensive sectoral report on the Smart Cities has also been prepared and released by SESEI, providing details on the various initiatives and standards related activities carried out by the Govt. of India under the smart cities mission.

The automotive sector in India is buzzing with activities, a lot has been initiated by the Ministry of Heavy Industry (MoHI) to roll out the Electrical Vehicle (EV) vision of the country to achieve hundred percent electrical vehicles on the Indian roads by 2030. The Automotive Research Foundation of India (ARAI), Pune, is working on standardization of charging infrastructure, which is scheduled to be launched by the top of 2022, for fast charging, the prototype. Similarly, Indian Institute of Technology (IIT) Bombay along with Convergence Energy Services Limited (CESL) is working on developing flagship products, standardizing technical specifications, and customizing solutions for the Indian EV charging ecosystem.

The Central government has also launched 'E-Amrit', a web portal on electric vehicles (EVs), at the ongoing COP26 Summit in United Kingdom's Glasgow. E-Amrit is a one-stop destination for all information on electric vehicles–busting myths around the adoption of EVs. Several states have also formed their various EV policies and are encouraging people to adopt EVs with various subsidy schemes in a bid to reduce the carbon footprint.

We all know that Information Communication Technology will be the key sector for all industries and for the growth of the country's economy. AI, blockchain and IoT/M2M will be leaving lasting impressions on the way we live. Ministry of Electronics and Information technology (MEITY) released "National Strategy on Blockchain" with the vision to create trusted digital platforms. The Department of Telecommunication (DoT) has created a technology innovation group focused on the 6G technology, with the hopes of taking the lead in global technology development. The Innovation Group will be focusing on creating roadmap for research and development (R&D), pre-standardization, application and product development, and action plans for 6G technology. C-DoT (Centre of Development for Telematics) has launched a Quantum Communication lab, becoming the first organization in the country to provide indigenous quantum secure telecom products and solutions.

The 5Gi standards developed by Telecom Standards Development Society of India (TSDSI), is all set to be formally incorporated in the global 5G standard (3GPP). The DoT has been coordinating with the global players for the incorporation of 5Gi with the 3GPP standard. The new ICT technologies also necessitates the need to have robust cyber security strategy. The National Security Council is working on the National Cybersecurity Strategy, over the last two years and is in the cabinet for the final stamp.

Apart from the Production linked incentives for the electronic and telecommunication devices, the government also notified the policy for Semiconductor chips manufacturing in the country. As per the policy, the government will provide up to 50% of the cost for setting up two semiconductors and two display fabs units.

In the Realm of Green Energy and Resource efficiency, India is ensuring positive actions and steps. Apart from proposing tweaks in its laws to make it mandatory for industrial units to use a minimum share of green energy in overall electricity consumption as the country seeks to move away from fossil fuels and fight climate change. The government is also working on providing fiscal incentives to encourage a circular economy. Extended producer liability in 11 sectors or products and a refund option for products after use besides some other fiscal sops could be introduced to aid the switch to circular economy from a linear one.

Both India and European Union have also agreed to work together in the areas of clean energy with a focus on offshore wind, green hydrogen, and solar power besides deciding to encourage investments in the field of energy efficiency. Some of the areas identified for cooperation included ensuring nearly zero energy buildings and renewable energy sources, including solar and offshore wind

Similar, interesting articles and updates from the other priority sectors are provided in this newsletter. As always, we look forward to your comments and suggestions to further improvise it. Happy New Year and happy reading once again.

Warm Regards,

Dinesh Chand Sharma
(Seconded European Standardization Expert in India)

The List of Draft Indian Standards as issued by BIS for eliciting technical comment along with Standards as published by ARAI and TSDSI are available as part of Annexure 1 to this newsletter.

Standards/IPR/TBT-Market Access

Bureau of Indian Standards (BIS) adopted EN 301 549 Standard as Indian Standard

Bureau of Indian Standards (BIS), national standard development body of India, has published Indian Standard IS 17802-"Accessibility for ICT Products and Services, Part 1: Requirements" which is the technical adoption of European Standard EN 301 549-"Accessibility Requirements of ICT Products and Services" developed by CEN, CENELEC and ETSI. Modifications have been made to adapt it to India and are limited to referencing the relevant regulatory context (Rights of Persons with Disabilities Act, 2016) and the official languages of India. Download>>

Prime Minister Calls for Stable Global Supply Chain and Cyber Security Standards

Prime Minister Narendra Modi, while addressing the 16th East Asia Summit (EAS), called for a resilient and stable global supply chain and raised the idea of developing global standards on cyber security. The PM's comments on developing global standards on cyber security are significant amid allegations of hacking by China. Read More

TEC Applies for TBT with WTO to notify (MTCTE) – Phase III & IV

India has submitted TBT notification - G/TBT/N/IND/218" related to 8517 - Telephone sets, including telephones for cellular networks or for other wireless networks " to the World Trade Organization (WTO) for protection of human safety and Quality. This TBT was filed by the Telecom Engineering Centre (TEC), under the Department of Telecommunications to notify Mandatory Testing and Certification of Telecommunication Systems (MTCTE) – Phase III & IV. Read more

National Intellectual Property Awareness Mission (NIPAM) launched

A National Intellectual Property Awareness Mission (NIPAM) under the initiative of the Government's "Azadi ka Amrit Mahotsav", has been launched by Shri Anurag Jain, Secretary, DPIIT on 8/12/2021. The pan-India ambitious mission aims to provide awareness on intellectual property and its rights to 1 million students. It aims to inculcate the spirit of creativity and innovation to students of higher education (classes 8 to 12) and ignite and inspire the students at college/Universities to innovate and protect their creations. During the launch, Govt. emphasized the importance of the role of a strong IPR ecosystem in the advancement of a country and how IPR is an important tool for the IP holder to become a "Job giver rather than job seeker". Read More

Commerce and Industry Minister Reiterates Call for IPR Waiver at WTO

Commerce and Industry Minister called for waiver of Intellectual Property Rights (IPR) in World Trade Organization (WTO) and dismantling new trade barriers in the global fight against the Covid-19 pandemic. In October 2020, India and South Africa had submitted the first proposal, suggesting a waiver for all WTO members on the implementation of certain provisions of the Trade-Related Aspects of Intellectual Property Rights (TRIPs) in relation to the prevention, containment, or treatment of Covid-19. In May, a revised proposal was submitted by 62 co-sponsors, including India, South Africa, and Indonesia. The TRIPS agreement came into effect in January 1995. Read More

Smart Cities

Centre extends timeline for implementation of Smart Cities Mission to June 2023

The Union Housing and Urban Affairs Ministry has extended the timeline for the implementation of Smart Cities Mission to June 2023 due to the Covid pandemic and other reasons, a senior official said on Thursday. According to an earlier deadline, the cities were expected to complete their projects within five years of being selected under the Smart Cities Mission. The official said all the 100 smart cities selected under the mission will now have to complete their projects by June 2023. The official said all the 100 smart cities selected under the mission will now have to complete their projects by June 2023. Hundred smart cities had been selected through four rounds of competition from January 2016 to June 2018. The ministry had launched the Smart Cities Mission on 25 June 2015. Read More

Four industrial smart cities being developed under DMIC: Commerce Ministry

Four greenfield industrial cities or nodes are being developed in Gujarat, Maharashtra, Uttar Pradesh, and Madhya Pradesh under the Delhi-Mumbai Industrial Corridor (DMIC), and major trunk infrastructure works have been completed there, the commerce and industry said. In these cities, 138 plots (754 acres) have been allotted to companies with investment to the tune of more than Rs 16,750 crore, it said in a statement. Anchor investors in these cities/nodes include companies like HYOSUNG (South Korea), NLMK (Russia), HAIER (China), TATA Chemicals and AMUL. Read more

IIT Roorkee wins Smart Move Innovative Urban Mobility challenge

The Indian Institute of Technology (IIT) Roorkee won the Smart Move Innovative Urban Mobility Challenge held on November 8 by the Ministry of Housing and Urban Affairs (MoHUA) in collaboration with Smart Cities Mission, National Institute of Urban Affairs and GIZ India. The team from IIT Roorkee developed an interactive passenger information system to predict the crowding levels in the public transit system. Read More

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Mobility

Ministry of Heavy Industry (MoHI) to roll out EV fast charging standardization by 2022-end

The union authorities' s efforts to hurry up electric vehicle adoption within the nation will get an enormous push with the standardization of charging infrastructure which is scheduled to be launched by the top of 2022. The unbiased organization Automotive Research Foundation of India (ARAI), Pune, is engaged on this. "For quick charging, the prototype is prepared and by December 2022, we'll carry this to the market. However, we hope this may be achieved even earlier than that," Minister for Heavy Industries, stated. He invited the industry stakeholders and policymakers from the important thing states to push electrical automobile adoption within the quick lane. Read More

Niti Aayog and World Bank join hands to push electric vehicles financing

NITI (National Institution for Transforming India) Aayog and the World Bank (WB) are working together to facilitate a program for faster and easier financing of electric vehicles (EVs). NITI Aayog and World Bank are setting up a $300 million 'first loss risk sharing instrument', with the State Bank of India (SBI) as its program manager. The current rate of

interest for electric two-wheelers & electric 3 Wheelers, which is in the range of 20-25 per cent is expected to be reduced to 10-12 per cent. Read More

IIT Bombay partners with CESL to build on India's electric vehicle charging ecosystem

Indian Institute of Technology (IIT) Bombay has joined hands with Convergence Energy Services Limited (CESL) in a bid to implement electric vehicle charging facilities across the country. CESL is a subsidiary of state-owned Energy Efficiency Services Ltd. This pact will help both parties collaborate on technological advancements to set up electric vehicle (EV) charging infrastructure that includes developing flagship products, standardizing technical specifications and customizing solutions for the Indian EV charging ecosystem.

India is working on reducing vehicular pollution in its metros, with the government encouraging startups to innovate on technology to make electric vehicles affordable for the masses. Several states have also formed their various EV policies and are encouraging people to adopt EVs with various subsidy schemes in a bid to reduce the carbon footprint. Read More

India launches e-Amrit portal on EVs at COP26

E-Amrit is a one-stop destination for all information on electric vehicles–busting myths around the adoption of EVs. The Central government launched 'E-Amrit', a web portal on electric vehicles (EVs), at the ongoing COP26 Summit in United Kingdom's Glasgow. According to a statement issued by the NITI Aayog, E-Amrit is a one-stop destination for all information on electric vehicles–busting myths around the adoption of EVs, their purchase, investment opportunities, policies, and subsidies. "The portal has been developed and hosted by NITI Aayog under a collaborative knowledge exchange programme with the UK government and as part of the UK-India Joint Roadmap 2030, signed by the Prime Ministers of the two countries," the statement said.

E-Amrit intends to complement initiatives of the government on raising awareness on EVs and sensitizing consumers on the benefits of switching to electric vehicles. In the recent past, India has taken many initiatives to accelerate the decarbonization of transport and the adoption of electric mobility in the country. Schemes such as FAME and PLI are especially important in creating an ecosystem for the early adoption of EVs. NITI Aayog intends to add more features and introduce innovative tools to make the portal more interactive and user-friendly. Read More

MoRTH/Railway ministry Notifications

Ministry of Road, Transport and Highways issued following notifications:

- G.S.R 720 regarding concessions under the Vehicle Scrapping Policy. Read more>>
- G.S.R. 653(E) regarding the Motor Vehicles (Registration and Functions of Vehicle Scrapping Facility) Rules, 2021 Read more>>
- G.S.R. 652(E) regarding Recognition, Regulation and Control of Automated Testing Station. Read more>>
- Notification G.S.R. 800(E) regarding Central Motor Vehicles (Twenty Sixth Amendment) Rules, 2021 on emission norms for construction equipment vehicles Read more>>

ICT including services

Made in India 5G technology to be incorporated in global standard

In a major boost for the Department of Telecom, the made-in-India standard 5Gi is all set to be formally incorporated in the global 5G standard (3GPP). This will enable telecom equipment makers, especially the domestic players, to start using this standard to develop network gear for 5G services. According to sources, a formal agreement is expected to be announced in the coming week. The DoT has been coordinating with the global players for the incorporation of 5Gi with the 3GPP standard. 3GPP is an international body that defines the global standard for telecom sector. The new standard was developed under the supervision of Telecom Standard Development Society India and DoT with major contribution from all major IITs and IISc. Read More

Unified cyber security task force by March

Concerned about the growing threat posed by cyber-attacks and national security threats, the government is in the process of forming a unified national-level cyber security task force with a special focus on risks posed by the telecom sector. The move comes at a time when the government is finalizing a "trusted source" list for telecom gear procurement as the country moves towards 5G and other cutting-edge telecom and immersive technologies, but insignificant purchases from China and other countries are detrimental to India's security interests. Read More

India in final stages of clearing national cybersecurity strategy

India is in the final stages to clear a National Cybersecurity Strategy in the wake of growing cyber-attacks and threats from nation-state actors and threats from nation-state actors against the country, national cyber security coordinator Lt. Gen. (retd) Rajesh Pant has stressed. Read More

Telecom Secretary Inaugurates the Public Procurement Policy Portal

The telecom secretary launched the Public Procurement Policy (Make in India) portal for Telecom Products. The portal will help OEMs, Vendors, and other stakeholders to register and track their complaints. He also released the technical report on "Emerging Communication Technologies and Use Cases in IoT Domain", a concept paper on "Optical Fibre & Cable in Indian Telecom Network", and "TEC Handbook – 2021", documented by IoT, Regional TECs, and RC Division of TEC, respectively. Along with the Public Procurement Policy portal, the DoT secretary also inaugurated the Nationwide MTCTE Helpdesk and Evaluation Centre infrastructure and Control Lab, situated in TEC premises. Read More

Telecom department sets up 6G technology innovation group

The Department of Telecommunications (DoT) has created a technology innovation group focused on the next frontier, sixth generation (6G), with the hopes of taking the lead in global technology development. As chairperson, Telecom Secretary will set the vision and objectives for the effort, as well as construct a roadmap for research and development (R&D), pre-standardization, application and product development, and action plans for 6G technology. Read More

NCSC Gives "Trusted Source" Status to Tejas, Cisco, Nokia, and Ericsson

Ericsson, Nokia, Tejas Networks, and Cisco have become the first telecom gear makers to get the "Trusted Source" status from the National Cyber Security Coordinator. European, Indian Companies Get NCSC Nod, Chinese Companies Wait. Earlier this year, the NCSC launched a portal for gear makers and telcos to apply for "Trusted Sources" status. The Chinese telecom suppliers, Huawei and ZTE, still wait for their approval; they have failed to complete the documentation process. France-

based IIoT solutions provider Proscend, identity-related security service provider IDEMIA, PC Solutions and Dori Software have also received approval. Read More

Department of Telecom working to streamline the clearance process for satcom services

With the launch of satellite broadband services in India, a new wave of connectivity options and technologies will surface. The Department of Telecommunications (DoT) is working to streamline the process of deploying satellite networks in order to speed up the rollout of services. Elon Musk's Starlink Satellite Communications and Bharti Group-backed OneWeb are competing to provide satellite-based broadband services in India. The faster the rollout, the faster innovative technology can hit the market and the earlier firms can break even on their heavy investments. Read More

MEITY released National Strategy on Blockchain

Ministry of Electronics and Information technology (MEITY) released "National Strategy on Blockchain" with the vision to create trusted digital platforms through shared Blockchain infrastructure; promoting research and development, innovation, technology and application development; and facilitating state of the art, transparent, secure and trusted digital service delivery to citizens and businesses.

This strategy document lays out overall vision towards development and implementation strategies for a National Blockchain Platform covering the technology stack, legal and regulatory framework, standards development, collaboration, human resource development and potential use cases. It is envisaged that this strategy document would provide the necessary guidance and support for realizing the vision and creating a nationwide ecosystem for creating the National Blockchain Platform and development of relevant applications using this platform in various domains. Download>>

- **Telecommunications Standards Development Society, India (TSDSI)** have released a technical report titled "Smartphone User Data & Privacy Protection" Read more/Download>>
- **MEITY** launched its AI compendium' 75@75 India's AI journey". This was done in collaboration with NeGD and NASSCOM. The compendium highlights the 75 use cases of AI in India that have successfully impacted the people and the governance of the nation. The use cases have been categorized under government, startups, academia, and enterprises. Read more/Download>>

Notifications and Publications Released by Telecom Engineering Centre (TEC)

- Telecom Engineering Centre (TEC) have released a study paper on "5G security" Read more/Download>>
- Report on "Emerging Communication Technologies & Use Cases in IoT Domain" Read more>>
- Concept paper on OF & OFC in Indian Telecom Network. Read more>>
- Study paper on 25/50Gbps Passive Optical Network (PON). Read more>>

Notifications and Publications Released by Telecom Regulatory Authority of India (TRAI)

- 'Regulatory Framework for Promoting Data Economy Through Establishment of Data Centers, Content Delivery Networks, and Interconnect Exchanges in India' Read more>>
- ''Ease of Doing Business in Telecom and Broadcasting Sector''. Read more>>
- ''Auction of Spectrum in frequency bands identified for IMT/5G''. Read more>>
- Draft Telecommunication Tariff (Sixty Sixth Amendment) Order, 2021. Read more>>
- consultation paper on Licensing Framework for Establishing Satellite Earth Station Gateway. Read more>>

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Electrical Equipment including Consumer Electronics

Government notifies semiconductor policy to push manufacturing

The center notified the semiconductor policy that aims to promote the manufacturing of semiconductor chips in the country. As per the notification, the government will provide up to 50% of the cost for setting up two semiconductors and two display fabs units. The Application window will start from 1 January and will be open for 45 days. "The government may extend the benefits of Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme… Up to 2.5% of the outlay of the scheme shall be earmarked for meeting the R&D, skill development and training requirements for the development of semiconductor… Semiconductor Fab(s) set up in India will be supported through purchase preference in procurement of electronic products by the Government under the Public Procurement (Preference to Make in India) Order 2017," reads the notification. The Centre is planning to give incentives of Rs 76,000 crore to set up over 20 semiconductor companies, components manufacturing and display fabrication units in the next six years to make India an electronics market." Read More

Government releases guideline for the Cyber Security in Power Sector

Under direction of Union Power and New & Renewable Energy Minister the Central Electricity Authority, Ministry of Power has prepared the guideline for the Cyber Security in Power sector, and it has been released. The guideline lays down required actions for cyber security preparedness across various utilities in power sector to raise the level of cyber security preparedness for power sector. It lays down a cyber assurance framework, the strengthens the regulatory framework, puts in place mechanisms for security threat early warning, vulnerability management and response to security threats, securing remote operations and services, protection and resilience of critical information infrastructure, reducing cyber supply chain risks, encouraging use of open standards, promotion of research and development in cyber security, human resource development in the domain of Cyber Security, Developing effective public private partnerships and information sharing and cooperation. Read More

Tata Power collaborates with IIT Delhi to work on smart grid technologies

Tata Power and IIT Delhi have signed an MoU to collaborate in areas like smart grid technology, clean energy solutions. Considering the large number of experts with their excellence in different fields in IIT Delhi and Tata Power, there is an immense potential to collaborate between academia, research, and domain experts from business with a high transformational impact. Both the institutions have agreed to work together to identify projects that can be transformed from R&D stage to pilot projects and scaling in areas such as EV infrastructure, Artificial Intelligence, machine learning, hydrogen technologies, battery energy storage systems, monitoring and sensing solutions, microgrids, et al. Read More

To Promote Clean Energy Consumption, Power Ministry proposes Amendment to Energy Conservation Act, 2001

Amidst the growing energy needs and changing global climate landscape, the Government of India has identified new areas to achieve higher levels of penetration of Renewable energy by proposing certain Amendments to Energy Conservation Act, 2001. The objective will be to enhance demand for renewable energy at the end- use sectors such as Industry, buildings, transport etc. Ministry of Power has prepared amendments, after consultations with stakeholders. The proposal includes defining minimum share of renewable energy in the overall consumption by the industrial units or any establishment. There will be provision to incentivize efforts on using clean energy sources by means of carbon saving certificate. Read More

Ministry of Power (MoP) & Ministry of New and Renewable Energy (MNRE) notifications/guidelines:

- Revised Policy for Biomass Utilization Power Generation through Co-firing in Coal based Power Plants Read more>>
- Inviting Suggestions regarding Formulation of Comprehensive Policy Framework and Recommend other interventions to promote Energy Storage in Power Sector Read more>>
- Seeking comments on Draft Electricity (Rights of Consumers) Amendment Rules, 2021 Read more>>
- Public Procurement (Preference to Make in India) to provide for Purchase Preference (linked with local content) in respect of Power Sector. Read more>>
- Scheme for Flexibility in Generation and Scheduling of Thermal/Hydro Power Stations through bundling with Renewable Energy and Storage Power. Read more>>

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Manufacturing/Make in India

DoT approved 31 proposals of $447 million scheme for telecom and networking products manufactured in India

The Department of Telecommunications approved 31 proposals entailing an investment of $447 million (INR 33450 million) over the next 4.5 years, as part of the Production Linked Incentive (PLI) scheme for telecom and networking products manufactured in India. Proposals from seven global companies, 8 domestic firms and 16 Micro Small and Medium Enterprises were approved. Nokia India, Ericsson, Foxconn, Tejas Networks, VVDN, STL Technologies, Dixon and HFCL, are some of the companies selected for this scheme. The PLI scheme covers the manufacturing of telecom gear, such as core transmission equipment, 4G/5G radio access network (RAN) and wireless gear, internet of things (IoT) access devices, customer premises equipment (CPEs), and enterprise equipment including switches and routers, among others. Read More

- Ministry of Electronics and Information Technology (MEITY) have issued notification for Extension of Production Linked Incentives (PLI) Scheme for Large Scale Electronics Manufacturing. Read more>>

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R&D and Innovation

Telecom secretary asks C-DoT to work on 6G, launches Quantum Communication Lab

A statement said C-DoT has become the first organization in India to offer complete portfolio of indigenous quantum secure telecom products and solutions to comprehensively address the requirements of telecom operators as well as that of strategic sector like Defense, in India. Sh. K. Rajaraman also inaugurated the Quantum Communication Lab at C-DOT, Delhi and unveiled the indigenously developed Quantum Key Distribution (QKD) solution by C-DOT which can support more than 100 kilometers on standard optical fiber. Development of indigenous QKD solution is essential to address the threat that rapid advancement in Quantum Computing poses to the security of the data being transported by various critical sectors through the current communication networks. With the development of QKD solution and the existing suite of wide range of products in Optical Access, Core, Switching & Routing, Wireless, Post Quantum Cryptography Encryptors (PQCE) etc., C-DOT has become the first organization in India to offer complete portfolio of indigenous Quantum Secure telecom products & solutions to comprehensively address the requirements of Telecom Service Providers as well as Strategic and Defense sector in India. Read More

UK-India joint research and innovation funding led to 258 projects: Report

The UK-India research and innovation relationship has resulted in 258 projects with a joint investment of around 330 million pounds, UK Research, and Innovation (UKRI) India said in a new report released. The report, entitled UK-India: Partnerships for Growth with Research and Innovation', is said to illustrate the real-world impact of the countries' research and innovation partnership and the opportunities for further bilateral collaboration. It analyses bilateral research and innovation projects co-funded by India and UKRI a non-departmental public body of the UK government. Read More

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Energy Efficiency & Environment including Circular Economy

Relevant, Faster and Better-Quality Standards Key for Achieving SDGs

On World Standards Day, Bureau of Indian Standards (BIS) organized a day-long event on the theme of 'Shared Vision for a Better World' Standards for Sustainable Development Goals. Minister of State (MoS) for Consumer Affairs, Food and Public Distribution and Environment, Forest, and Climate Change, pressed on the significance of environmental sustainability through standardization. He emphasized on the importance of MSME sector in India and how the implementation of standards facilitate access to national and international markets. He spoke on the critical role that standards play in ensuring the integration of diverse technologies and interoperability of innovations required for propelling smart cities of the future. Read more

Fiscal sops, stricter rules in the works to back circular economy

It has been reported that India is eyeing a slew of measures, including fiscal incentives and stricter regulations, as part of the framework being firmed up to encourage a circular economy. Extended producer liability in 11 sectors or products and a refund option for products after use besides some other fiscal sops could be introduced to aid the switch to circular economy from a linear one. The 11 sectors include scrap metal (ferrous and non-ferrous), lithium ion (Li-ion) batteries, tyre and rubber recycling, gypsum, end-of-life vehicles (ELVs), electronic waste, toxic and hazardous industrial waste, municipal solid waste and liquid waste, agriculture waste, used oil waste (generated from tools and machines) and solar panels, the company said. Read More

India to impose minimum level of green energy use by industries

India is proposing tweaks in its laws to make it mandatory for industrial units to use a minimum share of green energy in overall electricity consumption as the country seeks to move away from fossil fuels and fight climate change. Proposed amendments will facilitate the development of a carbon market in India besides prescribing a minimum consumption of renewable energy for industrial units, the government said in a statement Saturday. "The objective will be to enhance demand for renewable energy at the end-use sectors such as industry, buildings, transport," and others, India's ministry of power said in the statement, add adding that this may also facilitate the use of "green hydrogen" as an alternate to the existing fossil fuels. Carbon saving certificates will also be given to spur companies toward clean energy sources. The statement did not specify the minimum use percentage that the government is planning to mandate. Read More

India targets net zero emissions by 2070

India's prime minister on Monday used the COP26 climate talks to announce 2070 as the target for his country to reach net zero carbon emissions, two decades beyond what scientists say is needed to avert catastrophic climate impacts. Prime Minister defended India, however, as having stuck to its climate pledges "in spirit and "in spirit and letter" and noted that his country contained 17% of the world's population but was responsible for only 5% of global emissions. Read More

India, Italy to collaborate on green hydrogen, gas sector

India and Italy have agreed to explore development of green hydrogen, setting up renewable energy corridors, and joint projects in the natural gas sector as the two nations sought to strengthen partnership in energy transition. They agreed to "initiate a dialogue to support the development and deployment of green hydrogen and related technologies in India" as well as to "consider working together to support a large size green corridor project in India to capitalize on India's target to produce and integrate 450 GW of renewable energy by 2030." Read More

Ministry of Environment, forest and Climate Change released following notifications:

- Disposal of e-waste – defunct/obsolete computer hardware, peripherals and office equipment Read more/Download>>
- Regulation on the Extended Producer Responsibility (EPR) under Plastic Waste Management Rules, 2016. Read more/Download>>

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EU-India/Trade-FTA/Investments

India-EU trade talks to resume by December

After an eight-year hiatus, India, and the European Union (EU) are set to resume negotiations for a Bilateral Trade and Investment Agreement (BTIA) by December, according to a government official. Another official termed the India-EU connectivity partnership, announced in May, as a "counterfoil" to other such initiatives in an indirect reference to China's Belt and Road Initiative (BRI). "India-EU trade talks are set to start anytime by end of the year... We have prioritized and discussions will now go forward. It will be comprehensive talks," the official said on the sidelines of a report launch. Read More

India, EU decide to expand clean energy cooperation

India and the European Union have vowed to scale up cooperation in areas of clean energy with a focus on offshore wind, green hydrogen, and solar power besides deciding to encourage investments in the field of energy efficiency. Various aspects of deepening clean energy cooperation were discussed at a meeting of the India-EU Energy Panel. The Ministry of External Affairs (MEA) said the panel agreed on a detailed work programme until 2023 to implement clean energy and climate partnership that was agreed in 2016. Some of the areas identified for cooperation included ensuring nearly zero energy buildings and renewable energy sources, including solar and offshore wind. Read More

Green Strategic Partnership between India, Denmark will make bilateral relations stronger

Indian President met Denmark's Prime Minister Mette Frederiksen and said that the Green Strategic Partnership between India and Denmark will further strengthen bilateral relations. During the meeting, the president also noted that India and

Denmark have strong trade and investment ties, according to an official statement. Danish public and private sectors are already actively involved in several states in India, taking forward key national missions such as Make in India, Jal Jeevan Mission, Smart Cities, Digital India, Startup India, Clean India, and Clean Ganga, etc., he said. Read more

Invest India

Government allowed 100% FDI (Foreign Direct Investment) in telecom via automatic route

The government on Tuesday notified its decision to permit 100 per cent foreign direct investment (FDI) under the automatic route in the telecom services sector subject to certain conditions. Till now, only 49 per cent of FDI was allowed through the automatic route and anything beyond that had to come via the government route. Telcos, including infrastructure providers, will be covered under the new FDI regime. The 100 per cent FDI was part of the telecom reforms package approved by the Cabinet on September 15. Other reliefs included a four-year moratorium on AGR (Average Gross Revenue) dues, and an option for the government to convert dues into equity post the moratorium period. Read More

Event calendar 2022

India Smart Utility Week
When: 02 - 05 Mar 2022
Where: New Delhi, India
Electricity Utilities, Policy Makers, Regulators, Investors and world's top-notch Smart Grid and Smart City Experts and Researchers to discuss trends, share best practices and showcase next generation technologies and products. For more information, please click here>>

Smart Cities India Expo
When: 23 - 25 Mar 2022
Where: Pragati Maidan, New Delhi, India
The Smart Cities India Expo is design to bring together the city leaders and representatives from international organizations, academic institutions, and private companies, aiming at establishing a knowledge hub for Smart Cities. For more information please click here>>

International Conference on Machine Learning, Security and Cloud Computing
When: 28 - 29 Jan 2022
Where: Vardhaman College of Engineering, Hyderabad, India
International Conference on Machine Learning, Security and Cloud Computing aim to bring together leading academic scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects of Machine Learning, Security and Cloud Computing. For more information please click here>>

Transport India Expo 2022
When: 23-25 Mar 2022
Where: Pragati Maidan, New Delhi, India

Transport India Expo 2022 is India's largest trade expo and exhibition, showcasing smart technology and solutions in electric mobility, batteries and storage systems, electric vehicle charging and intelligent transport. For more information please click here>>

National Summit on Smart Cities India
When: 27 Aug 2022
Where: The LaLiT New Delhi
National Summit on Smart Cities India will feature the designated heads of municipalities, urban/city planning, research/academic institutes, engineers/consultants, energy and utility experts, mobility and transportation experts, technology providers, and many more. For more information please click here>>

Internet Of Things India Expo 2022
When: 23-25 Mar 2022
Where: Pragati Maidan, New Delhi, India
Internet Of Things India Expo 2022 is a trade expo and exhibition that brings the whole ICT fraternity (industry leaders, traders, government officers and customers) collectively on a single platform and provides priceless insights into the technologies and services of tomorrow. For more information please click here>>

India Energy Storage Week - International Conference & Expo
When: 17 - 21 Jan 2022
Where: New Delhi, India
India Energy Storage Week - International Conference & Expo is India's premier B2B networking & business event focused on renewable energy, advanced batteries, alternate energy storage solutions, electric vehicles, charging infrastructure, and microgrids ecosystem. For more information please click here>>

IIoT India 2022
When: 9-10 March 2022
Where: IICC New Delhi, Sector 25 Dwarka, New Delhi, India
The 2022 edition of IIoT India, dedicated towards reimagining the future of manufacturing, is a strategic platform that evolves with the industry and is shaped by the leaders and experts in support of their transformative initiatives; a journey that is necessary and made possible by the process of digitalization. For more information please click here>>

EWHEELS - Electric Vehicles Expo 2022
When: 26-28 Feb 2022
Where: Pragati Maidan, New Delhi, India
EWHEELS - Electric Vehicles Expo 2022 is the only dedicated trade expo and exhibition on 2 Wheelers, 3 Wheelers & 4 wheelers Electric. For more information please click here>>

World Blockchain Conclave
When: 21 - 22 Apr 2022
Where: Bengaluru, India (Virtual event)
World Blockchain Conclave will explore the industries that are set to be disrupted the most by this new technology. It connects global blockchain gurus and technology players in this space including emerging startups with regional businesses, governments, and IT leaders from across key industry verticals. For more information please click here>>

Smart Mobility Expo
When: 5-7 May 2022
Where: Pragati Maidan, New Delhi, India
With the emergence of the new mobility eco system, Smart Mobility Expo held along with Trafficinfratech Expo and Parking Infratech Expo will focus on Future Mobility providing a platform for Electric Vehicles, Connected and

Autonomous vehicles, Highspeed travel modes, Sustainable rapid transport, Common payment modes and emerging technologies including. For more information please click here>>

Annexure 1

Electrical Equipment including Consumer Electronics (ETD)

The following Draft Indian Standards were issued by Electro-Technical division council at BIS during the last quarter for eliciting technical comment:

Sl No	Document No	Title of the Doc	IEC/ISO	Give comments	Detail
	At Bureau of Indian Standards (BIS)				
	Electrotechnical (ETD)				
1	ETD 1(18633)	Basic and Safety Principles for Man-Machine Interface Marking and Identification - Actuating Principles (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
2	ETD 1(18645)	Graphical Symbols for Electrical Equipment in Medical Practice (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
3	ETD 1(18646)	IEC standard frequencies (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
4	ETD 1(18648)	Industrial Systems Installations and Equipment and Industrial Products - Structuring Principles and Reference Designations - Part 1: Basic Rules (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
5	ETD 1(18649)	Protection Against Electric Shock - Common Aspects for Installation and Equipment (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
6	ETD 1(18650)	Basic and Safety Principles for Man-Machine Interface Marking and Identification - Identification of Equipment Terminals Conductor Terminations and Conductors (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail
7	ETD 1(18651)	Designation of phase differences by hour numbers in three-phase AC systems (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC-3C (O);	Comment	Detail

8	ETD 1(18659)	Electrotechnical Vocabulary Part 614: Generation Transmission and Distribution of Electricity Operation (First Revision)	IEC TC- (O); IEC TC- (P); IEC TC- 3C SC- 3C (O);	Comment	Detail
9	ETD 13(18664)	a.c. Static Transformer Operated Watthour Meters (Class 0.2 S and 0.5 S) and Var-Hour Meters (Class 0.2 S, 0.5 S and 1 S) — Specification (First Revision) -Amendment 1	IEC TC-13 (P);	Comment	Detail
10	ETD 16(18647)	Safety of transformers reactors power supply units and combinations thereof Part 1: General requirements and tests	IEC TC- 14 (P); IEC TC- 96 (P);	Comment	Detail
11	ETD 16(18652)	Safety of Transformers Reactors Power Supply Units and Combinations Thereof Part 2-4: Particular Requirements and Tests for Isolating Transformers and Power Supply Units Incorporating Isolating Transformers for General Applications	IEC TC- 14 (P); IEC TC- 96 (P);	Comment	Detail
12	ETD 16(18653)	Safety of Transformers Reactors Power Supply Units and Combinations Thereof Part 2-6: Particular Requirements and Tests for Safety Isolating Transformers and Power Supply Units Incorporating Safety Isolating Transformers for General Applications	IEC TC- 14 (P); IEC TC- 96 (P);	Comment	Detail
13	ETD 21(18661)	Arc Welding Equipment Part 2: Liquid Cooling Systems (First Revision)	ISO TC-44 SC- (O); IEC TC-26 SC- (O);	Comment	Detail
14	ETD 21(18662)	Arc welding equipment Part 3: Arc striking and stabilizing devices (First Revision)	ISO TC-44 SC- (O); IEC TC-26 SC- (O);	Comment	Detail
15	ETD 21(18663)	Arc welding equipment Part 5: Wire feeders (First Revision)	ISO TC-44 SC- (O); IEC TC-26 SC- (O);	Comment	Detail
16	ETD 21(18665)	Arc welding equipment Part 8: Gas consoles for welding and plasma cutting systems (First Revision)	ISO TC-44 SC- (O); IEC TC-26 SC- (O);	Comment	Detail
17	ETD 21(18666)	Arc welding equipment Part 10: Electromagnetic compatibility EMC requirements (First Revision)	ISO TC-44 SC- (O); IEC TC-26 SC- (O);	Comment	Detail
18	ETD 23(18372)	Tubular fluorescent lamps for general lighting service: Part 2 performance requirements (Second Revision) Amendment - 1	_	Comment	Detail
19	ETD 25(18483)	DRAFT AMENDMENT NO. 4 NOVEMBER 2021 TO IS 14665 (PART 3/SEC 1): 2000 ELECTRIC TRACTION LIFTS PART 3 SAFETY RULES/ SECTION 1 PASSENGER AND GOODS LIFTS	ISO TC- 178 (P)	Comment	Detail
20	ETD 28(18548)	Photovoltaic devices Part 14: Guidelines for production line measurements of single-junction PV module maximum power output and reporting at standard test conditions	IEC TC-82 (P)	Comment	Detail

21	ETD 28(18549)	Photovoltaic PV Module Performance Testing and Energy Rating Part 3: Energy Rating of PV Modules	IEC TC-82 (P)	Comment	Detail
22	ETD 28(18550)	Photovoltaic PV Module Performance Testing and Energy Rating Part 4: Standard Reference Climatic Profiles	IEC TC-82 (P)	Comment	Detail
23	ETD 28(18551)	Safety of Power Converters for Use in Photovoltaic Power Systems Part 3: Particular Requirements for Electronic Devices in Combination with Photovoltaic Elements	IEC TC-82 (P)	Comment	Detail
24	ETD 28(18552)	Photovoltaic PV Systems Requirements for Testing Documentation and Maintenance Part 2: Grid Connected Systems Maintenance of PV Systems	IEC TC-82 (P)	Comment	Detail
25	ETD 28(18553)	Measurement Procedures for Materials Used in Photovoltaic Modules Part 1-7: Encapsulates Test Procedure of Optical Durability	IEC TC-82 (P)	Comment	Detail
26	ETD 28(18554)	Measurement Procedures For Materials Used In Photovoltaic Modules Part 5-1: Edge Seals Suggested Test Methods For Use With Edge Seal Materials	IEC TC-82 (P)	Comment	Detail
27	ETD 28(18555)	Measurement Procedures for Materials Used in Photovoltaic Modules Part 5-2: Edge Seals Durability Evaluation Guideline	IEC TC-82 (P)	Comment	Detail
28	ETD 28(18556)	Measurement Procedures for Materials Used In Photovoltaic Modules Part 6-2: General Tests Moisture Permeation Testing Of Polymeric Materials	IEC TC-82 (P)	Comment	Detail
29	ETD 28(18557)	Maximum Power Point Tracking Efficiency of Grid Connected Photovoltaic Inverters	IEC TC-82 (P)	Comment	Detail
30	ETD 28(18558)	Extended Thermal Cycling of PV Modules Test Procedure	IEC TC-82 (P)	Comment	Detail
31	ETD 28(18559)	Photovoltaic Power Systems Pvps Information Model for Availability	IEC TC-82 (P)	Comment	Detail
32	ETD 28(18560)	Photovoltaics in Buildings Part 2: Requirements for Building-Integrated Photovoltaic Systems	IEC TC-82 (P)	Comment	Detail
33	ETD 28(18561)	Simulators Used for Testing Of Photovoltaic Power Conversion Equipment Recommendations Part 1: AC Power Simulators	IEC TC-82 (P)	Comment	Detail
34	ETD 28(18562)	Photovoltaic Systems Power Conversion Equipment Performance Energy Evaluation Method	IEC TC-82 (P)	Comment	Detail
35	ETD 28(18563)	Photovoltaic Systems Guidelines for Effective Quality Assurance of Power Conversion Equipment	IEC TC-82 (P)	Comment	Detail
36	ETD 28(18564)	Incompatibility of Connectors for Dc-Application in Photovoltaic Systems	IEC TC-82 (P)	Comment	Detail

37	ETD 28(18565)	Managing Fire Risk Related to Photovoltaic PV Systems on Buildings	IEC TC-82 (P)	Comment	Detail
38	ETD 28(18566)	Lightning and Surge Voltage Protection for Photovoltaic PV Power Supply Systems	IEC TC-82 (P)	Comment	Detail
39	ETD 28(18567)	Measurement Protocols for Photovoltaic Devices Based on Organic Dye-Sensitized or Perovskite Materials	IEC TC-82 (P)	Comment	Detail
40	ETD 28(18568)	Derisking Photovoltaic Modules Sequential and Combined Accelerated Stress Testing	IEC TC-82 (P)	Comment	Detail
41	ETD 28(18569)	Photovoltaic Power Systems PVPSs Roadmap for Robust Reliability	IEC TC-82 (P)	Comment	Detail
42	ETD 28(18570)	Guidelines for Qualifying PV Modules Components and Materials for Operation at High Temperatures	IEC TC-82 (P)	Comment	Detail
43	ETD 28(18571)	Photovoltaics in Buildings Part 1: Requirements for Building-Integrated Photovoltaic Modules	IEC TC-82 (P)	Comment	Detail
44	ETD 29(17182)	SPECIFICATION FOR CAPACITORS FOR ELECTIC FAN MOTORS	IEC TC-33 (P)	Comment	Detail
45	ETD 36(18655)	Live Working - Conductive Clothing (Second Revision)	IEC TC- 78 (O)	Comment	Detail
46	ETD 36(18656)	Live Working Methods for Assessment of Defects And Verification of Performance Applicable To Tools Devices And Equipment (Second Revision)	IEC TC- 78 (O)	Comment	Detail
47	ETD 36(18657)	Live Working Voltage Detectors Part 1: Capacitive Type to Be Used For Voltages Exceeding 1 KV AC (First Revision)	IEC TC- 78 (O)	Comment	Detail
48	ETD 36(18658)	Live Working Guidelines For The Installation of Transmission And Distribution Line Conductors And Earth Wires Stringing Equipment And Accessory Items (First Revision)	IEC TC- 78 (O)	Comment	Detail
49	ETD 39(18460)	High-Voltage Fuses Part 1: Current-Limiting Fuses	IEC TC-10 (P)	Comment	Detail
50	ETD 39(18582)	HIGH-VOLTAGE FUSES PART 4: ADDITIONAL TESTING REQUIREMENTS FOR HIGH-VOLTAGE EXPULSION FUSES UTILIZING POLYMERIC INSULATORS	IEC TC-10 (P)	Comment	Detail
51	ETD 50(18350)	LVDC systems Assessment of standard voltages and power quality requirements	IEC TC-SyC LVDC (P)	Comment	Detail
52	ETD 11(18132)	Methods of test for measurement of Energy density and Cycle life of Advanced Chemistry Cells ACCs	IEC TC-21 (O); IEC TC- SC-21A (P)	Comment	Detail
53	ETD 19(18444)	Power installations exceeding 1 kV ac Part 1: Common Rules	IEC TC-28 (P); IEC TC-42 (P); IEC TC-109 (O)	Comment	Detail

54	ETD 23(18372)	Tubular fluorescent lamps for general lighting service: Part 2 performance requirements (Second Revision) Amendment - 1	–	Comment	Detail
55	ETD 25(18458)	Installation and maintenance of home lifts - Code of practice - Amendment - 2	ISO TC- 178 (P)	Comment	Detail
56	ETD 25(18459)	GUIDE FOR MAINTENANCE FOR ESCALATORS AND MOVING WALKS	ISO TC- 178 (P)	Comment	Detail
57	ETD 25(18475)	GUIDE FOR MAINTENANCE OF LIFTS	ISO TC- 178 (P)	Comment	Detail
58	ETD 25(18483)	DRAFT AMENDMENT NO. 4 NOVEMBER 2021 TO IS 14665 (PART 3/SEC 1): 2000 ELECTRIC TRACTION LIFTS PART 3 SAFETY RULES/ SECTION 1 PASSENGER AND GOODS LIFTS	ISO TC- 178 (P)	Comment	Detail
59	ETD 28(18116)	Measurement Procedures for Materials Used in Photovoltaic Modules Part 1: Encapsulants Section 4 Measurement of Optical Transmittance and Calculation of the Solar-Weighted Photon Transmittance Yellowness Index and UV Cut-Off Wavelength (First Revision)	IEC TC-82 (P)	Comment	Detail
60	ETD 28(18117)	Measurement Procedures for Materials Used in Photovoltaic Modules Part 1: Encapsulants Section 6 Test Methods for Determining the Degree of Cure in Ethylene-Vinyl Acetate (First Revision)	IEC TC-82 (P)	Comment	Detail
61	ETD 28(18118)	Photovoltaic Inverters - Data Sheet and Name Plate (First Revision)	IEC TC-82 (P)	Comment	Detail
62	ETD 28(18119)	Junction Boxes for Photovoltaic Modules Safety Requirements and Tests (First Revision)	IEC TC-82 (P)	Comment	Detail
63	ETD 28(18120)	Photovoltaic PV Modules Salt Mist Corrosion Testing (First Revision)	IEC TC-82 (P)	Comment	Detail
64	ETD 28(18121)	Terrestrial Photovoltaic PV Modules - Quality System for PV Module Manufacturing (First Revision)	IEC TC-82 (P)	Comment	Detail
65	ETD 29(17182)	SPECIFICATION FOR CAPACITORS FOR ELECTIC FAN MOTORS	IEC TC-33 (P)	Comment	Detail
66	ETD 36(12946)	Live Working - Electrical Insulating Blankets	IEC TC- 78 (O)	Comment	Detail
67	ETD 36(12947)	Rigid Protective Covers for Live Working on A.C. Installation	IEC TC- 78 (O)	Comment	Detail
68	ETD 50(18350)	LVDC systems Assessment of standard voltages and power quality requirements	IEC TC-SyC LVDC (P)	Comment	Detail
69	ETD 51(18175)	Electric vehicle battery swap system - Part 1: General and Guidance	IEC TC-69 (P)	Comment	Detail
70	ETD 51(18205)	Electric vehicle battery swap system - Part 2: Safety requirements	IEC TC-69 (P)	Comment	Detail

https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetail/65/3/ETD

ICT/LITD

The following Draft Indian Standards were issued by Electronics and Information Technology division council (LTD) of BIS for eliciting technical comments:

At Bureau of Indian Standards (BIS)					
Electronics and Information Technology Department (LITD)					
SI No	Document No	Title of the Doc	IEC/ISO	Give comments	Detail
1	LITD 8(18683)	RADIATION PROTECTION INSTRUMENTATION DOSIMETRY SYSTEMS WITH INTEGRATING PASSIVE DETECTORS FOR INDIVIDUAL WORKPLACE AND ENVIRONMENTAL MONITORING OF PHOTON AND BETA RADIATION First Revision	IEC TC- 45 (O) IEC TC- 85 (O); IEC TC- 45A SC- 45A (O); IEC TC- 45B SC- 45B (O); ISO TC- 85 (P); ISO TC- 2 SC- 2 (P) ISO TC- 5 SC- 5 (P)	Comment	Detail
2	LITD 15(18172)	Digital publishing EPUB accessibility Conformance and discoverability requirements for EPUB publications	ISO/IEC/JTC1 TC- 22 SC- 22 (O); ISO/IEC/JTC1 TC- 32 SC- 32 (P); ISO/IEC/JTC1 TC- 34 SC- 34 (P)	Comment	Detail
3	LITD 15(18527)	Information technology Metadata registries MDR Part 2: Classification	ISO/IEC/JTC1 TC- 22 SC- 22 (O); ISO/IEC/JTC1 TC- 32 SC- 32 (P); ISO/IEC/JTC1 TC- 34 SC- 34 (P)	Comment	Detail
4	LITD 15(18680)	Programming Languages — C++	ISO/IEC/JTC1 TC- 22 SC- 22 (O); ISO/IEC/JTC1 TC- 32 SC- 32 (P); ISO/IEC/JTC1 TC- 34 SC- 34 (P)	Comment	Detail
5	LITD 1(18703)	Electrotechnical Vocabulary Part 84 Terminology Concerning Fire Tests for Electrotechnical Products Third Revision	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail

6	LITD 5(18462)	Environmental testing Part 2 Tests Section 20 Tests Ta and Tb: Test methods for solderability and resistance to soldering heat of devices with leads Superseding 1IS 9000 Part 18Sec 1 to 3:1981 and 2 IS 9001 Part 9: 1981	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
7	LITD 5(18463)	Fixed resistors for use in electronic equipment Part 1 Generic specification Superseding IS 5786 Part 1 : 2018	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
8	LITD 5(18464)	Method of measurement of current noise generated in fixed resistors Superseding IS 5027 : 1969	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
9	LITD 5(18465)	Method of measurement of non-linearity in resistors Superseding IS 13504 : 1992	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
10	LITD 5(18469)	Thermistors Directly heated positive temperature coefficient Part 1 Generic specification Superseding IS 11534 Part 1 : 1985 and IS QC 440000: 1994	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail

11	LITD 5(18472)	Fixed capacitors for use in electronic equipment Part 4 Sectional specification Fixed aluminium electrolytic capacitors with solid MnO2 and non-solid electrolyte Superseding IS 4317: 1983 and ISQC 300300 : 1992	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
12	LITD 5(18473)	Fixed capacitors for use in electronic equipment Part 9: Sectional specification: Fixed capacitors of ceramic dielectric Class 2 Superseding IS 2786 Part 1: 1978 and ISQC 300700: 1994	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
13	LITD 5(18474)	Fixed capacitors for use in electronic equipment Part 14 Sectional specification Fixed capacitors for electromagnetic interference suppression and connection to the supply mains Superseding ISQC 302400 : 1994	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
14	LITD 5(18476)	Fixed capacitors for use in electronic equipment Part 14 Blank detail specification Fixed capacitors for electromagnetic interference suppression and connection to the supply mains Section 1 Assessment level DZ Superseding ISQC 302401 : 1994	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
15	LITD 5(18477)	Fixed capacitors for use in electronic equipment Part 15: Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte Superseding ISQC 300200 : 2000	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail

16	LITD 7(18467)	International Electrotechnical Vocabulary Part 24 Broadcasting Sound Television Data	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
17	LITD 7(18468)	International Electrotechnical Vocabulary IEV Part 3: Acoustics and electroacoustics	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
18	LITD 7(18470)	International Electrotechnical Vocabulary IEV Part 48: Recording and Reproduction of audio and video	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
19	LITD 7(18480)	Electroacoustics- Specifications For Personal Sound Exposure Meters First Revision	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
20	LITD 7(18484)	Audio video and related equipment Determination of power consumption Part 5: Set top boxes STB	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
21	LITD 7(18485)	Electroacoustics Audiometric equipment Part 3: Test signals of short duration	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
22	LITD 7(18486)	Electroacoustics Audiometric equipment Part 6: Instruments for the measurement of otoacoustic emissions	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
23	LITD 7(18487)	Sound system equipment Part 10: Peak programme level meters	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
24	LITD 7(18488)	Analogue audio disk records and reproducing equipment	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
25	LITD 7(18489)	Methods of measurement on receivers for television Broadcast transmissions Part 13: General considerations - Measurements at radio and video frequencies	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
26	LITD 7(18490)	Methods of measurement on receivers for television Broadcast transmissions Part 14: Audio channels General methods and methods for monophonic channels	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail

27	LITD 13(18354)	Information Technology Home Electronic System HES Application Model Part 3: Model of a Demand-Response Energy Management System for HES	ISO TC- 25 SC- 25 (P); ISO TC-6 SC-6 (P):	Comment	Detail
28	LITD 13(18357)	Information Technology Home Electronic System HES Architecture Part 2-1: Introduction and device modularity	ISO TC- 25 SC- 25 (P); ISO TC-6 SC-6 (P):	Comment	Detail
29	LITD 13(18358)	Information Technology Home Electronic System HES Architecture Part 3-1: Communication Layers Application Layer for Network Based Control of HES Class 1	ISO TC- 25 SC- 25 (P); ISO TC-6 SC-6 (P):	Comment	Detail
30	LITD 13(18364)	Information Technology Home Electronic System HES Architecture Part 3-2: Communication Layers Transport Network and General Parts of Data Link Layer for Network Based Control of HES Class 1	ISO TC- 25 SC- 25 (P); ISO TC-6 SC-6 (P):	Comment	Detail
31	LITD 13(18365)	Information Technology Home Electronic System HES Architecture Part 3-3: User Process for Network Based Control of HES Class 1	ISO TC- 25 SC- 25 (P); ISO TC-6 SC-6 (P):	Comment	Detail
32	LITD 17(18442)	Information technology - Security techniques - Modes of operation for an n - Bit block cipher (Second Revision) Amendment - 1	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
33	LITD 28(18457)	Unified Digital Infrastructure Unified Last Mile Communication Protocols Stack Part 4 Network Access Interface Layer IEEE 802154 - Section 1 Specification	IEC TC-SyC SC- (P); IEC TC-SEG 9 (P); ISO/IEC TC-JTC 1 SC-WG 11 (P); IEC TC-SyC (P)	Comment	Detail
34	LITD 31(18278)	Information technology Cloud computing Overview and vocabulary	ISO/IEC TC-JTC 1 SC-38 (P); SOA ISO/IEC TC-JTC 1 SC-39 (P)	Comment	Detail
35	LITD 31(18279)	Information technology Cloud computing Reference architecture	ISO/IEC TC-JTC 1 SC-38 (P); SOA ISO/IEC TC-JTC 1 SC-39 (P)	Comment	Detail
36	LITD 31(18280)	Information technology Cloud computing Interoperability and portability	ISO/IEC TC-JTC 1 SC-38 (P); SOA ISO/IEC TC-JTC 1 SC-39 (P)	Comment	Detail
37	LITD 31(18282)	Information technology Cloud computing Part 1: Vocabulary	ISO/IEC TC-JTC 1 SC-38 (P); SOA ISO/IEC TC-JTC 1 SC-39 (P)	Comment	Detail

38	LITD 31(18285)	Cloud computing and distributed platforms Data flow data categories and data use Part 1: Fundamentals	ISO/IEC TC-JTC 1 SC-38 (P); SOA ISO/IEC TC-JTC 1 SC-39 (P)	Comment	Detail
39	LITD 15(18170)	Information technology Metadata registries MDR Part 4: Formulation of data definitions	ISO/IEC/JTC1 TC- 22 SC- 22 (O); ISO/IEC/JTC1 TC- 32 SC- 32 (P); ISO/IEC/JTC1 TC- 34 SC- 34 (P)	Comment	Detail
40	LITD 16(16656)	Information technology Radio frequency identification for item management Part 1: Unique identification for RF tags numbering systems	ISO/IEC/JTC1 TC- 17 SC- 17 (P); ISO/IEC/JTC1 TC- 23 SC- 23 (O); ISO/IEC/JTC1 TC- 28 SC- 28 (O); ISO/IEC/JTC1 TC- 31 SC- 31 (P); ISO/IEC/JTC1 TC- SC- 17 (P)	Comment	Detail
41	LITD 16(16657)	Information technology Radio frequency identification for item management Part 2: Parameters for air interface communications below 135 kHz	ISO/IEC/JTC1 TC- 17 SC- 17 (P); ISO/IEC/JTC1 TC- 23 SC- 23 (O); ISO/IEC/JTC1 TC- 28 SC- 28 (O); ISO/IEC/JTC1 TC- 31 SC- 31 (P); ISO/IEC/JTC1 TC- SC- 17 (P)	Comment	Detail
42	LITD 16(16658)	Information technology Radio frequency identification for item management Part 2: Unique identification for RF tags registration procedures	ISO/IEC/JTC1 TC- 17 SC- 17 (P); ISO/IEC/JTC1 TC- 23 SC- 23 (O); ISO/IEC/JTC1 TC- 28 SC- 28 (O); ISO/IEC/JTC1 TC- 31 SC- 31 (P); ISO/IEC/JTC1 TC- SC- 17 (P)	Comment	Detail

43	LITD 16(16659)	Information technology Radio frequency identification for item management Part 3: Parameters for air interface communications at 1356 MHz	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
44	LITD 16(16660)	Information technology Radio frequency identification for item management Part 4: Parameters for air interface communications at 245 GHz	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
45	LITD 16(16661)	Information technology Radio frequency identification for item management Part 6: Parameters for air interface communications at 860 MHz to 960 MHz General	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
46	LITD 16(16662)	Information technology Radio frequency identification for item management Part 7: Parameters for active air interface communications at 433 MHz	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail

47	LITD 16(16718)	Information technology Radio frequency identification for item management Part 61: Parameters for air interface communications at 860MHz to 960MHz Type A	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
48	LITD 16(16719)	Information technology Radio frequency identification for item management Part 62: Parameters for air interface communications at 860MHz to 960 MHz Type B	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
49	LITD 16(16720)	Information technology Radio frequency identification for item management Part 63: Parameters for air interface communications at 860MHz to 960 MHz Type C	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
50	LITD 16(16721)	Information technology Radio frequency identification for item management Part 64: Parameters for air interface communications at 860MHz to 960 MHz Type D	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail

51	LITD 16(17411)	Cards and security devices for personal identification Contactless proximity objects Part 1: Physical characteristics	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	[Comment](#)	[Detail](#)
52	LITD 16(17412)	Cards and security devices for personal identification Contactless proximity objects Part 2: Radio frequency power and signal interface	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	[Comment](#)	[Detail](#)
53	LITD 16(17413)	Cards and security devices for personal identification Contactless proximity objects Part 3: Initialization and anticollision	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	[Comment](#)	[Detail](#)
54	LITD 16(17414)	Cards and security devices for personal identification Contactless proximity objects Part 4: Transmission protocol	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	[Comment](#)	[Detail](#)

55	LITD 16(17415)	Cards and security devices for personal identification Contactless vicinity objects Part 1: Physical characteristics	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
56	LITD 16(17416)	Cards and security devices for personal identification Contactless vicinity objects Part 2: Air interface and initialization	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
57	LITD 16(17417)	Cards and security devices for personal identification Contactless vicinity objects Part 3: Anticollision and transmission protocol	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
58	LITD 16(17422)	Identification cards Contactless integrated circuit cards Proximity cards Multiple PICCs in a single PCD field	ISO/IEC/JTC1 TC- 17 SC-17 (P); ISO/IEC/JTC1 TC- 23 SC-23 (O); ISO/IEC/JTC1 TC- 28 SC-28 (O); ISO/IEC/JTC1 TC- 31 SC-31 (P); ISO/IEC/JTC1 TC- SC-17 (P)	Comment	Detail
59	LITD 1(18194)	Environmental Testing Part 2 Tests Section 5 Test M: Low Air Pressure	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
60	LITD 1(18195)	Environmental Testing Part 2 Tests Section 5 Test ZAD: Composite TemperatureHumidity Cyclic test	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail

61	LITD 1(18196)	Environmental Testing Part 2 Tests Section 6 Test Fc: Vibration sinusoidal	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
62	LITD 1(18202)	Environmental Testing Part 2 Tests Section 47 Mounting of specimens for vibration impact and similar dynamic tests	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
63	LITD 1(18206)	Basic environmental testing procedures Part 2: Tests Section 17: Test Q: Sealing	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
64	LITD 1(18207)	Environmental Testing Part 3 Supporting documentation and guidance Sec 4 Damp heat tests	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
65	LITD 1(18208)	Environmental testing Part 3: Supporting Documentation and guidance Sec 1: Cold and dry heat tests	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
66	LITD 1(18213)	Fire Hazard Testing Part 2 GlowingHot wire based test methods Section 13 Glow-wire ignition temperature GWIT test method for materials	IEC TC- 89 SC- (O); IEC TC-104 (P)	Comment	Detail
67	LITD 3(18176)	Connectors for electrical and electronic equipment Tests and measurements Part 1: Generic specification	IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O); IEC TC-48 (O)	Comment	Detail
68	LITD 5(16612)	Printed Circuit Board Assembly Part 1 Safety Requirements	IEC TC- 40 (P); IEC TC- 47 (P); IEC TC- 47A SC- 47A (P); IEC TC- 91 (P); IEC TC- 47F SC- 47F (O); IEC TC- 86B SC- 86B (O)	Comment	Detail
69	LITD 7(18078)	Universal serial bus interfaces for data and power - Part 1-1: Common components - USB Battery Charging Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
70	LITD 7(18081)	Universal serial bus interfaces for data and power Part 1-3: Common components USB Type-C Cable and Connector Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
71	LITD 7(18082)	Universal serial bus interfaces for data and power Part 1-4: Common components USB Type-CTM Authentication Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
72	LITD 7(18083)	Universal serial bus interfaces for data and power Part 1-5: Common components USB Audio 30 device class definition	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail

73	LITD 7(18084)	Universal serial bus interfaces for data and power Part 1-6: Common components USB Audio 30 device class definition basic functions	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
74	LITD 7(18085)	Universal serial bus interfaces for data and power Part 1-7: Common components USB Audio 30 device class definition data formats	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
75	LITD 7(18086)	Universal serial bus interfaces for data and power Part 1-8: Common components USB Audio 30 device class definition terminal types	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
76	LITD 7(18087)	Universal serial bus interfaces for data and power Part 2-1: Universal Serial Bus Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
77	LITD 7(18088)	Universal serial bus interfaces for data and power Part 2-2: Micro-USB Cables and Connectors Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
78	LITD 7(18089)	Universal serial bus interfaces for data and power Part 2-3: Universal Serial Bus Cables and Connectors Class Document	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
79	LITD 7(18090)	Universal Serial Bus interfaces for data and power Part 3-1: Universal Serial Bus 31 Specification	ISO TC-43 SC-1 (O); IEC TC-29 (P); IEC TC-108 (P); IEC TC-100 (P)	Comment	Detail
80	LITD 10(18001)	CODE OF PRACTICE FOR INSTALLATION AND MAINTENANCE OF OUTDOOR POWER LINE CARRIER EQUIPMENT PART 2 COUPLING DEVICES	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
81	LITD 10(18147)	Communication Networks and Systems in substations Part 2 Glossary	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
82	LITD 10(18148)	COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION Part 4: System and project management	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
83	LITD 10(18149)	Application integration at electric utilities System Interfaces for distribution management Part 1: Interface architecture and general recommendations	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
84	LITD 10(18150)	Application integration at electric utilities System interfaces for distribution management Part 3: Interface for network operations	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail

85	LITD 10(18152)	Application integration at electric utilities System Interfaces for distribution management Part 4: Interfaces for records and asset management	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
86	LITD 10(18153)	Energy management system application program interface EMS-API Part 301: Common information model CIM base	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
87	LITD 10(18156)	Power systems management and associated information exchange Data and communications security Part 3: Communication network and system security Profiles including TCPIP	EC TC- 57 (P); IEC TC- SC-PC 118 (P)	Comment	Detail
88	LITD 17(17502)	INFORMATION SECURITY KEY MANAGEMENT PART 5: GROUP KEY MANAGEMENT	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
89	LITD 17(17505)	Information technology - Security techniques - Encryption algorithms: Part 5 identity - Based ciphers Amendment - 1	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
90	LITD 17(18133)	Information technology - Security techniques - Key management: Part 4 mechanisms based on weak: Secrets (First Revision) Amendment - 2	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
91	LITD 17(18209)	INFORMATION TECHNOLOGY BIG DATA REFERENCE ARCHITECTURE PART 4: SECURITY AND PRIVACY	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
92	LITD 17(18210)	INFORMATION TECHNOLOGY INFORMATION SECURITY INCIDENT MANAGEMENT PART 3: GUIDELINES FOR ICT INCIDENT RESPONSE OPERATIONS	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
93	LITD 17(18211)	INFORMATION TECHNOLOGY CYBERSECURITY OVERVIEW AND CONCEPTS	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
94	LITD 17(18442)	Information technology - Security techniques - Modes of operation for an n - Bit block cipher (Second Revision) Amendment - 1	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)	Comment	Detail
95	LITD 19(17769)	Information technology for learning education and training — Learning analytics interoperability — Part 3: Guidelines for data interoperability	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail

96	LITD 19(17770)	Information technology for learning education and training — Learning analytics interoperability — Part 4: Privacy and data protection policies	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
97	LITD 19(17772)	Information technology - Learning education and training - Content packaging Part 3: Best practice and implementation guide	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
98	LITD 19(17872)	Information technology - Vocabulary Part 36: Learning education and training	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
99	LITD 19(17873)	Information technology-Learning education and training- Virtual experiment framework	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
100	LITD 19(17875)	Information technology for learning education and training - Nomadicity and mobile technologies	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
101	LITD 19(17876)	Information technology - Quality for learning education and training - Fundamentals and reference framework	ISO/IEC/JTC1 TC- 36 SC-36 (P)	Comment	Detail
102	LITD 28(18457)	Unified Digital Infrastructure Unified Last Mile Communication Protocols Stack Part 4 Network Access Interface Layer IEEE 802154 - Section 1 Specification	IEC TC-SyC SC- (P); IEC TC-SEG 9 (P); ISO/IEC TC-JTC 1 SC-WG 11 (P); IEC TC-SyC (P)	Comment	Detail
103	LITD 35(18478)	Accessibility for the ICT Products and Services Part 2: Determination of Conformance	IEC TC-IEC SyC AAL (P)	Comment	Detail
104	LITD 36(16698)	Information technology Office equipment Accessibility guidelines for older persons and persons with disabilities	ISO/IEC/JTC1 TC- SC-23 (P); ISO/IEC/JTC1 TC- SC-28 (P); ISO/IEC/JTC1 TC- SC-35 (P)	Comment	Detail
https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetail/66/3/LITD					

Transport (TED)

The following Draft Indian Standards were issued by Transport engineering division council at BIS during the last quarter for eliciting technical comment:

At Bureau of Indian Standards (BIS)					
Transport Engineering Department (TED)					
S.No.	Document No	Title of the Doc	IEC/ISO	Give comments	Detail
1	TED 18(17087)	Towing Hooks Part 1 : Scale of Tractive Efforts	ISO TC- 8 (P); ISO TC- 7 SC- 7 (P); ISO TC- 11 SC- 11 (P); ISO TC- 188 (O):	Comment	Detail

2	TED 26(14995)	Road vehicles - Compressed natural gas CNG fuel systems components - General requirements and definitions	ISO TC- 22 (P); ISO TC- 41 SC- 41 (P)	Comment	Detail
3	TED 26(15013)	Road vehicles - Compressed natural gas CNG fuel system components - Conduit Ventilation Hose	ISO TC- 22 (P); ISO TC- 41 SC- 41 (P)	Comment	Detail
4	TED 26(15014)	Road vehicles - Compressed natural gas CNG fuel system components - Cng high pressure fuel line Rigid with end connections having pressure exceeding 215 mpa 215 Bar	ISO TC- 22 (P); ISO TC- 41 SC- 41 (P)	Comment	Detail
5	TED 26(15015)	Road vehicles - Compressed natural gas CNGFuel system components - Current limiting devices	ISO TC- 22 (P); ISO TC- 41 SC- 41 (P)	Comment	Detail
6	TED 2(16665)	Specification for performance of small size spark ignition engines for agricultural pumps, sprayers, tillers, reapers, and other similar applications Amendment - 4	ISO TC-22 (P); ISO TC-22 SC-34 (P); ISO TC-70 (P); ISO TC-70 SC-7 (P); ISO TC-70 SC-8 (P)	Comment	Detail
7	TED 2(17821)	Specification for performance requirements for constant speed compression ignition (Diesel) engines for general purposes (Above 20 KW) Amendment - 1	ISO TC-22 (P); ISO TC-22 SC-34 (P); ISO TC-70 (P); ISO TC-70 SC-7 (P); ISO TC-70 SC-8 (P)	Comment	Detail
8	TED 26(15033)	ROAD VEHICLES-LIQUEFIED PETROLEUM GAS LPG SPECIFIC EQUIPMENT-LPG FLEXIBLE HOSE	ISO TC- 22 (P); ISO TC- 41 SC- 41 (P)	Comment	Detail
https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetail/67/3/TED					

Smart City/Civil Department (CED)

The following Draft Indian Standards were issued by CED 59-Smart Cities Sectional Committee of Civil engineering division council at BIS during the last quarter for eliciting technical comment:

Smart Cities				
S. No.	Document No	Title of the Doc	IEC/ISO	Give comments
No records found				
https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetail/63/3/CED				

Service Sector Department

The following Draft Indian Standards were issued by SSD of BIS during the last quarter for eliciting technical comment:

At Bureau of Indian Standards (BIS)

		Services			
S.No.	Document No	Title of the Doc	IEC/ISO	Give comments	Detail
1	SSD-I 9(18283)	Collaborative business relationship management- Guidelines for micro small and medium-sized enterprises on the implementation of the fundamental principles	ISO TC-312 (P; ISO TC-324 (P)	Comment	Detail
2	SSD-I 13(16880)	Media and Entertainment Services– Categorization of Programmes offered by Skill Development Services Providers	_	Comment	Detail
3	SSD-II 18(17397)	Guidelines on Supply Chain of Onions	_	Comment	Detail
4	SSD-I 3(18251)	Security objectives of information systems of third-party payment services	__	Comment	Detail
5	SSD-I 3(18270)	Reference data for financial services Specification for the description of banking products or services BPoS	__	Comment	Detail
6	SSD-I 3(18271)	Reference data for financial services Overview of identification of financial instruments	__	Comment	Detail
7	SSD-I 3(18276)	Financial services Unique transaction identifier UTI	__	Comment	Detail
8	SSD-I 3(18277)	Web-service-based application programming interface WAPI in financial services	__	Comment	Detail
9	SSD-I 3(18302)	Securities and related financial instruments-Classification of financial instruments CFI code (Third Revision)	__	Comment	Detail
10	SSD-I 3(18306)	Improving transparency in financial and business reporting Harmonization topics - Part 1: European data point methodology for supervisory reporting	__	Comment	Detail
11	SSD-I 3(18307)	Improving transparency in financial and business reporting Harmonization topics - Part 2: Guidelines for data point modelling	__	Comment	Detail
12	SSD-I 3(18310)	Improving transparency in financial and business reporting Harmonization topics Part 3: Mapping between DPM and MDM	__	Comment	Detail
13	SSD-I 9(18281)	Service excellence Designing excellent service to achieve outstanding customer experiences	__	Comment	Detail
14	SSD-I 9(18283)	Collaborative business relationship management- Guidelines for micro small and medium-sized enterprises on the implementation of the fundamental principles	__	Comment	Detail
15	SSD-I 9(18284)	Service excellence- Principles and model	__	Comment	Detail

16	SSD-II 10(18180)	Information Technology Cloud Computing Service Level Agreement SLA Framework Part 1 : Overview and Concepts	—	Comment	Detail
17	SSD-II 10(18181)	Information Technology Cloud Computing Service Level Agreement SLA Framework Part 2 : Metric Model	—	Comment	Detail
18	SSD-II 10(18182)	Information Technology Cloud Computing Service Level Agreement SLA Framework Part 3 : Core conformance requirements	—	Comment	Detail
19	SSD-II 10(18183)	Information Technology Cloud Computing Service Level Agreement SLA Framework Part 4 : Components of Security and of Protection of PII	—	Comment	Detail
20	SSD-II 10(18186)	Information Technology Cloud Computing Guidance for Policy Development	—	Comment	Detail
21	SSD-II 10(18187)	Information Technology Cloud Computing Interacting with Cloud Service Partners CSNs	—	Comment	Detail
22	SSD-II 10(18188)	Information Technology Cloud Computing Cloud Service Metering Elements and Billing Modes	—	Comment	Detail
23	SSD-II 10(18189)	Information Technology Cloud Computing Guidance for using the cloud SLA metric model	—	Comment	Detail
https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetail/107/3/SSD-I					
https://www.services.bis.gov.in:8071/php/BIS_2.0/dgdashboard/draft/darftdetailcomm/402/3/SSD-II-1					

At Automotive Research Association of India (ARAI)

The following Draft Indian Standards were issued by Automotive Research Association of India during the last quarter for eliciting technical comment:

At Automotive Research Association of India (ARAI)			
S. No.	Department	Code	Title
1	Automotive	Draft AIS-010 (Part 1)(Rev.2) /D2/August 2021	Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Emitting an Asymmetrical Passing-Beam or a Driving-Beam or Both and Equipped with Filament Lamps and/or Light-Emitting Diode (Led) Modules
2	Automotive	Draft AIS-010(Part 2) (Rev.2) / D2 October 2021	Provisions of motor vehicle headlamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament, gas-discharge light sources or LED Modules (Revision 2)
3	Automotive	Draft AIS-010 (Part 4) (Rev.2)/F August 2021	Approval of motor vehicle headlamps equipped with gas-discharge light source

4	Automotive	Draft AIS-010 (Part 5) (Rev. 2)/F 2021	Specification of Colour of Light and Light-Signalling Devices
5	Automotive	Draft AIS-083 (Rev1)/F	Headlamp Cleaners and of Power-Driven Vehicles with Regard to Headlamp Cleaners
6	Automotive	Draft AIS-009 (Rev 2):2021/D4	Automotive Vehicles - Installation Requirements of Lighting and Light-signalling Devices for Two and Three Wheeled Motor Vehicles, and E-Rickshaw/E-Cart vehicles, their Trailers and Semi-Trailers
7	Automotive	Draft AIS 010 (Part 3) (Rev.2):2021/D4	Provisions concerning the Approval of Front Position Lamps, Rear Position Lamps, Stop Lamps, Direction Indicators, Rear- Registration Plate Illuminating Devices and Reversing Lamp for Two and Three Wheeled Vehicles and E-Rickshaw/E-Cart and their Trailers and Semi-trailers
8	Automotive	Draft AIS-034 (Part 1) (Rev.2):2021/D3	Provisions concerning the Approval of Filament Light Sources for use in Approved Lamp of Power-driven Vehicles and their Trailers
9	Automotive	Draft AIS-180/D0/Nov. 2021	Specific Requirements for Motor Vehicles intended for the carriage of Dangerous and Hazardous Goods with regard to their Constructional Features
10	Automotive	Draft AIS-012 (Part 10) (Rev.2) / D4 Nov 2021	Performance Requirements for Daytime Running Lamps for Motor Vehicles
11	Automotive	Draft AIS-183/D0/ Nov. 2021	Type Approval Requirement for Three wheeled moped of L1-1 category
12	Automotive	Draft Amd 10 to AIS-037	Procedure for Type approval and Establishing Conformity of Production for Safety Critical Components

ICT at TSDSI

"List of New Item for Proposal at TSDSI"				
S. No.	New Item Proposal	Name	Version	Status
1	NIP 274	Study UAV/Drone 3GPP-5G standards applicability to India use cases	TSDSI-SGSS-NIP274-V3.0.0-20211222	Accepted
2	NIP 274	Study UAV/Drone 3GPP-5G standards applicability to India use cases	TSDSI-SGSS-NIP274-V2.0.0-20211222	Accepted
3	NIP 272	Feasibility of Open-Source for 5G- Applications: RAN Intelligent Controller	TSDSI-SGSS-NIP272-V2.0.0-20211220	Accepted
4	NIP 274	Study UAV/Drone 3GPP-5G standards applicability to India use cases	TSDSI-SGSS-NIP274-V1.0.0-20211217	Accepted

5	NIP 268	Study of open and disaggregated design for IP Transport in 5G	TSDSI-SGN-NIP268-V2.0.0-20211208-20211201	Accepted
6	NIP 273	Updates to handbook on IMT with IMT 2020 inputs for WP5D	TSDSI-SGN-NIP273-V1.1.0-20211207-20211201	Accepted
7	NIP 273	Updates to Handbook on IMT with IMT-2020 inputs for WP5D	TSDSI-SGN-NIP273-V1.0.0-20211201	Accepted

For complete details of the NIP please click here

"List of Study Item status update"				
S. No.	Study Item	Name	Version	Status
1	SI92	Feasibility of Open Source for IP Transport in 5G	TSDSI-SGN-SI92-V1.0.0-20211008	Initiated

For complete details of the Study Items please click here

"List of SWIP Status Update"				
S. No.	SWIP	Name	Version	Status
1	SWIC755	Requirement and Architecture Contributions for NIP226 (5G Extensions for Broadcast Offload)	TSDSI-SGN-SWIC755-V1.0.0-20211201	Accepted
2	SWIC756	Summary of SI70 email discussions	TSDSI-SGN-SWIC756-V1.0.0-20211201	Accepted
3	SWIC757	Baseline Requirements and Assumptions for NIP226 (5G Extensions for Broadcast Offload)	TSDSI-SGN-SWIC757-V1.0.0-20211201	Accepted
4	SWIC758	Modeling of 6 GHz FSS-IMT coexistence study in India	TSDSI-SGN-SWIC758-V1.0.0-20211201	Accepted
5	SWIC755	Requirement and Architecture Contributions for NIP226 (5G Extensions for Broadcast Offload)	TSDSI-SGN-SWIC755-V1.1.0-20211203	Accepted
6	SWIC754	CR for Rel. 15 5Gi	TSDSI-SGN-SWIC754-V1.1.0-20211207	Accepted
7	SWIC759	TSDSI Response to ITU-R WP5D Liaison Statement for update of Recommendation M.2150	TSDSI-SGN-SWIC759-V1.0.0-20211208	Accepted
8	SWIC755	Requirement and Architecture Contributions for NIP226 (5G Extensions for Broadcast Offload)	TSDSI-SGN-SWIC755-V2.0.0-20211208	Accepted
9	SWIC757	Baseline Requirements and Assumptions for NIP226 (5G Extensions for Broadcast Offload)	TSDSI-SGN-SWIC757-V1.1.0-20211209	Accepted
10	SWIC760	Updates to Draft Technical report on Service Delivery using 5G Broadcast for TV, Radio, IPTV and File-casting	TSDSI-SGSS-SWIC760-V1.0.0-20211214	Accepted

11	SWIC761	UStudy on Edge Intelligence standards for haptics related IIoT use cases	TSDSI-SGSS-SWIC761-V1.0.0-20211217	Accepted
12	SWIC762	Study of Post-Quantum-Cryptography for Future 5G Networks and Application Verticals	TSDSI-SGSS-SWIC762-V1.0.0-20211220	Accepted
13	SWIC763	Rural Broadband Services & Architecture	TSDSI-SGSS-SWIC763-V1.0.0-20211220	Accepted
14	SWIC764	Minimum Technical Requirements for India PPDR	TSDSI-SGSS-SWIC764-V1.0.0-20211221	Accepted
15	SWIC765	Technical report compilation for sharing with DCPW	TSDSI-SGSS-SWIC765-V1.0.0 -20211221	Accepted
16	SWIC766	Updates to Draft Technical report on Digital Process For Know Your Machine Custodian	TSDSI-SGSS-SWIC766-V1.0.0-20211222	Accepted
17	SWIC767	Cloud Interoperability & Portability	TSDSI-SGSS-SWIC767-V1.0.0-20211222	Accepted
18	SWIC768	IoT Identifiers	TSDSI-SGSS-SWIC768-V1.0.0-20211222	Accepted
19	SWIC769	Common User Profile for Personalizing AudioVisual Mediay	TSDSI-SGSS-SWIC769-V1.0.0-20211222	Accepted
For complete details of the SWIP please click here and select SWIP				

Indian rupee

The Indian numeral system is based on the decimal system, with two notable differences from Western systems using long and short scales. The system is ingrained in everyday monetary transactions in the Indian subcontinent.

Indian semantic	International semantic	Indian comma placement	International comma placement
1 hazar	1 thousand	1,000	1,000
10 hazar	10 thousand	10,000	10,000
1 lakh	100 thousand	1,00,000	100,000
10 lakhs	1 million	10,00,000	1,000,000
1 crore	10 million	1,00,00,000	10,000,000
10 crores	100 million	10,00,00,000	100,000,000
100 crores	1 billion	100,00,00,000	1,000,000,000

Conversion applied above at 1 Euro = 80 INR and for more information please click here

About Project SESEI

The SESEI project (Seconded European Standardization Expert in India) is a project co-funded by five European partners, operating from New Delhi, India, with the objective to increase the visibility of European standardization in India and to promote EU/EFTA-India cooperation on standards and related activities. The SESEI Project (http://sesei.eu/) is managed by the European Telecommunications Standards Institute (ETSI - http://www.etsi.org/ - EU recognized Standards Organization for Telecommunication sectors) and is further supported by two other EU recognized Standards Organization, namely the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) – http://www.cencenelec.eu- which develop and adopt European standards in a wide range of products, services and processes, as well as by the European Commission (www.ec.europa.eu) and the European Free Trade Association (http://www.efta.int/). It is a Standardization focused project, with a priority emphasis on the sectors of ICT, Automotive, Electronic Appliances including Consumer Electronics and Smart Cities etc.

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CEN - European Committee for Standardization www.cen.eu

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ETSI - European Telecommunications Standards Institute www.etsi.eu

EC - European Commission www.ec.europa.eu

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