SESEI IV

Seconded European Standardization Expert in India

Newsletter

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CEN - European Committee for Standardization
CENELEC - European Committee for Electro Technical Standardization
ETSI - European Telecommunications Standards Institute

EC - European Commission
EFTA - European Free Trade Association

In this Issue

Dear Readers,

While sharing this sixth edition of SESEI newsletter Europe, I would like to begin with wishing you all a very Happy New Year 2021. May this year be full of hope and victory for all of us, harbinger of peace, good health and vitality for our families, society, country and most importantly the economy. This edition of our SESEI Newsletter Europe is prepared to provide you with important snippets from India on the Project priority sectors covering ICT, Smart Cities, Automotive, Electrical Equipment including Consumer Electronics, Energy Efficiency, Environment etc. for the period of "October to December 2020".

The ongoing efforts to strengthen the Indian economy, growth of industry and infrastructure and to give further impetus to foreign investments, "Department for Promotion of Industry and Internal Trade (DPIIT)" issued the "Patent (Amendment) Rules, 2020" and is working towards introducing a single-window clearance system for investors targeted to be operational by mid-April 2021. This will be a technology-based single window, which apart from giving all the information about land, procedures, requirements, will also be linked to a unified single fleet of information and approving ministries. This will help bring down multiplicity of applications and compliances. As per a survey done by E&Y, India is one of the three most favored destination for investments because of its market potential, skilled workforce, policy reforms and availability of raw materials.

Momentum is picking up on Govt. Smart City Mission program, post TSDSI transposition, Telecommunication Engineering Centre (TEC) have announced the adoption of oneM2M specifications as national standard, which will help establishing the standardised technology framework for providing Machine to Machine services in India and ensure interoperability, security and deployments bringing India closer to becoming 'Digital India'. Telecom Regulatory Authority of India (TRAI) have also released a White Paper on the Role of digital technologies for Smart Cities, emphasizing on the need for global standards, smart solutions and reference architecture for realization of Smart Cities in India.

In the automotive sector, the Ministry of Road Transport and Highways have been notifying various alternative clean fuels for transportation and recently they have allowed the use of Hydrogen-enriched compressed natural gas (H-CNG). The Bureau of Indian Standards (BIS) have developed specifications of H-CNG as a fuel for automotive purposes. Government also offering incentives to companies setting up advanced battery manufacturing facilities as it seeks to promote the use of electric vehicles and cut down its dependence on oil.

India's electric vehicle (EV) market is estimated to be an INR 50,000 crore (US$ 7.09 billion) opportunity by 2025, with “two and three wheelers” expected to drive higher electrification. To support and create the EV ecosystem in India, localization of several EV components is being encouraged and to support this, the department of heavy industries (DHI) extended its deadline for the localization of several components under its Phased Manufacturing Programme (PMP) for electric vehicles (EV) from October 1,2020 to April 1,2021. This move is expected to help the fledgling EV industry as the localization plans of several companies were derailed due to the disruption acaused by the pandemic.

In the ICT Sector, the spectrum auction and introduction of 5G Technologies trials etc. is delayed due to the COVID pandemic. 5G technologies which is slated to provide faster data speeds, reliable connectivity, and low latency — will be needed for a digitally connected society and for achieving the cities and industry with a vast network of connected devices sending vast amounts of data via ultrafast broadband. Ministry of Communications is working on allocation of spectrum for 5G services and it has identified the 3300 MHz to 3600 MHz band for 5G. India’s application for its own 5G technology as claimed have also completed the evaluation phase of ITU's International Mobile Telecommunications 2020 (IMT-2020).

India is deeply committed towards accomplishing the goals as set out in the Paris Agreement and a high level inter-ministerial Apex Committee have been set up under the Ministry of Environment, Forest and Climate Change (MoEFCC). Ministry of Power is working towards replacing coal-fired power plants with renewable generating capacity in a bid to cut the nation's carbon footprint. However, India's power ministry has proposed pushing back the deadlines for adoption of new emission norms by coal-fired power plants stating "an unworkable time schedule" would burden utilities and lead to an increase in power tariffs.

The Newsletter carries, information on many other important topics related to investment landscape and market synopsis around project priority sectors. We also provide you details of the upcoming important events/ seminars and workshops as part of this newsletter along with draft standards formulated by the standardization bodies as annexures.

Wish you all a very happy New Year once again. Hope you will find this Newsletter informative. Happy Reading!!!!

Warm regards,
Dinesh Chand Sharma
Seconded European Standardization Expert in India (SESEI)

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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.

Headlines of the Quarter

Standards, TBTs and IPR

Bureau of Indian Standards (BIS) brings in quality control for home appliances

BIS, has brought in some fresh standards for certain home appliances. The BIS in a statement said that these items will have to follow the norms set by the bureau. These include refrigerators with or without low temperature, freezers and household frosts. BIS standards that help to ensure quality certification of goods and incidental matters, have been made applicable to refrigerators and freezers from Jan 2020 and as such the industry players dealing in these goods will have to mandatorily comply with the standards issued by BIS and also obtain requisite BIS registrations."

Read More>>

BIS to bring service norms for e-commerce companies, aggregators

BIS is in the process of setting standards for services provided by e-commerce companies and aggregators like Flipkart, Ola, AirBnB among others. BIS, has been in discussion with various stakeholders to lay out standards for several issues ranging from standardisation of invoices and websites. It also plans to come out with certification for secure websites in order to curb the menace of fly by night operators in the digital commerce industry. The certification will help consumers in identifying the reliable ones," said an official who did not want to be identified.

Read more>>

India Patent- 2019/2020 annual report published

DPIIT India which is also responsible for formulation and implementation of IPR policies has recently published its annual report for the year 2019/2020. Chapter 5 of the annual report provides description of recent activities of the Office of the Controller General of Patents, Designs and Trademarks (CGPDTM) carried out in 2019/2020 including:

- implementation of new amendments in Patent Rules
- number of patents granted under the expedited examination procedure
- number of applications received by CGPDTM in the capacity of ISA and IPEA

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Revised Patent Rules in India effective from 19 Oct 2020

Govt., in exercise of the powers conferred upon it under Section 159 of the Patents Act, 1970 has passed the Patents (Amendment) Rules of 2020 ("The Rules") on October 19, 2020. The Rules modify Form 27 of the Act through which statements regarding the working of patented invention on a commercial scale in India have to be filed by Patentees or Licensees. According to the amendment to Rule 131(2), the statement regarding the workings of the Patent have to be filed once in every financial year, within six months from the expiry of such financial year, due to which the due date for filing the same would be September 31st of every financial year.

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India, US ink MoU to cooperate on IP examination and protection

India and the US have inked a Memorandum of Understanding to co-operate on intellectual property examination and protection for the next 10 years and to strengthen the IP systems in both countries. The MoU was signed between the United States Patent and Trademark Office (USPTO), represented by Under Secretary of Commerce for Intellectual Property Andrei Iancu, and Secretary from India's Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade (DPIIT). The memorandum will strengthen the intellectual property (IP) systems of both countries, enabling further innovation and growth.

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Smart Cities

IIIT Hyderabad sets up Centre of Smart City Research

The International Institute of Information Technology, Hyderabad (IIITH) has set up a Smart City Research Center (SCRC) with support from MEITY (Government of India), Smart City Mission and Government of Telangana. As a part of it, Living Lab plans to create an urban area enhancing three value domains: social, economic, and environmental. It includes Living Lab, a test-bed to showcase new ideas and approaches in IoT. IIITH existing centres will be lending their expertise to the Smart City Research Centre in various domains covering signal processing, OneM2M server, design of smart and automated buildings, optics and photonics, flexible electronics, embedded systems and IoT, radio frequency integrated circuit design and low-power VLSI design, research and development in fundamental aspects of computing systems etc. Read More>>

OneM2M IoT standard to help underpin India's smart cities

As India strives to deliver over 100 smart cities across the country, standards-based deployment would help promote interoperability, security and multi-vendor deployments. International standards initiative for M2M and IoT technologies oneM2M has announced that its standard has been adopted at national level in India to develop the 100 smart cities plan of the country. oneM2M standard has been transposed in India by TSDSI. Read More>>

Indian cities to join G20 Global Smart Cities Alliance

Bengaluru, Hyderabad, Faridabad and Indore have entered the G20 Global Smart Cities Alliance that brings together 36 "pioneer cities" under the aegis of the World Economic Forum. Besides the silicon city, Hyderabad, Faridabad and Indore will join the 36-city alliance from 22 countries to create a roadmap to safely adopt new technology to tackle challenges posed by the pandemic and other disruptions capable of triggering budget crises.

Read More>>

Indian Institute of Technology (IIT) Madras Develops 'MOUSHIK' Microprocessor for IoT Devices

IIT Madras Researchers have booted up 'MOUSHIK,' an indigenously-made Microprocessor, that can cater to the rapidly-growing IoT devices, an integral part of Smart Cities of a Digital India. MOUSHIK is an Indigenous RISC-V Microprocessor and is the third chip of the SHAKTI family, all of which were conceptualized and developed by this Centre and were first time 'silicon successes.' The Field Applications of 'MOUSHIK' include:

- Smart cards including Credit cards, ID Cards, Debit cards, Travel Cards for Metros and Driving Licenses
- Electronic Voting Machines (EVMs)
- Office Management Systems including Attendance, surveillance cameras and safe locks
- Personalized Health Management Systems
- Consumer Electronics including but not restricted to Washing Machines and Water pump monitoring systems

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IRADe: Partnerships for building Climate-smart Cities in India

The Climate Centre for Cities (C-cube) within the National Institute of Urban Affairs (NIUA), instituted by the Ministry of Housing and Urban Affairs (MoHUA), has partnered with Integrated Research & Action for Development (IRADe), for developing climate-smart cities across India. Read more>>

Telecom Regulatory Authority of India (TRAI) released White Paper on Smart Cities in India

The White Paper highlights the Role of digital technologies for smart cities, discusses the key smart solutions, deliberates the need of Global Standardization and connectivity related aspects specific to smart cities, and tries to identify the framework for ICT Infrastructure for the success of Smart Cities Mission in India. **Read more/Download**

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Automotive

EV a $206 billion opportunity for India by 2030

Should India achieve its 2030 electric vehicle ambition and targets, it would present a market opportunity worth nearly $206 billion in the course of this decade, says an independent study released by the CEEW Centre for Energy Finance (CEEW-CEF). The study also estimates a cumulative investment need of over $180 billion in vehicle production and charging infrastructure until 2030 to meet India's EV ambition. While India is yet to officially spell out its electrification targets for 2030, the aspiration as stipulated by NITI Aayog-government's primary think tank, states that 70% of all commercial cars, 30% of private cars, 40 % of buses, and 80% of two-wheeler (2W) and three-wheeler (3W) sales would be electric by the end of this new decade.
Read More>>

Govt. working to reduce e-vehicle tax: NITI Aayog

NITI Aayog CEO said the government was pushing for electric mobility with FAME and FAME 2 schemes, bringing down the rate of taxes on electric vehicles at 5%, as compared to 28% for other vehicles and 43% for hybrid vehicles. Tax exemption, up to Rs 1 lakh, to people who are buying electric vehicles to increase focus on electrification will be huge. If India has to emerge as a leader in clean, connected and shared mobility, there are two important things to keep in mind — one is that India is a major user of two- and three-wheelers and 80% of people travel in these vehicles. Second, battery will be an important component. Battery manufacturing and storage will be a key component and storage will have to be linked to renewable energy integration with the grid. Read More>>

Govt. allows use of H-CNG as alternative clean fuel for automobile

In a move aimed at a wider adoption of alternative clean fuel for transportation, the Ministry of Road Transport and Highways allowed the use of Hydrogen-enriched compressed natural gas (H-CNG, which is an 18 % mix of hydrogen, in CNG engines. The ministry has been notifying various alternative clean fuels. BIS has also developed specifications of H-CNG as a fuel for automotive purposes. Certain CNG engines were tested to understand the emission reduction using H-CNG as compared to 'neat' CNG. Read More>>

India Plans offers incentives for battery manufacturing

India plans to offer $4.6 billion in incentives to companies setting up advanced battery manufacturing facilities as it seeks to promote the use of electric vehicles and cut down its dependence on oil, according to a government proposal seen by Reuters. A proposal drafted by NITI Aayog, a federal think tank chaired by Prime Minister, said India could slash its oil import bills by as much as $40 billion by 2030 if electric vehicles were widely adopted.

Read More>>

Government extends deadline for EV components localisation

Department of heavy industries extended the deadline for the localisation of several components under its phased manufacturing programme (PMP) for electric vehicles (EV) from October 1 to April 1 2021, offering a breather to the industry. Compliance with the PMP is a condition for availing subsidies. The move is expected to help the fledgling EV industry as the localisation plans of several companies were derailed due to the disruption from the pandemic.
Read More>>

MoRTH Notifications

Ministry of Road, Transport and Highways issued following notifications:

- Changes in the Model Concession Agreement (MCA) for NHs works under Hybrid Annuity Mode (HAM) Projects. Read more>>
- Standard Operating Procedure (SOP) for Maintenance & Repair (M&R) of NHs. Read more>>
- safety requirements for Construction Equipment's Vehicles. Read more>>

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ICT including services

India's own 5G tech completes evaluation phase of ITU's IMT 2020

India's own 5G technology, TSDSI 5Gi, has completed the evaluation phase of ITU's International Mobile Telecommunications 2020 (IMT-2020) vision and now conforms with the stringent performance requirement. This means that India's contribution is now being accepted as the global 5G standard. The Telecom Standards Development Society of India (TSDSI), India's body for telecom standards, said that global vendors will now need to make handsets and base stations conforming to this standard. The other two technologies that have completed the evaluation phase are 3GPP 5G-SRIT and 3GPP 5G-RIT submitted by the Third Generation Partnership Project (3GPP). Read More>>

DoT constitutes working groups to prepare 5G roadmap, includes Huawei

The Department of Telecommunications (DoT) has formed eight working groups to create a roadmap for the deployment of fifth-generation or 5G in different sectors such as agriculture, fintech, transportation and education. The working groups include members from Chinese vendor company Huawei, who will look at healthcare and fintech sectors, according to a notification by the department. "The objective is to conduct a study and to produce a report with actionable points which brings out the use of 5G mobile technology in the respective sectors and how global use cases of 5G mobile technology in these sectors can be utilised and adapted to the Indian requirements," the DoT said in a notification. Read More>>

MEITY to implement AI mission, while Niti Aayog will help in planning

Ministry of Electronics and Information Technology (MEITY) has got the green signal to roll out the ambitious Artificial Intelligence (AI) mission, resolving a long-standing issue of which arm of the administration would implement the prestigious project. The AI Mission is a five-year programme announced in the Budget two years ago. For the last couple of years, India has been harbouring big ambitions to develop its own AI roadmap and strategy to counter the lead that China already has in this area.
Read More>>

Government OKs policy for data protection

The Centre has approved the health data management policy pertaining to National Digital Health Mission (NDHM), that sets out the minimum standard for data privacy protection that should be followed across the board in order to ensure compliance with relevant and applicable laws, rules and regulations. The policy will act as a guidance document across the National Digital Health Ecosystem. Data collected across the NDHE will be stored in at the central level, the state or Union Territory level and at the health facility level, by adopting the principle of minimality at each point. Read More>>

Govt limits buying telecom goods from list of 'trusted sources' to ensure national security

Telecom equipment from China may face fresh curbs after the Cabinet cleared a proposal to secure telecom infrastructure by designating a "trusted source" for the purchase of equipment by service providers. IT Minister said a National Security Directive on Telecommunication Sector has been framed keeping in mind the national security. Under the provisions of this directive, the government will declare a list of trusted sources and trusted products for installation in the country's telecom network. The methodology to designate trusted products will be devised by the designated authority, the National Cyber Security Coordinator. Read More

DoT to seek Cabinet nod on PLI scheme guidelines for telecom gear

The Department of Telecommunications (DoT) will approach the Union Cabinet for approval of the structure of production-link incentives for telecom gear makers in India. In November, the Cabinet approved an incentive of Rs 12,195 crore (€1.5 bn) to introduce production-linked incentive (PLI) scheme for telecom and network products. The Digital Communications Commission on December 1 approved the proposal for the scheme. The product lines that have been specified include core transmission equipment; 4G/5G, next-generation radio access network and wireless equipment; and access and customer premises equipment (CPE). Read More

Internet user base rises 3.4% to 743 million at Mar-end: TRAI data

The number of internet subscribers in India increased to over 743 million at the end of March 2020, clocking a growth rate of 3.4 per cent on a sequential quarter basis, showed TRAI data on sector's quarterly performance. Read More

Telecom department begins work to identify additional spectrum for 5G: Report

The Department of Telecommunications is working on identifying additional spectrum to address Indian telecom operators' demand for a "larger chunk" of airwaves to rollout 5G services. DoT has allocated the 3300 MHz to 3600 MHz band for 5G services. Worldwide, the allocation of bands for 5G services is from 3300 MHz to 4200 MHz. India doesn't have that much bandwidth, so we are looking for an additional 150 MHz," a senior official said. Telcos had previously urged the telecom department to ensure optimum availability of spectrum in the 3300-3600 mid-band earmarked for 5G services. Read More>>

Other Service Provider (OSP) guidelines of the DoT

"With an aim to qualitatively improve the ease of doing business of the IT industry particularly business process outsourcing (BPO) and IT-enabled services, the government has drastically simplified the other service provider (OSP) guidelines of the department of telecom. The new guidelines reduce the compliance burden of the BPO industry. It is clarified that the registration requirement for OSPs has been done away with altogether and the BPO industry engaged in data related work have been taken out of the ambit of OSP regulations. Read More>>

ICT related notifications/consultation Papers/recommendations/policies and directives, whitepapers

MEITY seeks comments/suggestions on the Draft Data Centre Policy

MEITY has drafted a Data Centre policy to benefit the Data Centre park developers/Data Centre operators as well as the allied ecosystem of Data Centre sector. The policy intends to ensure sustainable and trusted Data Centre capacity within the country. This policy framework shall be followed by a detailed scheme with implementation guideline document providing the particulars of various fiscal and non-fiscal incentives to be provided to the sector by the Central and State Government. The Policy document is attached for your reference.

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Electrical Equipment including Consumer Electronics

Power ministry proposes pushing back emission norms deadline

India's power ministry has proposed pushing back the deadlines for adoption of new emission norms by coal-fired power plants, saying "an unworkable time schedule" would burden utilities and lead to an increase in power tariffs. India initially had set a 2017 deadline for thermal power plants to comply with emissions standards for installing Flue Gas Desulphurization (FGD) units that cut emissions of toxic sulphur dioxide. That was later changed to varying deadlines for different regions, ending in 2022.

Read More>>

India to replace coal fired power plants with renewables

India is planning to replace retiring coal-fired power plants with renewable generating capacity in a bid to cut the nation's carbon footprint. India is the world's second largest coal consumer after China, and the third largest emitter of greenhouse gases. Coal-fired plants currently account for over half its nearly 373 gigawatt (GW) power generating capacity. Many of those plants are getting retired. Some plants are already retired, and about 29 more plants are going to retire, and all that space will be occupied by renewable energy.

Read More>>

NITI Aayog, Rockefeller Foundation & Smart Power India Launch Electricity Access & Utility Benchmarking Report

NITI Aayog, Ministry of Power, Rockefeller Foundation, and Smart Power India launched the 'Electricity Access in India and Benchmarking Distribution Utilities' report. Based on a primary survey conducted across 10 states—representing about 65% of the total rural population of India and with a sample size of more than 25,000, including households, commercial enterprises and institutions—the report assesses 25 distribution utilities. Read More>>

India Energy Storage Alliance (IESA) welcomes steps for Self-Reliance

IESA, India's leading alliance on energy storage & e-mobility welcomes the Union Cabinet's approval to introduce the Production-Linked Incentive (PLI) Scheme for Enhancing India's Manufacturing Capabilities and Enhancing Exports – Atmanirbhar Bharat. A total financial outlay of INR 1,45,980 crore (€18 bn) over a period of five years, of which, Advanced Chemistry Cell (ACC) battery has been approved a financial outlay of INR 18,100 crores (€2.25 bn). Read More>>

Ministry of Power (MoP) has released following notification

- Testing of all equipment, components, and parts imported for use in the power Supply System and Network in the country to check for any kind of embedded malware/trojans/cyber threat and for adherence to Indian Standards. Read more/Download>>
- All Electricity Distribution Companies (DISCOMs) to come under Energy Conservation (EC) Act, 2001. Read more/Download>>
- Amendments to the Guidelines for Tariff Based Competitive Bidding Process for Procurement of Round-The Clock Power from Grid Connected Renewable Energy Power Projects, complemented with Power from Coal Based Thermal Power Projects. Read more/Download>>

Ministry of New and Renewable Energy (MNRE) issued following notifications/guidelines

- Concept Note on Plan for one Solar City in Each State/ UT. Read more
- Amendments to the Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects. Read more/Download

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Manufacturing/Make in India

Inter-Ministerial Committee for Capital Goods Sector. The govt. has set up a 22-member inter-ministerial committee in strengthening the Capital Goods (CG) Sector through interventions that help the CG Sector in contributing more actively in the national goal of achieving a USD 5 trillion economy and a USD 1 trillion manufacturing sector. The IMC will help DHI in taking a holistic view for all the issues pertaining to the CG Sector. The Committee will look into on all such issues pertaining to the Capital Goods Sector including technology development, mother technology development, global value chains, testing, skill training, global standards, reciprocity issues, custom duties to make this sector globally competitive and to become the manufacturing hub for the world. Read More>>

MeitY has prepared a strategy paper entitled "National Strategy on Additive manufacturing (AM)" for promoting various verticals of the AM sector.
To keep pace with rapid global manufacturing prowess, India needs to adopt an integrated approach to additive manufacturing in all segments including defence and public sectors, especially within the nation‟s small, medium and large-scale industries. The National Strategy on Additive manufacturing (AM) will aim to create a conducive ecosystem for design, development and deployment, and to overcome technical and economic barriers for Global AM leaders to set up their operations with supporting ancillaries in India, facilitating development of the domestic market and enhancement of global market share. Read More>>

India set to achieve Self Reliance in Supercomputing with Manufacturing Critical Components in India

C-DAC and National Supercomputing Mission Host Institutes sign MOU for establishing Supercomputing Infrastructure in various premier institutions across India. C-DAC accelerating pace of research and innovation using computational science techniques with manufacturing Critical Supercomputing components in India, is a step towards Atmanirbhar Bharat. Read More>>

Cabinet approves PLI Scheme to 10 key Sectors for Enhancing India's Manufacturing Capabilities & Enhancing Exports

The Union Cabinet chaired by the Prime Minister, Shri Narendra Modi has given its approval to introduce the Production-Linked Incentive (PLI) Scheme in the following 10 key sectors for Enhancing India's Manufacturing Capabilities and Enhancing Exports – Atmanirbhar Bharat. The PLI scheme will be implemented by the concerned ministries/departments and will be within the overall financial limits prescribed. Read More>>

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R&D and Innovation

India now has two of the top 100 most powerful supercomputers in the world

India's newest and fastest supercomputer, PARAM-Siddhi AI, has been ranked 63rd in the Top 500 list of most powerful supercomputers in the world. The super-computer was established earlier this year, under the National Supercomputer Mission (NSM) and is going to be installed in the Centre for Development of Advanced Computing's (C-DAC) unit. The Top500 project tracks the most powerful supercomputers in the world and is published twice a year. PARAM-Siddhi is the second Indian supercomputer to be entered in the top 100 on the Top 500 list. Pratyush, a supercomputer used for weather forecasting at the Indian Institute of Tropical Meteorology, ranked 78th on the November edition of the list. Read More>>

IIT Kharagpur researchers develop UAV assisted communication infrastructure for 5G

Flying base stations are a feature that enhances wireless capacity and coverage footprint on the ground with ultra-dense traffic demands, to meet the requirements of 5G and B5G or beyond 5G cellular communications. Researchers from Indian Institute of Technology (IIT) Kharagpur have developed a UAV (unmanned aerial vehicle) assisted communication infrastructure for 5G that can serve as an air-borne mobile telecom tower during emergency situations. The system includes an Android-based application fitted to a fleet of drones which are programmed to create emergency communication networks by extending cellular network coverage from the closest available mobile tow. Read More>>

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Energy Efficiency-Environment

India has moved to the Centre stage of International Energy Affairs: International Energy Agency

Executive Director of International Energy Agency (IEA), Mr. Fatih Birol said that India has moved to the Centre stage of international Energy Affairs and is a role model for other major emerging economies. Speaking at a virtual launch of the Energy Technology Perspectives 2020, a new study of IEA which focusses on the technology needs and opportunities for reaching international climate and sustainable energy goals, Mr. Birol praised the Indian government for its efforts in providing clean energy to millions by way of schemes like *Ujjawala* and *Ujala*. Read More

India Climate Change Knowledge Portal" launched

Ministry of Environment, Forest and Climate Change, launched the "India Climate Change Knowledge Portal". The Portal will be a "single point Information resource" which provides information on the different climate initiatives taken by various Line Ministries enabling users to access updated status on these initiatives. The portal captures sector-wise adaptation and mitigation actions that are being taken by the various line Ministries in one place including updated information on their implementation. The knowledge portal will help in disseminating knowledge among citizens about all the major steps Government is taking at both national and international levels to address climate change issues.
Read More>>

Government constitutes High-level Ministerial Committee for implementation of Paris Agreement

In another move that re-affirms India's seriousness to 'walk the talk' on climate change, the Ministry of Environment, Forest and Climate Change (MoEFCC) has constituted a high-level inter-ministerial Apex Committee for Implementation of Paris Agreement (AIPA) under the chairmanship of Secretary, MoEFCC. The purpose of AIPA is to generate a coordinated response on climate change matters that ensures India is on track towards meeting its obligations under the Paris Agreement including its Nationally Determined Contributions (NDC). Another key function of AIPA would be to operate as a National Authority to regulate carbon markets in India under Article 6 of the Paris Agreement.
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EU-India/Trade-FTA/Investments

India and France re-elected as President and Co- President of the International Solar Alliance (ISA)

The Third Assembly of the International Solar Alliance has been attended by 34 ISA Members ministers. 53 Member countries and 5 Signatory and Prospective Member countries participated to the Assembly. India and France were re-elected as the President and Co- President of the International Solar Alliance (ISA) for a term of two years at the virtual meeting of the Third Assembly held on 14 October. Read More>>

MoU between India and UK on cooperation in the field of ICTs

The Union Cabinet, chaired by the Prime Minister, has given its approval for signing a Memorandum of Understanding (MoU) between the Ministry of Communications of the Republic of India and the Department of Digital, Culture, Media and Sports (DCMS) of United Kingdom Government on cooperation in the field of Telecommunications /Information and Communication Technologies (ICTs). The MoU will contribute in strengthening bilateral cooperation and mutual understanding in the field of Telecomm./ ICTs. Post-Brexit, the MoU is also aiming for enhanced scope of cooperation and opportunities for India. Read More>>

India and Finland sign MOU for environmental protection and biodiversity conservation.

India and Finland signed MOU for developing cooperation in the field of Environment protection and biodiversity conservation. The MoU is a platform to further advance Indian and Finnish partnership and support, exchange best practices in areas like prevention of Air and water pollution; Waste management; Promotion of circular economy, low-carbon solutions and sustainable management of natural resources including forests; Climate change; Conservation of Marine and Coastal Resources; etc. The MoU will strengthen technological, scientific and management capabilities and develop bilateral cooperation in the field of environmental protection & biodiversity conservation. Read More>>

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Invest India

UNDP and Invest India launch the SDG Investor Map for India

The United Nations Development Programme (UNDP) and Invest India have launched the SDG Investor Map for India, laying out 18 Investment Opportunities Areas (IOAs) in six critical SDG enabling sectors, that can help India push the needle forward on Sustainable Development. Read more/Download>>

Centre to introduce single-window clearance for investors by mid-April: DPIIT Secy

As part of the ease of doing business in the country, the government is committed to introducing a single-window clearance mechanism for investors by mid-April next year. This technology-based platform for both domestic or global investors envisages to give all the information about the land, procedures, requirements and requirements to get that investment proposal cleared. "It will lead to a unified single sheet of information, which other approval ministries will draw. So, the investor doesn't have to do multiple applications in the end. Although, it is not going to replace any important approval because these are all important approvals. Read More>>

India amongst top three choices for future investments: Survey

India is one of the top three choices for overseas investments in the next two-three years, said a survey conducted by Confederation of Indian Industries (CII) and EY to assess India's competitiveness in terms of certain parameters and give constructive suggestions to policymakers. The survey said that new investments will be driven by capacity expansion, digital transformation, research and development and greenfield investments. According to the respondents, market potential, skilled workforce and political stability are the top reasons to make India their favoured destination.
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Event calendar 2021

International Conference on IT & Computer Science
When: 20-21 January, 2021
Where: FabHotel Suncourt Karol Bagh, New Delhi, India
The Rationale behind the conference is to provide an opportunity and platform to channelize the various multidimensional and multidisciplinary streams of Engineering and Technology. For more information, please click here

POWERGEN India
When: 27-29 Jan, 2021
Where: Pragati Maidan, New Delhi, India
For more than 15 years, POWERGEN India has served as India's premier forum for the power generation industry - from conventional to renewable energy and other low-carbon options. Following Clarion Events acquisition of PennWell, POWERGEN India will now be collocated with Indian Utility Week & DISTRIBUTECH India, the global brands from Clarion & PennWell's global Power & Energy Series; providing one major event covering the entire end-to-end value chain of power generation, distribution and digital transformation. As the nation's flagship energy conference & exhibition, POWERGEN India continues to recognise the vital role flexible generation is playing in the energy transition and the trends towards distributed generation. For more information, please click here

India Smart Utility Week 2021
When: 2-6 March, 2021
Where: Virtual Conference
ISUW 2021 has been scheduled from 02 – 05 March 2021 and it will be conducted on a DIGITAL PLATFORM as an International Conference and Exhibition on Smart Energy and Mobility for Smarter Cities. The 3-D Exhibition Booths at ISUW 2021 will offer never before experience to exhibitors and visitors. ISUW 2021 will virtually bring together India's leading Electricity, Gas and Water Utilities, Policy Makers, Regulators, Investors and world's top- notch Smart Energy Experts and Researchers to discuss trends, share best practices and showcase next generation technologies and products in smart energy and smart cities domains. For more information, please click here

2nd Future Mobility Show (FMS 2021)
When:25 February - 3 March 2021
Where: BIEC Bengluru
The 2nd Future Mobility Show (FMS 2021) is scheduled from 25 February - 3 March 2021 on CII Hive Virtual Platform. This new initiative of the Confederation of Indian Industry (CII), for creating a sustainable future mobility in India, is supported by the Automotive Components Manufacturers Association of India (ACMA) and Society of Indian Automobile Manufacturers (SIAM). For more information, please click here

6th Smart Cities India 2021 Expo
When: 24-26 March, 2021
Where: Pragati Maidan, New Delhi, India
India is one of the fastest growing economies in the world. The focus of the Union government augurs well with its urban development programmes such as AMRUT, Swachh Bharat Mission, National Solar Mission, National Mission for Clean Ganga, FAME II, PMAY, Make in India, Digital India, Skill India, Startup India, etc. that positively impact the Smart Cities Mission. For more information, please click here

Transport India
When: 24-26 March, 2021
Where: Pragati Maidan, New Delhi, India
Indian cities are now home to millions of vehicles, including domestic or commercial, two-wheelers, three-wheelers, buses and locally modified electric vehicles used to ferry goods and passengers within the city. For more information, please click here

EV Manufacturing & Design Show
When: 28-29 Jan, 2021
Where: Virtual Trade Show
Engineering simulation is one of the key factors in designing the next generation of vehicles. Multiple OEMs and startups are investing time and resources into mastering the shift from ICEs to EVs. Companies that can turn the combination of EV performance, range, and durability into commercial success will increasingly dominate the competition. For more information, please click here

International Conference on Data Management, Analytics & Innovation
When: 15-17 January, 2021
Where: Science City, Kolkata, India
International Conference on Data Management, Analytics & Innovation aims at bringing eminent academicians, corporate executives, researchers, technocrats and experts from the field of Computer Science, Information Technology, Computational Engineering, Electronics and Telecommunication, Electrical, Computer Application and all the relevant discipline to a common forum for exploring and discussing the technology advances and innovations that play a key role in data management and analytics. For more information, please click here

International Conference on Electrical, Electronics, Computer Science and Information Technology
When: 17 Jan, 2021
Where: Breeze Residency, Tiruchirappalli, India
International Conference on Electrical, Electronics, Computer Science and Information Technology is a prestigious event organized with a motivation to provide an excellent international platform for the academicians, researchers, engineers, industrial participants and budding students around the world to share their research findings with the global experts. For more information, please click here

International Conference on Artificial Intelligence and Sustainable Engineering
When: 18-20 Jan, 2021
Where: National Institute of Technology Goa, Ponda, India
Artificial Intelligence (AI) plays a vital role in every area of life now a days. Artificial intelligence not only creates opportunities but also brings greater challenges to the sustainable development of engineering products. AI is helping the next generation of companies to reduce their environmental and social impact by improving efficiency and developing new products. For more information, please click here

Blockchain Training in Bangalore
When: 16 Jan – 15 Feb 2021
Where: Bengaluru, India
Blockchain Training in the blockchain technology that covers essential concepts like Blockchain programming, Ethereum, Solidity, Digital ledger types, Smart Contracts, Multichain, Bitcoin mining, Cryptocurrency, etc. This Blockchain training course offers two real-time projects and use-cases for gaining practical experience in blockchain implementations. Gaining knowledge in these areas will help you acquire essential skills for a career in dynamic space. For more information, please click here

India Power Expo
When: 20-21 Jan, 2021
Where: Bombay Exhibition Centre (BEC), Mumbai, India
This exhibition, being the only show in an Indian sub-continent to deal with all aspects of independent power generation and energy storage, will offer optimal space whereby professionals from all backgrounds and industries can meet, chat, network, and build relationships. From this, we believe each individual can grow exponentially. For more information, please click here

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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:

At Bureau of Indian Standards (BIS)			
Electrotechnical (ETD)			
Sl No	**Document No**	**Title of the Doc**	**IEC/ISO**
1	ETD 11 (15802)	Secondary cells and batteries for solar photovoltaic application - General requirements and methods of test	IEC TC-21 (O); IEC TC- SC-21A (P)
2	ETD 32 (15971)	Safety of Household And Similar Electrical Appliances Part 2 Particular Requirements Section 2 Vacuum Cleaners And Water-Suction Cleaning Appliances	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)
3	ETD 32 (15972)	Safety of Household And Similar Electrical Appliances Part 2 Particular Requirements Section 4 Spin Extractors	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)
4	ETD 32 (15973)	Safety of Household And Similar Electrical Appliances Part 2 Particular Requirements Section 6 Cooking Ranges Hobs Ovens and Similar Appliances	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)
5	ETD 32 (15974)	Safety of Household And Similar Electrical Appliances Part 2 Particular Requirements Section 7: Domestic Electric Clothes Washing Machines	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)

6	ETD 32 (15975)	Safety of Household And Similar Electrical Appliances Part 2 Particular Requirements Section 15 Appliances for Heating Liquids	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)
7	ETD 32 (16013)	SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES PART 2 PARTICULAR REQUIREMENTS SECTION 9 PARTICULAR REQUIREMENTS FOR GRILLS TOASTERS AND SIMILAR PORTABLE COOKING APPLIANCES	IEC TC- 61B, 61H, 61J SC- 61B, 61H, 61J (P); IEC TC- 59A, 59C, 59D, 59F, 59L SC- 59A, 59C, 59D, 59F, 59L (P)
8	ETD 40 (16343)	Voltage sourced converter (Vsc) valves for high - Voltage direct current (Hvdc) power transmission - Electrical testing Amendment – 1	IEC TC- 22F SC- 22F (P)
9	ETD 40 (16345)	High Voltage Direct Current (HVDC) Substation Audible Noise Amendment – 1	IEC TC- 22F SC- 22F (P)
10	ETD 49 (13149)	Luminaires Part 5 Particular Requirements Section 6 Handlamps Amendment - 1	--
11	ETD 9 (14611)	PVC insulated (heavy duty) electric cables: Part 1 For working voltages upto and including 1 100 V Amendment - 6	IEC TC-20 (P)
12	ETD 39 (15631)	Tutorial and application guide for high-voltage fuses	IEC TC-32 SC- 32 A,32 B (P)
13	ETD 11 (15802)	Secondary cells and batteries for solar photovoltaic application - General requirements and methods of test	IEC TC-21 (O); IEC TC- SC-21A (P)
14	ETD 40 (16343)	Voltage sourced converter (Vsc) valves for high - Voltage direct current (Hvdc) power transmission - Electrical testing Amendment – 1	IEC TC- 22F SC- 22F (P)
15	ETD 40 (16345)	High Voltage Direct Current (HVDC) Substation Audible Noise Amendment – 1	IEC TC- 22F SC- 22F (P)
16	ETD 20 (16347)	NATIONAL ELECTRICAL CODE OF INDIA - PART 1 (All sections) -General and Common Aspects	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)

17	ETD 20 (16357)	NATIONAL ELECTRICAL CODE OF INDIA- PART 2 All sections - GENERATING SETS AND CAPTIVE SUB-STATIONS	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
18	ETD 20 (16358)	NATIONAL ELECTRICAL CODE OF INDIA - PART 3 (All sections) -Requirements for special installations or locations	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
19	ETD 20 (16359)	NATIONAL ELECTRICAL CODE OF INDIA- PART 4 - Electrical installations in Industrial buildings	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
20	ETD 20 (16360)	NATIONAL ELECTRICAL CODE OF INDIA- PART 5 - Outdoor installations	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
21	ETD 20 (16361)	NATIONAL ELECTRICAL CODE OF INDIA - PART 6 - Electrical installations in Agricultural premises	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
22	ETD 20 (16362)	NATIONAL ELECTRICAL CODE OF INDIA - PART 7- ELECTRICAL INSTALLATIONS IN HAZARDOUS AREAS	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)
23	ETD 20 (16363)	NATIONAL ELECTRICAL CODE OF INDIA - PART 8- Solar photovoltaic PV power supply systems	IEC TC- 18 (O); IEC TC- 64 (P); IEC TC- 73 (O); IEC TC- 81 (O); IEC TC- 18A SC- 18A (O)

24	ETD 28 (16469)	Photovoltaic Devices â€" Measurement Procedures for Materials Used in Photovoltaic Modules Part 1 Encapsulants Section 5 Measurement of change in linear dimensions of sheet encapsulation material resulting from applied thermal conditions Amendment	IEC TC-82 (P)
25	ETD 19 (16477)	Insulation Coordination Part 1: Definition Principles And Rules First Revision	IEC TC-28 (P); IEC TC-42 (P); IEC TC-109 (O)
26	ETD 19 (16478)	Insulation Coordination Part 2: Application Guide	IEC TC-28 (P); IEC TC-42 (P); IEC TC-109 (O)
27	ETD 35 (16481)	Electromechanical elementary relays: Part 1 general and safety requirements Amendment – 1	IEC TC- (O); IEC TC- (P)
28	ETD 9 (16509)	Elastomer insulated cables with limited circuit integrity when affected by fire - Specification Amendment – 1	IEC TC-20 (P)
29	ETD 15 (15753)	Single phase ac induction motors for general purpose Third Revision	IEC TC- (P); ISO TC-43 SC-1 (O)
30	ETD 35 (16481)	Electromechanical elementary relays: Part 1 general and safety requirements Amendment – 1	IEC TC- (O); IEC TC- (P)
31	ETD 29 (16618)	Ac motor capacitors part 1: general performance testing and rating safety requirements guidance for installation and operation	IEC TC-33 (P)
32	ETD 29 (16619)	Ac motor capacitors part 2: motor start capacitors	IEC TC-33 (P)

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 (LITD)			
Sl No	**Document No**	**Title of the Doc**	**IEC/ISO**
1	LITD 14 (13806)	Software and Systems Engineering – Part 1 Core Agile Practices	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
2	LITD 28 (14073)	Unified Data Exchange Part 1: Architecture	IEC TC-SyC SC- (P); IEC TC-SEG 9 (P); ISO/IEC TC-JTC 1 SC-WG 11 (P):
3	LITD 3 (16157)	Connectors for frequencies below 3 MHz for use with printed boards Part 1: Generic specification General requirements and guide for the preparation of detail specifications, with assessed quality	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
4	LITD 3 (16158)	Connectors for frequencies below 3 MHz for use with printed boards – Part 2: Detail specification for two-part connectors with assessed quality, for printed boards, for basic grid of 2.54 mm (0.1 in) with common mounting features	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
5	LITD 3 (16159)	Connectors for frequencies below 3 MHz for use with printed boards Part 3: Two-part connectors for printed boards having contacts spaced at 2.54 mm(0.100 in)centres and staggered terminations at that same spacing	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
6	LITD 3 (16160)	Connectors for frequencies below 3 MHz for use with printed boards Part 4: Two-part connectors for printed boards having contacts spaced at 1.91 mm (0.075 in)centres and staggered terminations at that same spacing	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)

7	LITD 3 (16161)	Connectors for frequencies below 3 MHz for use with printed boards Part 5: Edge-socket connectors and two-part connectors for double-sided printed boards with 2.54 mm (0.1 in) spacing	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
8	LITD 3 (16162)	Connectors for frequencies below 3 MHz for use with printed boards Part 6: Edge-socket connectors and printed-board connectors with 2.54 mm (0.1 in) contact spacing for single or double-sided printed boards of 1.6 mm (0.063 in) nominal thickness	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
9	LITD 3 (16163)	Connectors for frequencies below 3 MHz for use with printed boards Part 8: Two-part connectors for printed boards for basic grid of 2.54 mm (0.1 in), with square male contacts of 0.63 mm x 0.63 mm	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
10	LITD 3 (16164)	Connectors for frequencies below 3 MHz for use with printed boards Part 11: Detail specification for concentric connectors dimensions for free connectors and fixed connectors	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
11	LITD 3 (16165)	Connectors for frequencies below 3 MHz for use with printed boards Part 12: Detail specification for dimensions general requirements and tests for a range of sockets designed for use with integrated circuits	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
12	LITD 3 (16166)	Connectors for frequencies below 3 MHz for use with printed boards - Part 13: Detail specification for two-part connectors of assessed quality for printed boards for basic grid of 2.54 mm(0.1 in) with free connectors for non-accessible insulation displacement terminations (ID)	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)

13	LITD 3 (16167)	Connectors for frequencies below 3 MHz for use with printed boards Part 14: Detail specification for circular connectors for low-frequency audio and video applications such as audio video and audio-visual equipment	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
14	LITD 3 (16168)	Connectors for electronic equipment Product requirements Part 1: Generic specification	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
15	LITD 3 (16170)	Connectors for electronic equipment Part 4-100: Printed board connectors with assessed quality Detail specification for two-part connector modules having a grid of 2.5 mm for prginted boards and backplanes	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
16	LITD 3 (16171)	Connectors for electronic equipment Part 4-101: Printed board connectors with assessed quality Detail specification for two-part connector modules having a basic grid of 2.0 mm for printed boards and backplanes in accordance with IEC 60917	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
17	LITD 3 (16172)	Connectors with assessed quality for use in d.c., low-frequency analogue and in digital high speed data applications – Part 4: Printed board connectors – Section 102: Detail specification for two-part single-pole connectors, for multiple uses on plug-in units, with pre-centring, coding and early mating features, having a metric grid in accordance with IEC 60917	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
18	LITD 3 (16173)	Connectors for use in dc low-frequency analogue and digital high speed data applications Part 4-103: Printed board connectors with assessed quality Detail specification for two-part connectors with shielding and a basic grid of 2.5 mm	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)

19	LITD 3 (16174)	Connectors for use in d.c., low frequency analogue and digital high speed data applications – Part 4-104: Printed board connectors with assessed quality – Detail specification for two-part modular connectors, basic grid of 2.0 mm, with terminations on a multiple grid of 0.5 mm	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
20	LITD 3 (16175)	Connectors with assessed quality for use in dc low-frequency analogue and in digital high-speed data applications - Part 4: Printed board connectors - Section 105: Detail specification for 9 mm circular connector with 3 to 8 contacts for use in a wide range of applications including the telecommunication and audio industry	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
21	LITD 3 (16176)	Connectors for electronic equipment – Part 4-107: Printed board connectors with assessed quality – Detail specification for shielded two-part connectors having a basic grid of 2.0 mm, fixed part with solder and press-in terminations for printed boards, free part with non-accessible insulation displacement and crimp terminations	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
22	LITD 3 (16177)	Connectors for electronic equipment - Part 4-108: Printed board connectors with assessed quality - Detail specification for cable-to-board connectors, with a modular pitch of 25 mm and integrated shielding function, applicable for transverse packing density of 15 mm, having a basic grid of 2.5 mm in accordance with IEC 60917-1	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
23	LITD 3 (16178)	Connectors for electronic equipment- Part 4-110: Printed board connectors with assessed quality Detail specification for latched cable connector system having a basic grid of 2.0 mm including full shielding and latching function	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)

24	LITD 3 (16179)	Connectors for electronic equipment – Printed board connectors – Part 4-113: Detail specification for two-part connectors having 5 rows with a grid of 2.54 mm for printed boards and backplanes in bus applications	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
25	LITD 3 (16180)	Connectors for electronic equipment Part 4-115: Printed board connectors Backplane connector for InfiniBand equipment	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
26	LITD 3 (16181)	Connectors for electronic equipment Product requirements Part 4-116: Printed board connectors Detail specification for a high-speed two-part connector with integrated shielding function	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
27	LITD 26 (16182)	ALARM SYSTEMS PART 7-8: Message Formats and Protocols for serial data interfaces in alarm transmission systems Requirements for common protocol for alarm transmission using the Internet protocol	IEC TC- 79 SC- (P)
28	LITD 26 (16183)	BUILDING INTERCOM SYSTEMS PART 3-2: Application Guidelines Advanced security building intercom systems ASBIS	IEC TC- 79 SC- (P)
29	LITD 3 (16372)	Capacitors and resistors for use in electronic equipment Preferred dimensions of shaft ends bushes and for the mounting of single-hole bush-mounted shaft-operated electronic components	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
30	LITD 16 (12452)	SCOSTA: Smart Card Operating System Template Architecture Part 3 Public Key Infrastructure	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)
31	LITD 23 (15475)	Information technology - Coding of audio - Visual objects: Part 22 open font format	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
32	LITD 30 (16237)	Information technology Big data reference architecture Part 3: Reference architecture	ISO/IEC TC-JTC 1 SC-SC 42 (P)

33	LITD 3 (16372)	Capacitors and resistors for use in electronic equipment Preferred dimensions of shaft ends bushes and for the mounting of single-hole bush-mounted shaft-operated electronic components	IEC TC- 48 (P); IEC TC- 48B SC- 48B (O); IEC TC- 48D SC- 48D (O)
34	LITD 17 (16422)	Information Technology Security techniques Security evaluation of biometrics	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)
35	LITD 14 (16424)	Software engineering Systems and software Quality Requirements and Evaluation SQuaRE Requirements for quality of Ready to Use Software Product RUSP and instructions for Testing First Revision	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
36	LITD 14 (16425)	Systems and software engineering Systems and software Quality Requirements and Evaluation SQuaRE Quality measurement framework First Revision	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
37	LITD 14 (16426)	Systems and software engineering — Systems and software quality requirements and evaluation (SQuaRE) — Quality requirements framework (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
38	LITD 14 (16427)	Information technology - Service management - Part 2: Guidance on the application of service management systems (Second Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
39	LITD 14 (16428)	Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISOIEC 20000-1 (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
40	LITD 14 (16430)	Information Technology Service Management Part 10 Concepts and Vocabulary (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
41	LITD 28 (16448)	IEEE Standard for Low-Rate Wireless Networks	IEC TC-SyC SC- (P); IEC TC-SEG 9 (P); ISO/IEC TC-JTC 1 SC-WG 11 (P):
42	LITD 11 (16464)	Optical Fibres Part 2 Product specifications Section 50 Sectional specification for class B single-mode fibres	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)

43	LITD 11 (16465)	Optical Fibre Cables Part 1 Generic specification Section 31 Optical cable elements Optical fibre ribbon	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
44	LITD 11 (16466)	Optical Fibre Cables Part 3 Outdoor cables Section 10 Family specification for duct directly buried or lashed aerial optical telecommunication cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
45	LITD 11 (16467)	Optical Fibre Cables Part 3 Outdoor cables Section 11 Product specification for duct directly buried and lashed Aerial single-mode optical fibre telecommunication cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
46	LITD 11 (16468)	Optical Fibre Cables Part 4 Sectional specification Section 20 Aerial optical cables along electrical power lines Family specification for ADSS all dielectric self-supported optical cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
47	LITD 23 (16470)	Information technology Coding of audio-visual objects Part 3: Audio First Revision	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
48	LITD 23 (16471)	INFORMATION TECHNOLOGY CODING OF AUDIO-VISUAL OBJECTS PART 14 MP4 FILE FORMAT (First Revision)	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
49	LITD 23 (16472)	INFORMATION TECHNOLOGY CODING OF AUDIO-VISUAL OBJECTS PART 15 CARRIAGE OF NETWORK ABSTRACTION LAYER NAL UNIT STRUCTURED VIDEO IN THE ISO BASE MEDIA FILE FORMAT first revision	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
50	LITD 23 (16473)	Information Technology - Coding of Audio-Visual Objects Part 4 Conformance Testing Amendment – 1	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
51	LITD 23 (16474)	Information Technology - Coding of Audio-Visual Objects Part 5 Reference Software Amendment – 1	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)

52	LITD 16 (16480)	Information processing - Volume and file structure of CD - ROM for information interchange Amendment – 1	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)
53	LITD 1 (16528)	Classification of Environmental Conditions Part 2 Environmental Conditions appearing in nature Section 4 Solar Radiation and Temperature	IEC TC- 89 SC- (O); IEC TC- 104 (O)
54	LITD 1 (16529)	Classification of Environmental Conditions Part 2 Environmental Conditions appearing in nature Section 7 Flora and Fauna	IEC TC- 89 SC- (O); IEC TC- 104 (O)
55	LITD 1 (16530)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 0 Introduction	IEC TC- 89 SC- (O); IEC TC- 104 (O)
56	LITD 1 (16531)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 1 Storage	IEC TC- 89 SC- (O); IEC TC- 104 (O)
57	LITD 1 (16534)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 1 Transportation and Handling	IEC TC- 89 SC- (O); IEC TC- 104 (O)
58	LITD 1 (16535)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 3 Stationary use at weather protected locations	IEC TC- 89 SC- (O); IEC TC- 104 (O)
59	LITD 1 (16536)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 4 Stationary use at non-weather protected locations	IEC TC- 89 SC- (O); IEC TC- 104 (O)

60	LITD 1 (16537)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 5 Ground Vehicle Installations	IEC TC- 89 SC- (O); IEC TC- 104 (O)
61	LITD 1 (16538)	Classification of Environmental Conditions Part 3 Classification of groups of environmental parameters and their severities Section 7 Portable and non-stationary use	IEC TC- 89 SC- (O); IEC TC- 104 (O)
62	LITD 1 (16539)	Fire Hazard Testing Part 1 Guidance for assessing the fire hazard of electro technical products Section 40 Insulating Liquids	IEC TC- 89 SC- (O); IEC TC- 104 (O)
63	LITD 12 (14556)	Electrotechnical Vocabulary – Part 704: Transmission	IEC TC- 103 (O)
64	LITD 12 (14559)	Electrotechnical Vocabulary – Part 725: Space Radio Communications	IEC TC- 103 (O)
65	LITD 23 (15475)	Information technology - Coding of audio - Visual objects: Part 22 open font format	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
66	LITD 32 (15687)	Information technology Biometrics Tenprint capture using biometric application programming interface BioAPI	ISO/IEC TC-JTC 1 SC-37 (P)
67	LITD 32 (15688)	Information technology Evaluation methodology for environmental influence in biometric system performance	ISO/IEC TC-JTC 1 SC-37 (P)
68	LITD 32 (15689)	Information technology Object oriented BioAPI Part 1: Architecture	ISO/IEC TC-JTC 1 SC-37 (P)
69	LITD 32 (15690)	Information technology Object oriented BioAPI Part 4: C implementation	ISO/IEC TC-JTC 1 SC-37 (P)
70	LITD 30 (16237)	Information technology Big data reference architecture Part 3: Reference architecture	ISO/IEC TC-JTC 1 SC-SC 42 (P)
71	LITD 14 (16424)	Software engineering Systems and software Quality Requirements and Evaluation SQuaRE Requirements for quality of Ready to Use Software Product RUSP and instructions for Testing First Revision	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)

72	LITD 14 (16425)	Systems and software engineering Systems and software Quality Requirements and Evaluation SQuaRE Quality measurement framework First Revision	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
73	LITD 14 (16426)	Systems and software engineering — Systems and software quality requirements and evaluation (SQuaRE) — Quality requirements framework (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
74	LITD 14 (16427)	Information technology - Service management - Part 2: Guidance on the application of service management systems (Second Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
75	LITD 14 (16428)	Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISOIEC 20000-1 (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
76	LITD 14 (16430)	Information Technology Service Management Part 10 Concepts and Vocabulary (First Revision)	ISO/IEC TC-JTC 1 SC-7 (P); ISO/IEC TC-JTC 1 SC-40 (P)
77	LITD 16 (16449)	IDENTIFICATION CARDS RECORDING TECHNIQUE PART 1 EMBOSSING Third Revision	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)
78	LITD 16 (16450)	IDENTIFICATION CARDS RECORDING TECHNIQUE PART 2 MAGNETIC STRIPE LOW COERCIVITYThird Revision	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)

79	LITD 16 (16451)	Identification cards Recording technique Part 7: Magnetic stripe: High coercivity high density Second Revision	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)
80	LITD 16 (16452)	Identification cards Integrated circuit cards Part 4: Organization security and commands for interchange First Revision	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)
81	LITD 16 (16453)	Identification cards Integrated circuit cards Part 6: Interindustry data elements for Interchange Third Revision	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)
82	LITD 16 (16454)	Identification cards Integrated circuit cards Part 8: Commands and mechanisms for security operations First Revision	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)
83	LITD 16 (16455)	Identification cards Integrated circuit cards Part 9: Commands for card management First Revision	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)

84	LITD 16 (16456)	Identification cards Integrated circuit cards Part 11: Personal verification through biometric methods First Revision	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)
85	LITD 16 (16457)	Cards and security devices for personal identification Test methods Part 7: Contactless vicinity objects First Revision	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)
86	LITD 11 (16464)	Optical Fibres Part 2 Product specifications Section 50 Sectional specification for class B single-mode fibres	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
87	LITD 11 (16465)	Optical Fibre Cables Part 1 Generic specification Section 31 Optical cable elements Optical fibre ribbon	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
88	LITD 11 (16466)	Optical Fibre Cables Part 3 Outdoor cables Section 10 Family specification for duct directly buried or lashed aerial optical telecommunication cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
89	LITD 11 (16467)	Optical Fibre Cables Part 3 Outdoor cables Section 11 Product specification for duct directly buried and lashed Aerial single-mode optical fibre telecommunication cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)
90	LITD 11 (16468)	Optical Fibre Cables Part 4 Sectional specification Section 20 Aerial optical cables along electrical power lines Family specification for ADSS all dielectric self-supported optical cables	IEC TC- 86 (P); IEC TC- 86A SC- 86A (P); IEC TC- 86C SC- 86C (P); IEC TC- 86 B SC- 86 B (O)

91	LITD 23 (16470)	Informatgion technology Coding of audio-visual objects Part 3: Audio First Revision	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
92	LITD 23 (16471)	INFORMATION TECHNOLOGY CODING OF AUDIO-VISUAL OBJECTS PART 14 MP4 FILE FORMAT (First Revision)	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
93	LITD 23 (16472)	INFORMATION TECHNOLOGY CODING OF AUDIO-VISUAL OBJECTS PART 15 CARRIAGE OF NETWORK ABSTRACTION LAYER NAL UNIT STRUCTURED VIDEO IN THE ISO BASE MEDIA FILE FORMAT first revision	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
94	LITD 23 (16473)	Information Technology - Coding of Audio-Visual Objects Part 4 Conformance Testing Amendment – 1	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
95	LITD 23 (16474)	Information Technology - Coding of Audio-Visual Objects Part 5 Reference Software Amendment – 1	ISO/IEC/JTC1 TC- 24 SC- 24 (O); ISO/IEC/JTC1 TC-SC 29 SC- (P)
96	LITD 16 (16480)	Information processing - Volume and file structure of CD - ROM for information interchange Amendment – 1	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)
97	LITD 6 (16557)	Coaxial communication cables Part 1 Coaxial cables Section 1 Capability approval	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
98	LITD 6 (16558)	Coaxial communication cables Part 8 Sectional specification for semi-flexible cables with polytetrafluoroethylene PTFE dielectric	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
99	LITD 6 (16559)	Coaxial communication cables Part 1 Test methods Section 106 Electrical Test for withstand voltage of cable sheath	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)

100	LITD 6 (16560)	Coaxial communication cables Part 1 Test methods Section 113 Electrical Test for attenuation constant	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
101	LITD 6 (16561)	Coaxial communication cables Part 1 Test methods Section 201 Environmental Test for cold bend performance of cable	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
102	LITD 6 (16562)	Coaxial communication cables Part 1 Test methods Section 203 Environmental Test for water penetration of cable	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
103	LITD 6 (16564)	Coaxial communication cables Part 1 Test methods Section 313 Mechanical test for Adhesion of dielectric and sheath	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
104	LITD 6 (16565)	Coaxial communication cables Part 1 Test methods Section 314 Mechanical test for Test for bending	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
105	LITD 6 (16566)	Coaxial communication cables Part 1 Test methods Section 316 Mechanical test for maximum pulling force of cable	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
106	LITD 6 (16567)	Coaxial communication cables Part 1 Test methods Section 324 Mechanical test for abrasion resistance of cable	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
107	LITD 6 (16568)	Radio frequency and coaxial cable assemblies Part 2 Part 2: Sectional specification Radio frequency coaxial connectors of type 952 (First Revision of IS 5054 (Part 2)	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
108	LITD 6 (16569)	Radio frequency and coaxial cable assemblies Part 4 RF coaxial connectors with inner diameter of outer conductor 16 mm 063 in with screw lock Characteristic impedance 50 type 7-16	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
109	LITD 6 (16592)	Passive RF and microwave devices intermodulation level measurement Part 1 General requirements and measuring methods	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)

110	LITD 6 (16593)	Passive RF and microwave devices intermodulation level measurement Part 4 Measurement of passive intermodulation in coaxial cables	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
111	LITD 6 (16595)	Metallic communication cable test methods Part 4 Electromagnetic compatibility EMC Section 4 Test method for measuring of the screening attenuation a s up to and above 3 GHz triaxial method	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
112	LITD 6 (16596)	Metallic communication cable test methods Part 4 Electromagnetic compatibility EMC Section 5 Coupling or screening attenuation Absorbing clamp method	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
113	LITD 6 (16597)	Metallic communication cable test methods Part 4 Electromagnetic compatibility EMC Section 6 Surface transfer impedance Line injection method	IEC TC-SC 46A SC- (O); IEC TC-SC 46C SC- (O); IEC TC-SC 46F SC- (O)
114	LITD 17 (16653)	Information technology Electronic discovery Part 1: Overview and concepts	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)
115	LITD 17 (16654)	Information security Lightweight cryptography Part 2: Block ciphers First Revision	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)
116	LITD 17 (16694)	AMENDMNET 1 TO Information technology - Security techniques - Key management: Part 4 mechanisms based on weak: Secrets (First Revision) Amendment – 1	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)
117	LITD 17 (16695)	Amendment 1 to 18033-4 Information technology - Security techniques - encryption algorithms: Part 4 stream ciphers	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)
118	LITD 17 (16696)	Amendment 1 to Information technology - Security techniques - Requirements for bodies providing audit and Certification of Information Security Management systems (First Revision)	ISO/IEC TC-JTC 1 SC-27 (P); ISO/IEC/JTC1 TC-WG SC-13 (P)

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)			
Sl No	**Document No**	**Title of the Doc**	**IEC/ISO**
1	TED 11 (15885)	Headlight Switches for Automobiles – Specification	ISO TC-22 (P); ISO TC-22 SC-31 (P); ISO TC-22 SC-32 (P); ISO TC-22 SC-35 (P)
2	TED 2 (16117)	Reciprocating internal combustion engine - Vocabulary - Part 2: Terms for engine maintenance	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)
3	TED 2 (16120)	Reciprocating internal combustion engine driven alternating current generating sets - Part 2: Engines	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)
4	TED 2 (16121)	Reciprocating internal combustion engines - Exhaust emission measurement - Part 3: Test procedures for measurement of exhaust gas smoke emissions from compression ignition engines using a filter type smoke meter	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)
5	TED 2 (16129)	Reciprocating internal combustion engines - Exhaust emission measurement - Part 9: Test cycles and test procedures for measurement of exhaust gas smoke emissions from compression ignition engines using an opacimeter	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)
6	TED 11 (16132)	Road Vehicles - Fuse-links - Part 6: Single-bolt fuse-links	ISO TC-22 (P); ISO TC-22 SC-31 (P); ISO TC-22 SC-32 (P); ISO TC-22 SC-35 (P)

7	TED 24 (16292)	Freight containers Electronic seals Part 1: Communication protocol	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
8	TED 24 (16293)	Freight containers Electronic seals Part 2: Application requirements	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
9	TED 24 (16294)	Freight Containers Electronic Seals Part 3: Environmental Characteristics	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
10	TED 24 (16295)	Freight containers Electronic seals Part 4: Data protection	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
11	TED 24 (16296)	Freight containers Electronic seals Part 5: Physical layer	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):

12	TED 24 (16307)	Packaging Transport packaging for dangerous goods Recycled plastics material	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
13	TED 24 (16308)	Transport packages for dangerous goods Dangerous goods packagings intermediate bulk containers IBCs and large packagings Guidelines for the application of ISO 9001	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
14	TED 24 (16309)	Packaging Transport packaging for dangerous goods Test methods	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
15	TED 24 (16324)	Pallets — Slip Sheets	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
16	TED 24 (16326)	Freight containers Container Tracking and Monitoring Systems CTMS: Requirements	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):

17	TED 24 (16338)	Packaging — Accessible Design — Ease of Opening	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
18	TED 24 (16339)	Packaging Accessible Design General Requirements	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
19	TED 24 (16340)	Packaging Tactile Warnings of Danger Requirements	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
20	TED 24 (16352)	Packaging Label Material Required Information for Ordering and Specifying Self-Adhesive Labels	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
21	TED 24 (16367)	Series 1 Freight Containers — Handling and Securing — Rationale for ISO 3874:2017 Annexes A To E	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):

22	TED 24 (16368)	Series 1 Freight Containers - Rationale for Structural Test Criteria	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
23	TED 24 (16369)	Thermal Containers Safety Standard for Refrigerating Systems Using Flammable Refrigerants Requirements for Design and Operation	ISO TC- 51 (P); ISO TC- 104 (P); ISO TC- 122 (P); ISO TC- 3 SC- 3 (O); ISO TC- 4 SC- 4 (P); ISO TC- 1 SC- 1 (P); ISO TC- 2 SC- 2 (P); ISO TC- 4 SC- 4 (P):
24	TED 11 (15885)	Headlight Switches for Automobiles – Specification	ISO TC-22 (P); ISO TC-22 SC-31 (P); ISO TC-22 SC-32 (P); ISO TC-22 SC-35 (P)

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 Amd. No. 4 to AIS 110:2009	Automotive Vehicles -Temporary-Use Spare Wheel/ Tyres and Run Flat Tyres
2	Automotive	Draft AIS-170/ DF / Sept. 2020	Remote Sensing Devices for on-road Emissions Monitoring – Product Specifications and Programme Guidelines
3	Automotive	Draft AIS-168 / D2 Oct 2020	Specific Requirements for A6 and A7 Category Electric Power Train Agricultural Tractors
4	Automotive	Draft Amendment 5 to AIS-145	Additional Safety features for Category M & N Vehicles
5	Automotive	Draft Amendment 5 to AIS-023	Automotive Vehicles - Seats, their Anchorages and Head Restraints for Passenger Vehicles of Categories L7, M2, M3 and Goods Vehicles of Category N - Specifications

ICT at TSDSI

Activities at TSDSI				
"List of New Item for Proposal at TSDSI"				
S. No.	**New Item Proposal**	**Name**	**Version**	**Status**
1	NIP 256	Study of technical aspects for deployment of a pan-India PPDR network based on PS-LTE technology	TSDSI-SGSS-NIP256-V1.0.0-20201006	Accepted
2	NIP 255	Rural Broadband Architecture	TSDSI-SGSS-NIP255-V5.0.0-20201217	Accepted
3	NIP 255	Rural Broadband Architecture	TSDSI-SGSS-NIP255-V4.0.0-20201217	Accepted
4	NIP 262	COMMUNICATIONS REQUIREMENTS AND RECOMMENDATIONS FOR THE ENERGY SECTOR	TSDSI-SGSS-NIP262-V1.0.0-20201217	Accepted
5	NIP 242	Open Bootstrap Framework	TSDSI-SGSS-NIP242-V3.0.0-20201216	Accepted
6	NIP 261	User Device Data Protection	TSDSI-SGSS-NIP261-V1.0.0-20201216	Accepted
7	NIP 248	Evaluation of the existing Relay/IAB architecture in 3GPP 4G LTE/5G NR Networks and Standardization of a new generic and flexible Relay/IAB Architecture along with the associated protocols	TSDSI-SGN-NIP248-V1.1.0-20201215	Accepted
8	NIP 260	Road Test Comparison of 5Gi vs 5G	TSDSI-SGSS-NIP260-V1.0.0-20201215	Accepted
9	NIP 259	MC-IOT Standard Proposal for channel BW below 100 kHz	TSDSI-SGN-NIP259-V1.0.0-20201214	Accepted
10	NIP 255	Rural Broadband Architecture	TSDSI-SGSS-NIP255-V3.0.0-20201214	Accepted
11	NIP 256	Study of technical aspects for deployment of a pan-India Broadband PPDR network based on PS-LTE and 5G technology	TSDSI-SGSS-NIP256-V2.0.0-20201214	Accepted

12	NIP 251	Load and Latency Aware Joint Hypervisor Controller Deployment for 5G and Beyond	TSDSI-SGN-NIP251-V1.1.0-20201213	Accepted
13	NIP 258	Characterization of E-band for 4G/5G Backhaul & Rural Broadband	TSDSI-SGN-NIP258-V1.0.0-20201213	Accepted
14	NIP 253	UAV Assisted C-RAN for 5G and beyond	TSDSI-SGN-NIP253-V2.0.0-20201213	Accepted
15	NIP 257	Virtualization for Open-Disaggregated RAN	TSDSI-SGN-NIP257-V1.0.0-20201204	Accepted
16	NIP 255	Rural Broadband Architecture	TSDSI-SGSS-NIP255-V2.0.0-20201204	Accepted
17	NIP 223	Enhancement of flexible UL/DL resource utilization	TSDSI-SGN-NIP223-V2.0.0-20201202	Accepted
For complete details of the NIP please click here				
"List of Study Item status update"				
S. No.	**Study Item**	**Name**	**Version**	**Status**
1	SI81	Virtualization for Open-Disaggregated RAN- Sooktha	TSDSI-SGN-SI81-V1.0.0-20201215	Initiated
2	SI80	Dynamic joint deployment of SDN Controllers and Hypervisors	TSDSI-SGN-SI80-V1.0.0-20201215	Initiated
3	SI79	NB-IoT Performance Assessment for Metering and SCADA	TSDSI-SGN-SI79-V1.0.0-20201201	Initiated
4	SI78	Need of Post Quantum Cryptography in 5G Networks	TSDSI-SGSS-SI78-V1.0.0-20201109	Initiated
5	SI77	Know your Machine Custodian (KYMC)	TSDSI-SGSS-SI77-V1.0.0-20201109	Initiated
6	SI76	Common User Profile Format	TSDSI-SGSS-SI76-V1.0.0-20201109	Initiated
7	SI75	IoT Identifier	TSDSI-SGSS-SI75-V1.0.0-20201109	Initiated
For complete details of the Study Items please click here				
"List of SWIP Status Update"				
S. No.	**SWIP**	**Name**	**Version**	**Status**
1	SWIP684	Draft Cover Letter for TR – Reducing Threats to Nation CII Using DNS (SI68)	TSDSI-SGSS-SWIP684-V1.1.0-20201005	Accepted
2	SWIP685	Know Your Machine Custodian (KYMC)	TSDSI-SGSS-SWIP685-V1.0.0-20201109	Accepted
3	SWIP686	Summary of Email discussion on "SWIP 678"	TSDSI-SGN-SWIP686-V1.0.0-20201202	Accepted

4	SWIP687	TR update on enhancement of flexible UL/DL resource utilization	TSDSI-SGN-SWIP687-V1.0.0-20201202	Accepted
5	SWIP679	Status update on Technical Report for "5G Extension of Broadcast Offload "	TSDSI-SGN-SWIP679-V2.0.0-20201208	Accepted
6	SWIP688	Common user profile format for audiovisual content	TSDSI-SGSS-SWIP688-V1.0.0-20201214	Accepted
7	SWIP689	Need for Post-Quantum Cryptography in 5G networks TR Skeleton draft v1.0	TSDSI-SGSS-SWIP689-V1.0.0-20201216	Accepted
8	SWIP690	Proposal Text for TR : DCS support in cellular network	TSDSI-SGSS-SWIP690-V1.0.0-20201216	Accepted
9	SWIP691	Indian Language Support For Financial Transactions and Applications	TSDSI-SGSS-SWIP691-V1.0.0-20201216	Accepted
10	SWIP692	IoT Identifier	TSDSI-SGSS-SWIP692-V1.0.0-20201216	Accepted
11	SWIP693	KYMC	TSDSI-SGSS-SWIP693-V1.0.0-20201216	Accepted
12	SWIP691	Indian Language Support For Financial Transactions and Applications	TSDSI-SGSS-SWIP693-V2.0.0-20201217	Accepted
For complete details of the SWIP please click here and select SWIP				

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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 IV

SESEI stands for "Seconded European Standardization Expert in India" and is a 5-partner's project based in New Delhi, India, with the objective to increase visibility of European standardization and promote EU/EFTA-India cooperation on standards and related issues. The Project is managed by the European Telecommunications Standards Institute (ETSI), a European Union recognized Standards Organization, and is further supported by the other two other recognized EU Standards Organizations CEN and CENELEC. The other two partners to this Project are the European Commission and the European Free Trade Association. It is a Standardization focused project, with a priority emphasis on the following sectors: ICT, Automotive, Electronic Appliances including Consumer Electronics and Smart Cities etc.

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CEN - European Committee for Standardization www.cen.eu
CENELEC - European Committee for Electro Technical Standardization
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ETSI - European Telecommunications Standards Institute
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EC - European Commission
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EFTA - European Free Trade Association
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