स्टैंडर्ड्स इंडिया
Standards India

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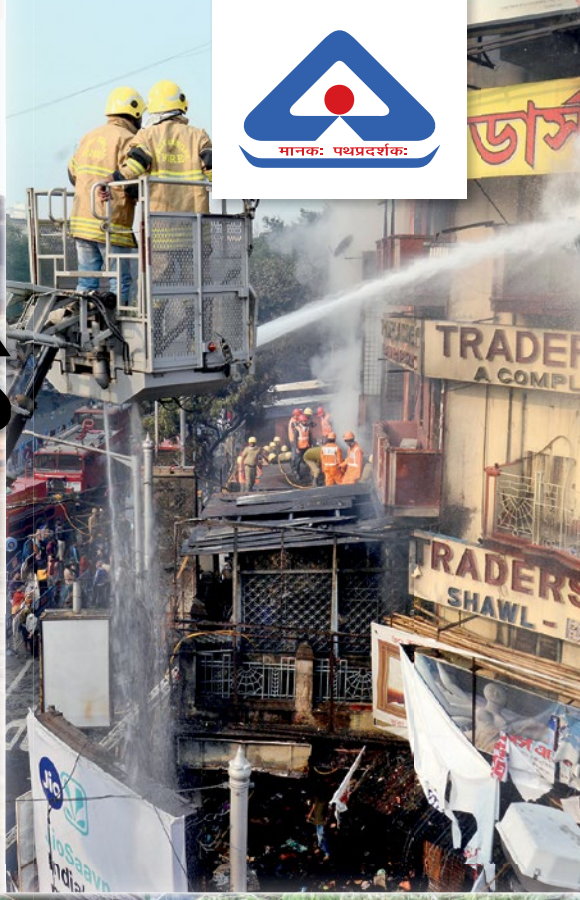

Disaster Management

MARKS OF TRUST

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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

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BUREAU OF INDIAN STANDARDS

स्टैंडर्ड्स इंडिया
Standards India

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As the world copes with COVID-19, the global pandemic, the topic of disaster management has become necessary for discussion. Any disaster, natural or man-made, challenges nations and citizens, apart from the existing systems of risk management and disaster recovery. The government has put in place several steps to mitigate and manage risk, and BIS has been playing an active part by encompassing relevant and effective standards across sectors. Yet, we must recognise, it is not always possible for countries or communities to be immune to the impact of a disaster.

In this issue of *Standards India*, we take a holistic look at disaster management—from assessing the level of preparedness, to safeguards, and strategies to boost awareness and community involvement. We also detail the UNDP's analysis of resilience and recovery, critical post-disaster aspects drawn from the UN's Sustainable Development Goals. When it comes to disasters, forecasting also plays an important part, and a study highlights the significance of objectivity in a forecasting mechanism, focusing on the COVID-19 pandemic and its impact.

In addition, our regular 'Consumer News' section brings you relevant industry and community information, while the 'Standards First' section lists the latest standards from BIS. We value your feedback, and look forward to your thoughts on **standardsindia@bis.gov.in.**

Binod Kumar Sinha,
Editor & Publisher

ऐसे दौर में जब दुनिया एक वैश्विक महामारी की चपेट में है, आपदा प्रबंधन एक आवश्यक चर्चा का विषय बन गया है। कोई भी आपदा, चाहे वो प्राकृतिक हो या मानव-निर्मित, राष्ट्रों और नागरिकों के अलावा, चुनौती प्रबंधन और आपदा से उभरने की मौजूदा प्रणालियों को चुनौती देता है। सरकार ने जोखिम को कम करने और प्रबंधित करने के लिए कई कदम उठाए हैं, और बी आई एस कइ क्षेत्रों में प्रासंगिक और प्रभावी मानकों को शामिल करके एक सक्रिय भूमिका निभा रहा है। फिर भी, हमें यह समझना चाहिए कि किसी भी आपदा के प्रभाव से खुद को हमेशा बचा के रखना देशों या समुदायों के लिए संभव नहीं है।

स्टैंडर्ड्स इंडिया के इस अंक में हम आपदा प्रबंधन पर एक समग्र नज़र डालते हैं – सुरक्षा और आपदा से बचने की रणनीति हेतु तैयारियों के स्तर का आकलन करने से लेकर, जागरूकता और सामुदायिक भागीदारी को बढ़ावा देने तक । संयुक्त राष्ट्र के सतत् विकास लक्ष्यों से निकाले गए महत्वपूर्ण पश्च-आपदा पहलुओं को मद्देनज़र रख कर, हम UNDP द्वारा प्रस्तुत पेशानी से उभरने की क्षमता और पुनर्प्राप्ति के विश्लेषण का भी विस्तार से वर्णन करते हैं। जब आपदाओं की बात आती है, तो पूर्वानुमान लगाना भी एक महत्वपूर्ण भूमिका निभाता है, और एक अध्ययन कोविड-19 महामारी और इसके प्रभाव पर ध्यान केंद्रित करते हुए किसी भी पूर्वानुमान तंत्र में निष्पक्षता के महत्व पर प्रकाश डालता है।

इसके अलावा, हमारा नियमित 'उपभोक्ता समाचार' खंड आपके लिए नवीनतम जानकारी लाता है जो समुदाय को प्रभावित कर सकती है, और हमारे 'मानक प्रथम' भाग नवीनतम मानकों का विवरण देते हैं। आपके बहुमूल्य विचारों का हम standardsindia@bis.gov.in पर स्वागत करते हैं।

बिनोद कुमार सिन्हा,
संपादक एवं प्रकाशक

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INTERNATIONAL STANDARD FOR SAFETY SIGNS UPDATED

INTERNATIONAL STANDARDIZATION OF SAFETY SIGNS MEANS EVERYONE SPEAKS THE SAME LANGUAGE WHEN IT COMES TO SAFETY

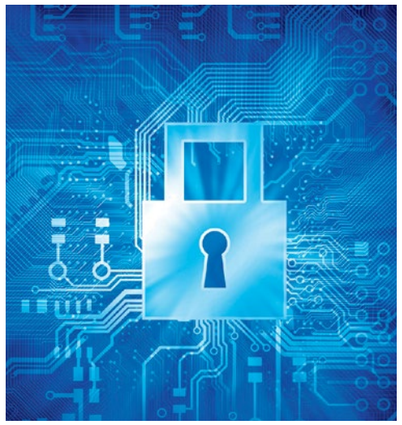
From no-go areas on construction sites to emergency exits, ISO 7010, Graphical symbols — Safety colours and safety signs — Registered safety signs, prescribes safety signs for the purposes of accident prevention, fire protection, health hazard information and emergency evacuation.

It features the shape and colour of the sign as referenced in ISO 3864-1, Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings, and the design of the symbol is according to ISO 3864-3, Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs.

The ISO standard that is a reference for safety signs has been updated to incorporate new safety signs that are in use around the world. Symbols that are internationally agreed and globally used in safety signs ensure clarity and consistency, regardless of language, culture or setting

Mr Jan-Bernd Stell, Chair of the ISO technical committee that developed the standard, said lack of harmonization and standardization in this area could lead to confusion and accidents. "International standardization of safety signs means everyone speaks the same language when it comes to safety. This provides a simple solution for everyone, both in workplaces and public areas like airports where many nationalities converge. Examples of safety signs documented in the standard include everything from warnings around deep water, electricity or barbed wire to instructions such as 'do not walk or stand here', or to not use lifts in the event of a fire."

ISO 7010 was developed by ISO subcommittee ISO/TC 145/SC 2, Safety identification, signs, shapes, symbols and colours, the secretariat of which is held by DIN, ISO's member for Germany.



PROTECTING OUR DIGITAL PRIVACY

TACKLING PRIVACY INFORMATION MANAGEMENT HEAD ON

The world's first International Standard to help organizations manage privacy information and meet regulatory requirements has just been published.

Protecting our digital privacy is a significant business concern. According to IBM the average cost of a data breach is USD 3.6 million, and legal obligations are increasingly stringent. As we get more connected, governments all over the world are introducing various privacy regulations, such as the European Union's General Data Protection Regulation (GDPR), which organizations must adhere to. The new ISO standards will help businesses meet such requirements, whatever jurisdiction they work in.

ISO/IEC 27701, Security techniques — Extension to ISO/IEC 27001 and ISO/IEC 27002 for privacy information management — Requirements and guidelines, specifies the requirements for establishing, implementing, maintaining and continually improving a privacy-specific information security management system. In other words, a management system for protecting personal data (PIMS).

Formerly referred to as ISO/IEC 27552 during its development, it builds on ISO/IEC 27001, Information Technology – Security techniques – Information security management systems – Requirements, providing the necessary extra requirements when it comes to privacy.

INTERNATIONAL STANDARD FOR WATER EFFICIENCY

THE RECENTLY PUBLISHED ISO 46001 HELPS ORGANIZATIONS OF ALL SIZES AND STATUS BE MORE WATER-EFFICIENT

Water is becoming a scarce commodity in many parts of the world. According to the United Nations, over the last hundred years, the use of water worldwide has increased by twice as much as the global population, meaning that seven hundred million people could be displaced due to lack of water by 2030.

The recently published ISO 46001, Water efficiency management systems – Requirements with guidance for use, aims to help organizations of all sizes and status be more water-efficient.

Through a clear framework and guidance on water efficiency management, ISO 46001 provides methods and tools for assessing and accounting water usage, as well as ways to identify and implement measures to optimize water use. In this way, users of the standard will contribute directly to the United Nations Sustainable Development Goal SDG 6 (Clean Water and Sanitation), which seeks to "ensure availability and sustainable management of water and sanitation for all".

ISO 46001 was inspired by work done to develop a national standard in Singapore to help organizations benefit from the use of a water efficiency management system

It specifically addresses Target 6.4: "By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity."

REVISED INTERNATIONAL GUIDANCE ON SERVICE MANAGEMENT SYSTEMS

THE ISO AND IEC'S 20000 SERIES PROVIDES INTERNATIONAL BEST-THINKING FOR AN EFFECTIVE ITSMS

Some of the world's most knowledgeable experts on ITSMS worked together to develop ISO/IEC 20000-1, Information technology — Service management — Part 1: Service management system requirements. It is a valuable tool for organizations wanting to implement or maintain an ITSMS. Following its revision late last year, two guidance documents in the series have been updated and another has been developed.

An IT service management system (ITSMS) is a strategic tool to help organizations improve efficiencies, optimize the use of technologies, save money and provide many other benefits that go beyond IT

ISO/IEC 20000-2, Information technology — Service management — Part 2: Guidance on the application of service management systems, and ISO/IEC 20000-3, Information technology — Service management — Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1, have been revised and joined by the new technical report ISO/IEC TR 20000-7, Information technology — Service management — Part 7: Guidance on the integration and correlation of ISO/IEC 20000-1: 2018 to ISO 9001:2015 and ISO/IEC 27001:2013.

They provide important information and recommendations for service providers, consultants and assessors to conform to the requirements of ISO/IEC 20000-1. These, and other documents in the series, help users to interpret the requirements of ISO/IEC 20000-1 more accurately and also include examples and suggestions to enable them to apply it more effectively.

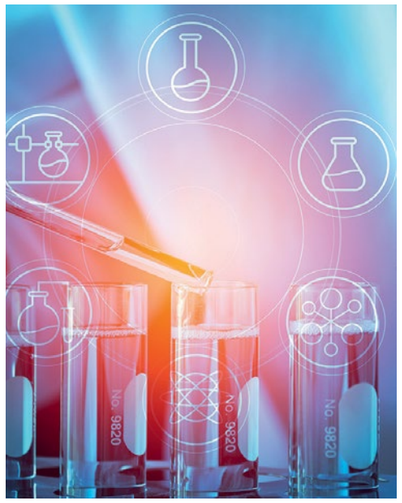
NEW TECHNICAL REPORT

NEW TECHNICAL REPORT ON TERMINOLOGY MAINTENANCE FOR MEDICINAL PRODUCTS PUBLISHED

ISO/TR 14872, Health informatics — Identification of medicinal products — Core principles for maintenance of identifiers and terms, provides a framework for ongoing maintenance and support of identifiers and terms that meet the criteria of IDMP standards. It describes a service delivery model and core principles which can be used as evaluation criteria for choosing IDMP terminology service providers. It also helps with the development of more robust service level agreements and governance processes used by IDMP data owners and terminology maintenance providers.

ISO's IDMP standards have been joined by a new technical report describing key considerations for organizations seeking to become IDMP terminology maintenance providers

The new technical report will be of use to many organizations in the biopharmaceutical and pharmaceutical industry, including global regulators involved in the development, authorization, marketing and distribution of medicinal products. Convenor of the ISO working group responsible for the IDMP standards and ISO/TR 14872, Christian Hay, said that the terminology maintenance service delivery model proposed in this document will help to provide a framework for greater collaboration and shared data governance amongst IDMP stakeholders. ISO/TR 14872 was developed by ISO/TC 215, Health informatics/WG6, Pharmacy and medicines business, the secretariat of which is held by NEN, ISO's member for the Netherlands.



ETHICAL LABELLING

INTERNATIONAL GUIDANCE MAKES ETHICAL CLAIMS MORE CREDIBLE

ISO/TS 17033, Ethical claims and supporting information — Principles and requirements, sets out internationally agreed ways to make a credible ethical claim.

Aimed at producers, manufacturers, importers, distributors, or any other organization likely to make such statements, it addresses claims that cover everything from animal welfare and local sourcing to fair trade, child labour, and more.

Co-convenor of the ISO working group that developed the technical specification, Jenny Hillard, said that the industry for ethical labelling is hugely complex: "There are many kinds of ethical label and labelling schemes, as well as variations in different countries and different ways of interpreting the information. ISO/TS 17033 is designed to draw together key elements from these schemes so that the information given in such claims is clear, well understood and reliable."

ISO/TS 17033, Ethical claims and supporting information — Principles and requirements, sets out internationally agreed ways to make a credible ethical claim

It draws information from the ISO 14020 series on environmental labelling and declarations, as well as the ITC (International Trade Centre) Guidelines for Providing Product Sustainability Information as part of their 10YPF Consumer Information Programme. It also complements existing guidance such as the ISEAL Sustainability claims – good practice guide.

NEW ISO STANDARD TO TACKLE FIRE

WORLD'S FIRST INTERNATIONAL STANDARD FOR OXYGEN REDUCTION SYSTEMS PUBLISHED

Prevention is always better than cure, and there are few better examples than with fires. If fires can only survive when there is oxygen to fuel them, removing it from the air is an effective way to ensure that the environment remains fire-free. Oxygen reduction systems (ORS) do that by creating atmospheres where there is not enough oxygen for a fire to break out, but enough for humans to breathe easily.

ISO 20338, Oxygen reduction systems for fire prevention — Design, installation, planning and maintenance, specifies minimum requirements and defines the specifications for the design, installation and maintenance of fixed oxygen reduction systems. It applies to those systems that use nitrogen-enriched air used for fire prevention in buildings and industrial production plants, and can be used for new systems as well as for the extension and modification of existing systems.

Alan Elder, chair of the ISO technical subcommittee that developed the standard, said it will be useful to users of ORS, such as facilities owners, and for meeting regulatory requirements. "Insurance companies, manufacturers, installers and users will all benefit from ISO 20338, particularly from regions outside Europe, because it will enable them to improve the performance and safety of ORS, as well as provide a way for governments to set regulatory requirements, and for users to meet them."

NEW ISO STANDARDS FOR RESPONSIBLE DIVING

New International Standards for sustainable diving have been published to help keep our waters clean

Two new International Standards have just been published, designed to increase diver environmental awareness and reduce negative impacts. ISO 21416, Recreational diving services — Requirements and guidance on environmentally sustainable practices in recreational diving, provides information on how the diving community can optimize their ability to observe the condition of the aquatic environment and undertake activities to improve it.

ISO 21417, Recreational diving services — Requirements for training on environmental awareness for recreational divers, provides guidance for training programmes aimed at educating divers in environmental awareness and sustainable practices in recreational diving activities. This covers both theory and practical sessions.

Two newly published International Standards are designed to increase diver environmental awareness and reduce negative impacts. These two standards give guidance and practical examples of best practice

Mr Manuel Otero, Chair of the ISO technical committee (TC) responsible for the standards, said divers see what we above water cannot see, and therefore have an eye on the environmental condition of aquatic life. "They also have a responsibility to be aware of their impact on it." He also said, "These two standards give guidance and practical examples of best practice, such as those related to operating boats or interacting with aquatic life, which will benefit everyone."

Mr Martin Denison, Convenor of the TC's working group that developed the standards, said they will benefit not only divers, diving instructors, centres and clubs, but tour operators offering diving holidays, diving boat operators and governments and any other organizations looking for information on diving and the aquatic environment. "They also contribute directly to the UN Sustainable Development Goal, SDG 14, which is about the sustainable use of oceans, seas and marine resources."

News credits: ISO Focus

BIS—THE GLORIOUS PAST

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1 Sixth meeting of the Southern region Storage and Marketing Structures Sectional Committee Agriculture Food Division Council AFDC - 5, held on January 22, 1960 at Ahmedabad. The meeting saw the presence of Chairman Chandu Lal C. Davgoria and Secretary Dr. D.V. Karmarkar

2 The Essential Oil Sectional Committee meeting at Bangalore held on April 14-15, 1960 CDC-11

3 Members of Infant Food Sub-Committee, AFDC 12 : 5 at the factory of M/S Glaxo Laboratories (India) Ltd. Bombay with the some of the staff

4 Eighteenth meeting of Leather Sectional Committee. Dr. Y. Nagudamm, Chairman seen welcoming members

5 Heat and Sound Insulation Sub-Committee meeting held on September 9, 1960

6 Meeting of BDC 13 - Building Construction Practice

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7 IEC Annual Group Meetings held for the first time in the Asian continent from October 31 - November 12, 1960. Dr. S. Radhakrishnan, Vice-President of India inaugurated the opening ceremony

8 Meeting of Building Division Council (BDC: 27)

9 Visit of Shri Sena Nayak, Ceylon Minister for Commerce & Industry to ISI in 1960. Dr. Lal C. Verman, Director ISI is seen along with the dignitaries

10 Meat & Meat products Sectional Committee Meeting held on December 3, 1960

THE HUMAN ELEMENT

By characterising and decoding the socio-demographic profile of those living in a multi-hazard environment, one can seek to establish the varying levels of preparedness. This study, conducted in the Atacama Region in the north of Chile, assessed the level of preparedness at home and work to face earthquakes and floods

BY NICOLÁS C. BRONFMAN, PAMELA C. CISTERNAS, PAULA B. REPETTO & JAVIERA V. CASTAÑEDA

THE GROWING MULTI-HAZARD ENVIRONMENT TO which millions of people in the world are exposed highlights the importance of making sure that populations are increasingly better prepared. A World Bank report that assessed the main natural disaster hotspots in the world found that approximately 3.8 million km^2 and 790 million individuals are exposed to at least two natural hazards, while 0.5 million km^2 and 105 million individuals are exposed to three or more natural hazards. An increase in the magnitude, frequency and geographic distribution of natural disasters has been recently demonstrated, particularly for those related to climate change. Records show that between 1994 and 2013, floods were the most frequent event (43 percent of all events registered), affecting approximately 2.5 billion people and caused the greatest material costs and losses. In the same period, earthquakes and tsunamis caused the highest number of fatalities, estimated at around 750,000, with tsunamis being twenty times more lethal than earthquakes.

The combination of human and economic losses, together with reconstruction costs, makes natural disasters both a humanitarian and an economic problem. Between 1994 and 2013, natural disasters produced economic losses of more than USD 2.6 trillion. More recently, in 2017, USD 314 billion were spent globally on damage related to natural disasters. There is currently an unresolved debate regarding whether natural disasters hinder a country's economic growth, given that the empirical evidence is somewhat heterogeneous. However, high expenditure associated with natural disasters may reduce investment in other priority areas for a country, such as education, health, transport and security.

There are no countries or communities that are currently immune to the impact of natural disasters. It is, however, possible to reduce the effects of these events through management strategies focused on risk reduction. Citizen preparedness strategies play a key role in reducing the effects of hazards that cannot be mitigated, as such strategies seek to improve the ability of individuals and communities to respond in the event of a natural disaster.

Chile, located in the Pacific Ring of Fire, is one of the countries that is most exposed to earthquakes/tsunamis and volcanic eruptions on the planet. Among the OECD member countries, Chile is the most exposed to natural hazards, where 54 percent of its population and 12.9 percent of its total surface area are exposed to three or more hazards. Between 2008 and 2018, Chile was affected by 10 natural disasters (earthquakes, tsunamis, wildfires, floods and volcanic eruptions), which translated into more than four million affected individuals. To move forward in adopting a multi-hazard approach to preparedness strategies, it is important to identify the primary socio-demographic characteristics of groups that show different levels of preparedness.

PREPAREDNESS IN A MULTI-HAZARD ENVIRONMENT

The complexity of territories and social structures expose communities to various hazards, both natural and man-made. Against this backdrop, the leading institutions responsible for disaster risk reduction worldwide indicate the importance of nations being able to assess, recognise and integrate the various hazards in their territories in their planning.

Although addressing a multi-hazard environment requires significant economic and political efforts, several studies have indicated that the multi-hazard approach has major benefits for the design of effective disaster risk reduction policies. A multi-hazard assessment permits not only more reliable territorial planning for a country's inhabitants but also lets stakeholders show that focusing mitigation measures on a single hazard may increase vulnerability to others.

The main steps for multi-hazard environments include strengthening risk assessment within territories, informing the population of these risks to raise awareness, and establishing multi-disciplinary and multi-sectoral efforts to develop integrated public policies.

NATURAL HAZARD PREPAREDNESS

In recent decades, numerous studies have been focused on assessing individuals' levels of preparedness for natural hazards, and the factors that promote the adoption of preparedness measures. There are different theoretical frameworks to conceptualize the adoption of preparedness measures to face natural hazards, where the Protective Action Decision Model and the Social-Cognitive Model are the most cited. The first model recognises that preparation is a behaviour dependent on risk perception, previous experience and some demographic characteristics, among other variables. The social cognitive model focuses on the role of motivational factors on the decision to adopt

Significant differences exist in the preparedness levels declared by participants depending on the type of hazard analyzed

preparedness actions, including awareness of the threat, anxiety, self-efficacy and sense of community, among others. Both models can help describe and understand the preparedness, and the Protective Action Decision Model also recognizes the role of experience.

One of the most common ways to study natural disaster preparedness levels is by characterising these measures within the places where individuals spend most of their time, such as their homes (with their families) and their workplaces. These areas are representative not only of the types of preparedness measures adopted by the population, but also the areas that people recognise as sources of common and relevant information for taking preparedness measures. Preparedness actions involve developing plans, stockpiling of supplies and performing exercises and drills, all aimed to reduce the impact of the disaster. These actions have been translated into recommendations, checklists and actions that organisations provide to households, communities and workplace to be prepared in case of a disaster. Response organisations recommend to frequently assess and evaluate whether these actions have been implemented.

Researchers have proposed several models to explain the decision to take action and implement preparedness actions, with a particular emphasis on the role of social cognitive processes. Traditionally these models have emphasised the role of risk perception and have also shown that previous experience may be relevant, but with mixed results in relation with preparedness.

This study focused on the inhabitants of Copiapó and Tierra Amarilla municipalities in the Atacama Region, who account for more than 60 percent of the Atacama Region's population. These localities have an extensive history of natural disasters, particularly extreme hydro-meteorological events causing significant floods. The Atacama Region's localities are not only vulnerable to the occurrence of major floods but also, like the rest of the country, to severe geophysical events.

SOCIO-DEMOGRAPHICS & PREPAREDNESS

Several of the studies that link gender to the adoption of preparedness measures conclude that women prepare more than men, especially when it comes to measures related to creating a family emergency plan, the safety of household members, and the use of preparedness messages. Similarly, it has been reported that married people or those who live with their partner show higher levels of preparedness than those who do not.

The age of subjects is also a predictor for the adoption of preparedness measures. Some studies conclude that older people adopt more preparedness measures, with one of the main reasons being previous exposure to and/or experience with natural disasters. In other studies, researchers suggest that age is not significantly related to the adoption of preparedness measures. But the presence of children under 18 years of age in the household is associated to higher levels of preparedness. A study conducted on a random sample of 1,158 households in Memphis, Tennessee, suggests that parents feel responsible for the safety of children, and also because children receive more information (from their school environment) about how to prepare for natural hazards, motivating parents to implement these types of measures.

Similarly, it has been found that parents are more concerned about what their children will experience during a natural disaster, which may prompt a desire to anticipate its consequences and to prepare in advance to mitigate any possible negative effects.

HOUSEHOLD PREPAREDNESS

Researchers have mostly focused on understanding family preparedness when characterising the preparedness levels of the population. Family preparedness has been researched and measured through different types of activities, such as survival measures, mitigation measures and planning measures. Family measures in the face of natural hazards are those which are adopted least frequently, but whose importance is highly recognised among individuals. Family preparedness is recognised as the base from which other preparation actions take place.

The participants in this study stated that they were significantly more prepared at home for an earthquake than a flood, regardless of their age, gender, marital status and work activity. Overall, it can be concluded that men aged between 45 and 59 years of age who live with their partner declared the highest level of household preparedness for floods. On the other hand, the subjects who declared the lowest level of preparedness are women above 60 years of age who are single, separated, divorced or widowed.

WORKPLACE PREPAREDNESS

Despite the fact that research on natural disaster preparedness has primarily focused on family preparedness, the study of workplace preparedness is emerging as a relevant focus for research, given the role that organisations play in local economies, the lives of the people they employ and even recovery following natural disasters. As in the case of family preparedness, workplace preparedness involves planning activities, such as speaking with employees about the impact and importance of preparing the company for natural hazards, having an emergency plan in place, alternative energy supplies for the company's operation following a natural disaster, insurance for this type of events, and the presence of an emergency kit in the company, among many others. One factor that is most closely related to workplace preparedness is company size. This is because companies with a larger number of employees have Formalized risk reduction processes, and allocated greater resources to implement them.

Here, too, it can be concluded that while the profile of subjects with the highest declared level of workplace preparedness for floods is men who are married or living with their partner, the profile of those with the lowest reported level is women who are single, separated, divorced or widowed.

The study concluded that significant differences exist in the preparedness levels declared by participants depending on the type of hazard analyzed. In fact, participants declared that they were significantly more prepared (both at home and at work) to face an earthquake than a flood, regardless of their age, gender, marital status and work activity. These results are an important sign, as the influence of climate change is expected to produce Produce extreme changes in weather phenomena, which would increase the frequency of extreme hydro-meteorological events.

Among the reasons that may explain the results is the fact that, historically, Chile as a country and the study area have placed greater emphasis on preparedness measures for earthquakes than for floods. In recent years, Chile has been affected by major earthquakes, with one of the most destructive ones taking place on February 27, 2010 in the south of the country. This event caused great alarm and concern among citizens and government authorities, not only due to the destructive effects of the event, but also the shortcomings uncovered regarding the level of preparedness and coordination of

government institutions responsible for risk reduction.

In addition, the scientific community has indicated that the recent earthquakes that have occurred in the north of the country provide evidence that there are still subduction zones which have not been activated in almost 150 years. As such, the scientific community and authorities still expect a mega-earthquake to affect the study area. This situation has led to the implementation of many communication and community preparedness plans and programmes to face a potential mega-earthquake in recent decades. Awareness from communities about the likelihood of an earthquake is high and motivate them to be prepared.

The results also show high levels of declared workplace preparedness for earthquakes, which could have its roots in the presence of large mining companies in the region. In fact, the mining industry has for decades constituted the main source of development in the region, in which large mining companies have played an important role in local economies. The presence of large mining companies represents one of the great opportunities for the development and implementation of preparedness programmes in the face of hazards, given that, as they have large numbers of employees, their emergency risk reduction and response processes are more formalised.

Although the history of earthquakes in Chile has led both public and private-sector organisations to develop increasingly effective citizen and institutional preparedness strategies, the floods that occurred in 2015 demonstrated that the Atacama Region needs to improve preparedness strategies, programmes and plans to face extreme hydro-meteorological events. It is, therefore, recommended that institutions responsible for disaster risk reduction in the region design preparedness plans and programmes that recognise and integrate the different hazards present in the region, given that the prioritization of preparedness strategies for one hazard may increase vulnerability to others.

As previously mentioned, the subject's age is significantly related to their declared levels of preparedness. Some authors posit that this could be explained because adults in this stage of life acquire greater care responsibilities (either for others or their own assets), which may give rise to increased interest in involving themselves in preparedness measures. On the other hand, the low levels of preparedness declared by young people may be explained by the fact that, in general, they have a lower perception of natural disaster risk, which translates into lower willingness to adopt preparedness measures.

Being married or living with a partner was significantly related to higher levels of preparedness within the household. Previous studies have concluded that the presence of a significant other generates greater concern among subjects and, therefore, greater willingness to prepare for potential natural disasters. Regarding these

The subject's age is significantly related to preparedness, which could be because adults in this stage of life acquire greater care responsibilities

arguments, the presence of school-age children in the household also produces higher levels of preparedness for natural hazards. Previous studies have argued that the presence of children in the household increases participation in preparedness measures due to the fact that children motivate the actions of adults, bring information regarding safety home from school, and because adults aim to protect children through this type of measures.

Finally, the results suggest that the level of preparedness for floods significantly differs depending on the subject's gender: in general, men declare that they are more prepared for floods than women, contrary to what was expected. The authors attribute this result to the fact that the majority of men in the sample who are employed work in the large and medium-scale mining sector, while almost all women work in the services and commerce sectors. The mining sector provides direct employment to more than 15 per of workers in the region, 92 percent of which are men. Due to regulatory requirements, these companies have advanced security, hygiene and prevention standards which are frequently monitored. In line with previous studies, the employees of these large companies have greater learning and training opportunities with regard to emergency risk reduction and response processes, so it is reasonable to believe that those who work in such companies (mainly men) would have higher levels of preparedness for earthquakes and floods.

The above also highlights the potential importance of large companies in the areas where they operate, not only because of their impact on local economies, but also due to their potential influence on communities' degree of preparedness for natural disasters. Therefore, the presence of large companies in the region is a relevant and important factor to be considered when designing disaster risk reduction programmes.

Based on the results obtained, it can be concluded that one of the greatest influencers on the motivation to prepare for natural disasters is the presence of significant others in the household. Groups that are less prepared should be the target of interventions to raise awareness and motivate them to adopt preparedness actions.

Also, the findings have revealed the need to continue investigating how people perceive/adopt the recommendations provided by local authorities (i.e., if they understand them and if they are capable of carrying them out), so as to be able to evaluate which factors that facilitate (or discourage) the adoption of preparedness actions. As some studies indicate, the preparedness actions are not always carried out by the individuals in the same way that authorities recommended it. Therefore, it is necessary to keep a continuous dialogue between authorities and the civil population to effectively communicate preparedness strategies. This is a crucial element to go forward in the design of public policies that take into account the social, cultural and political context in which people live.

Finally, the institutions responsible for developing local disaster risk reduction plans and programmes must appropriately characterize their target audiences if they expect to obtain more effective and efficient results.

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NOVEL CORONAVIRUS COVID-19

FOCUSING ON OBJECTIVITY & ACCURACY IN FORECASTING

This study introduces an objective approach to describe the timeline of a live forecasting exercise, which has potential implications for planning and decision-making to combat COVID-19

BY FOTIOS PETROPOULOS & SPYROS MAKRIDAKIS

WHAT WILL BE THE GLOBAL IMPACT OF THE NOVEL CORONAVIRUS? Answering this question requires accurate forecasting of the spread of confirmed cases as well as analysis of the number of deaths and recoveries. Forecasting, however, requires ample historical data. At the same time, no prediction is certain as the future rarely repeats itself in the same way as the past. Psychological factors also play a significant role in how people perceive and react to the danger from the disease and the fear that it may affect them personally. This paper introduces an objective approach to predicting the continuation of the COVID-19 using a simple, but powerful method. The risks are far from symmetric as underestimating its spread like a pandemic and not doing enough to contain it is much more severe than overspending and being over-careful when it will not be needed.

The accuracy of traditional forecasting largely depends on the availability of data to base its predictions and estimates of uncertainty. In outbreaks of epidemics there is no data at all in the beginning and then limited as time passes, making predictions widely uncertain. On February 18, 2020, a *New York Times* article cautioned against excessive optimism about the crisis peaking, even though there were close to 50 days since the virus had been identified.

Besides, there are concerns that the data may not be reliable, as was the case of bird flu and SARS when the number of affected people and deaths were misreported. Similarly, in the case of COVID-19, the reporting did not reflect the correct numbers as well, when on the February 13 a new category of "clinically diagnosed" was added to "lab-confirmed" ones. This decreases forecasting accuracy and increases uncertainty, making definite conclusions difficult to draw.

Related to forecasting accuracy and uncertainty, there is a more severe problem that has to do the perception of epidemics and pandemics. Governments are concerned about the measures to be taken, while the general population fears the impact on the epidemic on their health or lives. Furthermore, as pharmaceutical firms work on vaccinations for the new virus, they have to balance their commercial interest. This was the case with SARS, when governments highlighted the severity of the virus. It bought large numbers of vaccines that were never used as its spread stopped without the need to vaccinate people.

Of course, the big problem is the asymmetry of risks and the irrational fear of a pandemic with its possible catastrophic consequences, as happened with the 1918 Spanish flu that killed an estimated 50 million worldwide. In contrast, the SARS killed a total of 774 in 2003 and the bird flu around 100 in 1997. The death count due to COVID-19 is rising but, at the same time, there is less concern over the seasonal flu that still kills about 646,000 people worldwide each year.

Medical predictions are often not accurate while their uncertainty is seriously underestimated. Predicting the future of epidemics and pandemics is much more difficult as the number of cases to be studied is very small. At one end of the scale is the case of SARS where the fear of becoming a pandemic was overblown. At the other end is the Spanish flu that turned out to be a serious pandemic with catastrophic consequences, arguably in a different era when communication and the ability to raise public awareness were limited.

Despite the inaccuracies associated with medical predictions, forecasting is still invaluable in allowing us to better understand the current situation and plan for the future. This study presents statistical forecasts for the confirmed cases of COVID-19 using robust time series models, and an analysis of the trajectory of recovered cases.

ANALYSIS & FORECASTING

This study focuses on the cumulative daily figures aggregated globally of the three main variables of interest: confirmed cases, deaths and recoveries. These were retrieved by the Centre for Systems Science and Engineering (CSSE) at Johns Hopkins University. The data refers to daily cumulative cases and cover the period from January 22, 2020 until March 11, 2020, and includes both "lab-confirmed" and "clinically diagnosed" cases. There is an emphasis on the importance of the recovered cases, which is not covered in media as widely as the confirmed cases or the deaths. While all three data patterns show an exponential increase, the trends of both the confirmed cases and the deaths were reduced in the mid of February; a second exponential increase is observed in late February and March as a result of the increased number of cases in South Korea, Iran and Europe. At the same time, the number of recovered cases is steadily increasing.

To forecast confirmed cases of COVID-19, the study adopts simple time series forecasting approaches. It produces forecasts using models from the exponential smoothing family, which has shown good forecast accuracy over several forecasting competitions and is especially suitable for short series. Exponential smoothing models can capture a variety of trend and seasonal forecasting patterns (such as additive or multiplicative) and combinations of those. The attention is on trended and non-seasonal models, and a pragmatic approach has been taken—in that it has been assumed that the trend will continue in the future. This approach contradicts other modelling approaches to COVID-19 using an S-Curve model (logistics curve) that assumes convergence.

While statistical approaches to model selection (such as information criteria, which measure the maximum likelihood of a model while penalising for its complexity) could be used, the selected model better reflects the nature of the data. The study opts for an exponential smoothing model with multiplicative error and multiplicative trend

components. Even if, in some cases, an additive trend model gave lower information criteria values, the study opted for the multiplicative trend model given the asymmetric risks involved—the authors believe that it is better to err to the positive direction. The study produces 10-days-ahead point forecasts and prediction intervals.

FIRST ROUND OF FORECASTS [FEB 1, 2020 TILL FEB 10, 2020]

The study started at the end of January 31, 2020, with only 10 actual data points in hand. It was decided to use a multiplicative trend exponential smoothing model. The forecasts (and 90 percent prediction intervals) produced at the end of January 31, 2020, show that the mean estimate (point forecast) for the confirmed cases 10-days-ahead was 209,000 with the 90 percent prediction intervals ranging from about 38,000 to 534,000 cases. The actual confirmed cases on February 10, 2020, were just under 43,000. A considerable forecast error was observed from the mean estimate equal to 166,000 cases (an absolute percentage error of 388 percent), with the forecasts being extremely positively biased. The actual cases, however, lay within the prediction intervals.

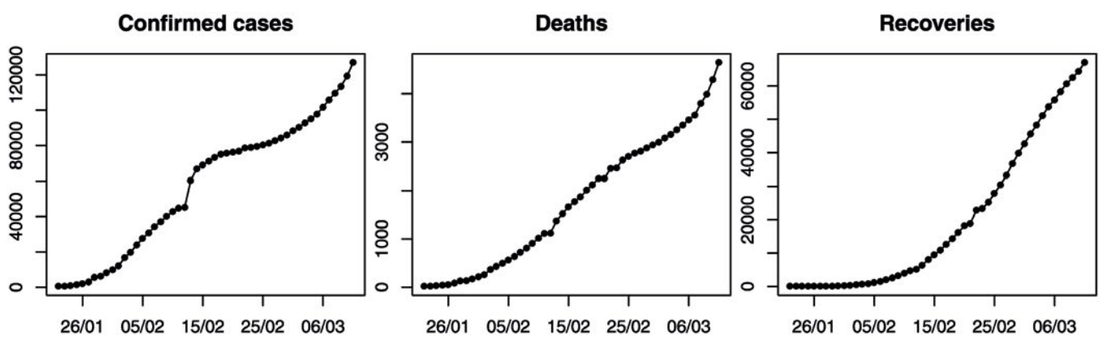
SECOND ROUND OF FORECASTS [FEB 11, 2020 TILL FEB 20, 2020]

The historical number of the data was increased to include cases up to the end of February 10, 2020 (20 data points). It was observed that the actual values for the period closely follow the mean estimate. The forecast error on February 20, 2020, was 5,800 cases (an absolute percentage error of 7.7 percent). This was despite the change that was made on February 13, 2020, with regard to how confirmed cases are recorded to now include "clinically diagnosed" instances, as opposed to exclusively lab-confirmed. One crucial observation is that this more accurate forecast came with a significant decrease in the steepness of the slope compared to the forecast for the previous 10-day period. Another observation is that at the end of February 20, 2020, the number of confirmed case were still being over-forecasted. Finally, all actual values lay well inside the prediction interval range.

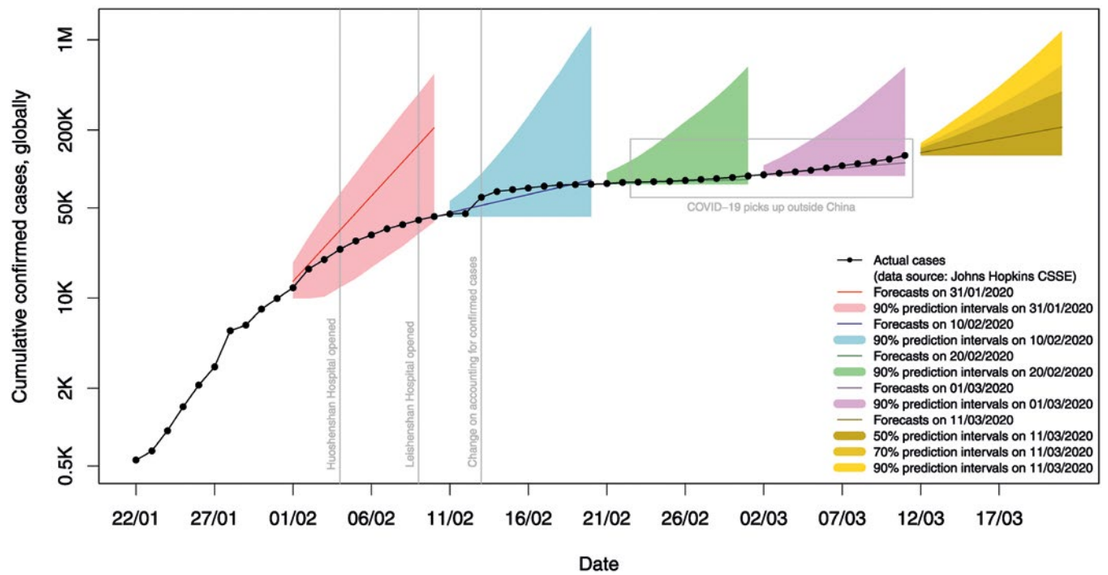
THIRD ROUND OF FORECASTS [FEB 21, 2020 TILL MAR 01, 2020]

The third set of forecasts and prediction intervals showed that the mean estimate for 10-days-ahead was 83,000 cases. The slope of the forecasts was, once again, lower compared to the previous two sets of forecasts, confirming the fact that the observed confirmed cases (until February 20, 2020) show a steady decrease. It was also observed that there was a significant decrease in the associated forecast uncertainty, with the prediction intervals being much tighter compared to the past forecasts. The 90 percent prediction intervals

DAILY CUMULATIVE CONFIRMED, DEATHS & RECOVERED CASES FROM COVID-19



CUMULATIVE ACTUAL CONFIRMED CASES OF COVID-19, WITH FORECAST & PREDICTION INTERVALS PRODUCED OVER SEVERAL ORIGINS



worst-case scenario was about 600,000 cases, which is half when compared to that of the last round of forecasts (1.2 million cases). The actual confirmed cases at the end of March 01, 2020, were 88,000. At the end of this third round of forecasts, an error of 5,500 cases (6.2 percent) was recorded. While this error was lower than the previous round (in both absolute and percentage terms), it was the first time that the 10-days ahead forecast was below the actual values (or under-forecasted). This was because the novel coronavirus had spread to three countries outside Mainland China (South Korea, Iran, and Italy).

FOURTH ROUND OF FORECASTS [MAR 02, 2020 TILL MAR 11, 2020]

The mean estimate for March 11, 2020, was 112,000 confirmed cases, with the uncertainty levels being similar to the previous round: there was a 5 percent chance that they would exceed 613,000 by the end of March 11, 2020. The observed actual confirmed cases at the end of this period were almost 127,000. The absolute forecast error at the end of the period was 15,400 (12.1 percent), higher compared to the previous set of forecasts but still well within the prediction intervals. For the second round in a row, the actual cases were being consistently under-forecasted. This was due to the exponential increase of the confirmed cases mostly in Europe, Iran and the US, with South Korea managing to decrease the number of new daily cases significantly.

FIFTH ROUND OF FORECASTS [MAR 12, 2020 TILL MAR 21, 2020]

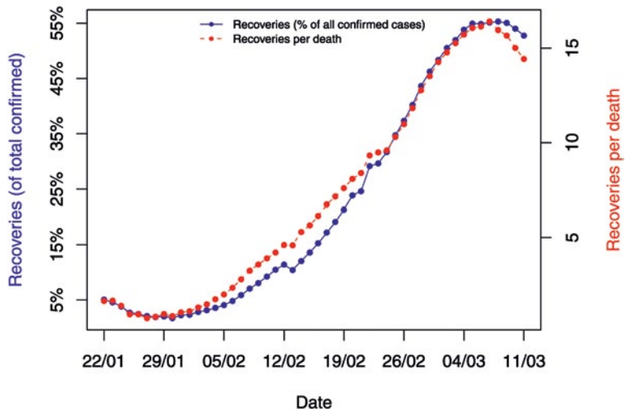
The final set of forecasts and prediction intervals used data up to March 11, 2020. The study estimated three levels of uncertainty (50, 70 and 90 percent). The trend of these forecasts is much higher compared to the last two rounds: it predicted 83,000 new cases for this round (a total of 210,000 cases). The associated levels of uncertainty are also higher: there was a 25 percent chance that the total confirmed cases would exceed 413,000 by the end of March 21, 2020, and a 5 percent chance that they would exceed 1.19 million.

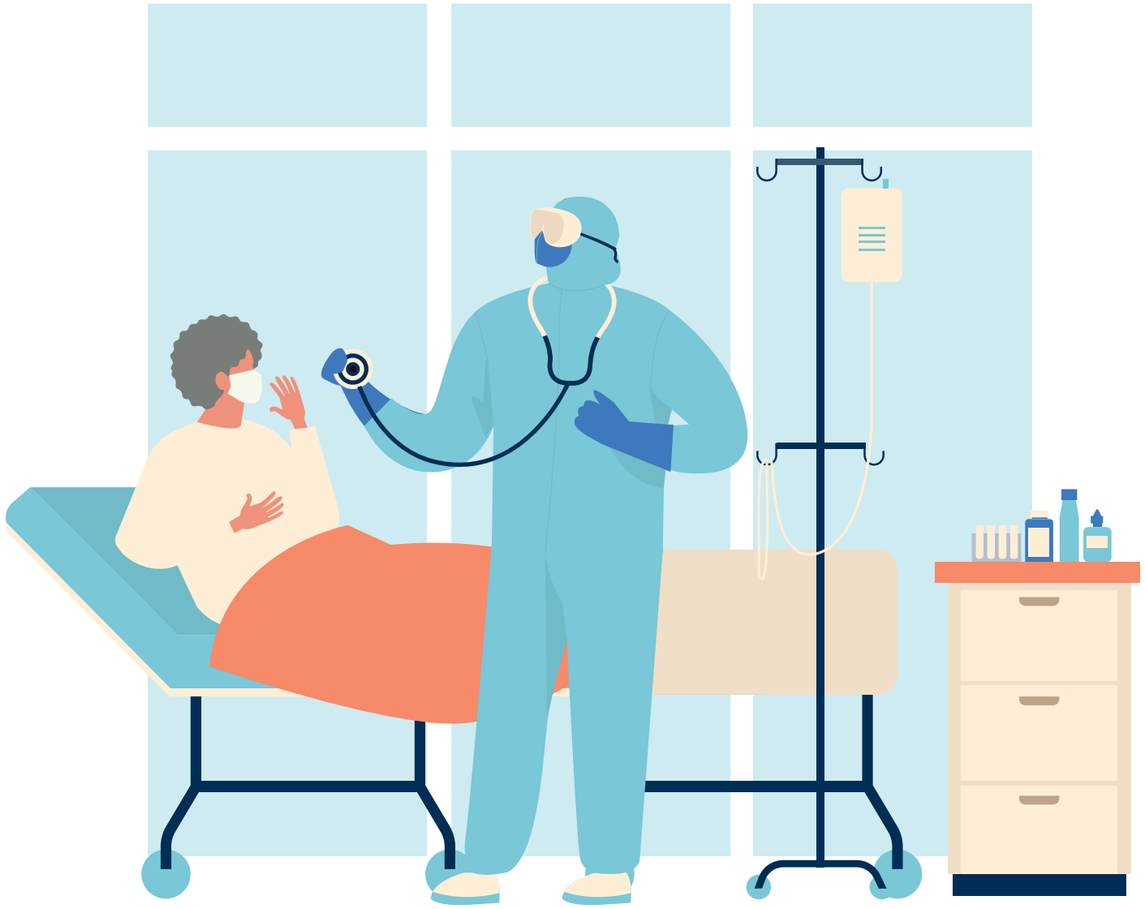
In addition to these rounds, the study also attempted to produce forecasts by splitting the recorded confirmed cases into two groups: cases within Mainland China and cases anywhere else, as the trends into these two groups are different. The independent exponential smoothing models were fitted, and the forecasts were then summed up (bottom-up hierarchical forecasting). It was noticed that with this approach, the mean estimate is closer to that if all the data was considered together (207,000 versus 210,000 cases). However, the estimated uncertainty by splitting the data is considerably lower, possibly since the confirmed cases outside Mainland China have significantly increased only recently.

RECOVERED CASES

The recovered cases are also very important to note, especially as a percentage of the total confirmed cases, as well as the ratio of

RECOVERIES (AS A % OF THE TOTAL CONFIRMED CASES & RECOVERED CASES PER DEATH)





recovered cases versus deaths. Upon observing the trajectory of these two ratios, it is found that a solid relationship exists between the two curves. Second, despite the very small percentages of recovered cases until the end of January (less than 2 percent), currently, about 1 out of 2 confirmed cases has recovered (52.8 percent of the total confirmed cases). Moreover, the ratio of recovered cases versus deaths is currently above 14:1. Despite this, a reverse of both curves since March 08, 2020, can be observed—which is associated with the increasing number of cases outside Mainland China.

DRAWING CONCLUSIONS

The uncertainty surrounding an unknown, novel coronavirus can spark a global alarm, which lead Harvard T.H. Chan School of Public Health professor Marc Lipsitch to state that 40–70 percent of the global population may be infected in the coming year. This matches German Chancellor Angela Merkel's warning regarding the effects of the novel coronavirus in Germany. Joseph Norman, Yaneer Bar-Yam and Nassim Nicholas Taleb at the New England Complex Systems Institute (NECSI) discussed the systemic risk of pandemics, the existence of fat-tailed processes due to global interconnectivity and the negatively biased estimates of spread, reproduction and mortality rates. On the opposite side, others argued about people overly panicking and neglecting the probabilities with the new virus being the first "infodemic" as a result of the hyper-connectivity offered by today's social media. The polarisation of the opinions globally can be summarised by the quotes of three renowned personalities:

Elon Musk: "The coronavirus panic is dumb."

Nassim Nicholas Taleb: "Saying the coronavirus panic is dumb is dumb."

Bill Gates: "I hope it's not that bad, but we should assume it will be until we know otherwise."

Regardless of what one's beliefs are, it can be said that forecasts and their associated uncertainty can and should be an integral part of the decision-making process, especially in high-risk cases. Apart from the significant public health concerns, the dangers imposed on global supply chains and the economy as a whole are also considerable. Risk-averse people can focus on the worst-case-scenarios and act accordingly. Deciding to discard any formal, statistical forecasts and acting conservatively still implies an underlying forecasting process, even if this process is not formalised—a personal judgment or belief.

In this study, univariate time series models were used, which assume that the data is accurate and past patterns (including precautionary measures) will continue to apply. Significant, consistent forecast errors (potentially spanning outside the prediction intervals) should be associated with changes in the observed patterns and the need for additional actions and measures in the case of negatively-biased forecasts. The significant forecast error at the end of the first forecast period could be the result of two factors.

First, while the forecasts that were made using the data up to January 31, 2020, would be a good estimate in the scenario of "business-as-usual" (nothing changes), they disregard the fact that the world will act to get the virus under control. The Chinese authorities managed to rapidly construct two new hospitals in the Huoshenshan and Leishenshan areas in Wuhan, which opened on February 03, 2020, and February 08, 2020, respectively. Multiple commuting restrictions were applied both within China and internationally. The World Health Organisation helped in creating awareness of the novel virus. So, the decline in the spread of the COVID-19 during this first round could well be linked with these attempts from local and global authorities.

Second, there may be a "garbage-in, garbage-out" situation. As mentioned above, the analysis and forecasts assumed that the data is accurate. It could be the case that the positive bias of the first-period forecasts is not as significant as it seems, due to potential inaccuracies in the actual data and the under-accounting of confirmed cases. This is especially true given the delay in diagnosing COVID-19 cases.

The second and third sets of forecasts were very close to the recorded confirmed cases (the forecast error was lower than 6,000 cases at the end of each 10-day period). The slowing down of the trend during this period suggested that COVID-19 would not cause any serious problems, particularly outside of Mainland China. Unfortunately, that was not the case. The last two sets of forecasts show a significant increase in the trend of cases globally, coupled with an increase in the associated uncertainty. Nevertheless, these forecasts can be a useful tool for governments and individuals towards making decisions and taking the appropriate actions to contain the spreading of the virus to the degree possible.

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DISASTER MITIGATION AND MANAGEMENT: A STANDARDS PERSPECTIVE

Natural or man-made disasters can be tackled by proper mitigation and preparedness measures. BIS has formulated a series of Indian standards to ensure that buildings and infrastructure have inherent capabilities to counter disasters in a sustainable manner

BY SANJAY PANT AND ARUN KUMAR S

The entire effort being made by the mankind in the process of its own survival and well-being is to contribute towards overall development of humanity. This in turn involves exploitation of natural resources, creation of built environment conducive to living and working activities, and a series of activities directly aimed at growth of human prowess and potential. Over a period of time, the mankind has gone beyond its needs and has been overexploiting the resources, ensuring comfort-at-any-cost, and has overstepped in its efforts to outdo other people, cities, and countries. All these have over a period of time disturbed the natural balance of the ecosystem and adversely affected the earth and its resources including the flora, fauna, natural slopes, drainage basins, etc. There are others particularly within the built spaces occupied and visited by it where human activities result it catastrophic incidences. These result in consequences, which adversely affect the earth or human lives or properties, and are termed as disasters. The best ways to deal with a disaster or prevent its occurrence is to ensure prevention of activities, which would lead to calamities. Additionally, there can be disasters occurring even without any human interventions. It is best to deal with these through proper mitigation and preparedness measures. The Bureau of Indian Standards, has, therefore, formulated a series of Indian Standards to ensure proper planning, design, and execution of buildings and built environment taking into cognizance the potential of the buildings and infrastructure so built to counter the disasters in a sustainable manner. This paper discusses some of such efforts.

DISASTER

Disaster is a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, by accident, or by negligence, which results in substantial loss of life, or human suffering or damage to, and destruction of, property or damage to or degradation of environment. And, is of such a nature of magnitude as to be beyond the coping capacity of the community of the affected area.

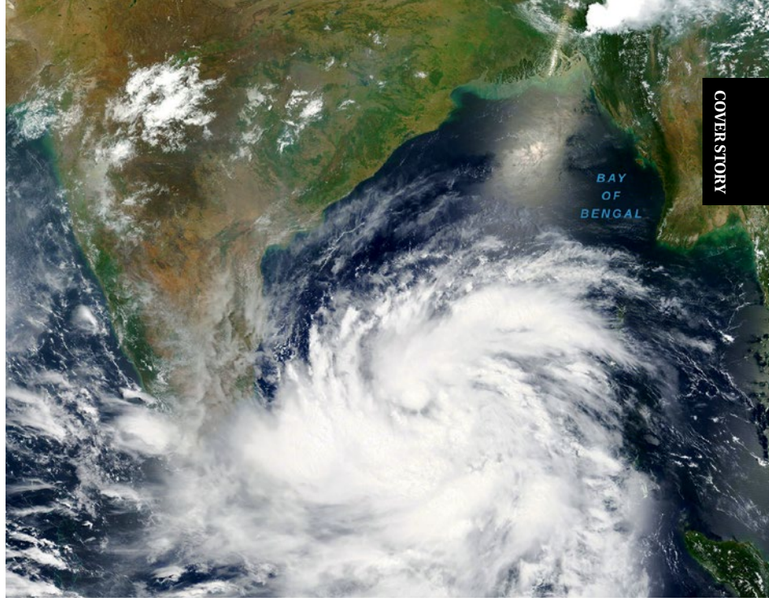
TYPES OF DISASTER

As per the National Disaster Management Authority (NDMA), natural hazards that can lead to a disaster can be attributed to 5 broad categories as follows:

TABLE 1:
CATEGORIES OF NATURAL HAZARDS

FAMILY	MAIN EVENT LEADING TO DISASTER
Geophysical	**Earthquake / movement of earth** • Volcano • Tsunami
Hydrological	• Flood • Landslide • Wave action
Meteorological	**Short-lived extreme weather conditions leading to:** • Cyclone • Cold wave OR Heat wave • Lightning • Sandstorm • Cloudburst
Climatological	**Long-lasting extreme weather conditions leading to:** • Drought • Forest fire • Glacial lake outburst • Subsidence
Biological	**Exposure to germs and toxic substances leading to:** • Epidemic/Pandemic • Insect infestation

Human-induced disaster can be accidental such as accidents, building collapse, fires, mine flooding, oil spills, etc. Hazards due to unintentional and intentional (malicious) use of Chemical, Biological, Radiological and Nuclear (CBRN) threats which can cause significant harm or disruption are also human-induced disasters.



DISASTER MANAGEMENT

The Disaster Management Act, 2005 defines Disaster Management (DM) as a continuous and integrated process of planning, organizing, coordinating and implementing relevant measures. Such activities are intended towards:
i) Prevention; ii) Mitigation (or risk reduction); iii) Preparedness;
iv) Prompt response; v) Assessment of disaster effects; and
vi) Rehabilitation and reconstruction.

FIGURE 1: DISASTER MANAGEMENT CYCLE

Figure 1 depicts the above six main activities in the form of a typical Disaster Management Cycle. With the tremendous and simultaneous action of governments at all level as also the non-government bodies, India has stridden from the erstwhile post-disaster assistance to pre-disaster planning, preparedness, capacity building, crisis management and even total risk management. Thus, a holistic and integrated approach of Disaster Risk Reduction (DRR) is now in place in the country.

Activities involved in the disaster management is categorized time wise as Pre-Disaster, During Disaster and Post Disaster. Pre-disaster activities

are with a view to reducing the potential losses to men and material due to the hazard thereby minimizing losses during the onset of disasters. Activities that tend to the needs and provisions of victims with a view to alleviating and minimizing the suffering are classified as those during a disaster. Post-disaster activities involve all those performed to obtain rapid and durable recovery which does not replicate initial vulnerable conditions. The activities can therefore be indicated as in Table 2.

TABLE 2:
ACTIVITIES INVOLVED IN DISASTER MANAGEMENT

PHASE	ACTIVITY
Pre-Disaster	Prevention and Mitigation Preparedness Early warning
During Disaster	Response *(First stage after the Disaster Impact)*
Post Disaster	Recovery Rehabilitation Reconstruction Development

ADMINISTRATIVE SYSTEM IN INDIA

In line with the Disaster Management Act, 2005 various Disaster Management Authorities can be and were set up at the national (NDMA), the state (SDMA) and the district (DDMA) levels. Based on the 2009 National Policy on DM, first DM Plan was established in 2016, and was revised subsequently as 'National Disaster Management Plan, 2019'. Figure 2 depicts the typical representative of the institutional framework on Disaster Management in the country through which necessary co-ordination, decision making and communication for DM can take place.

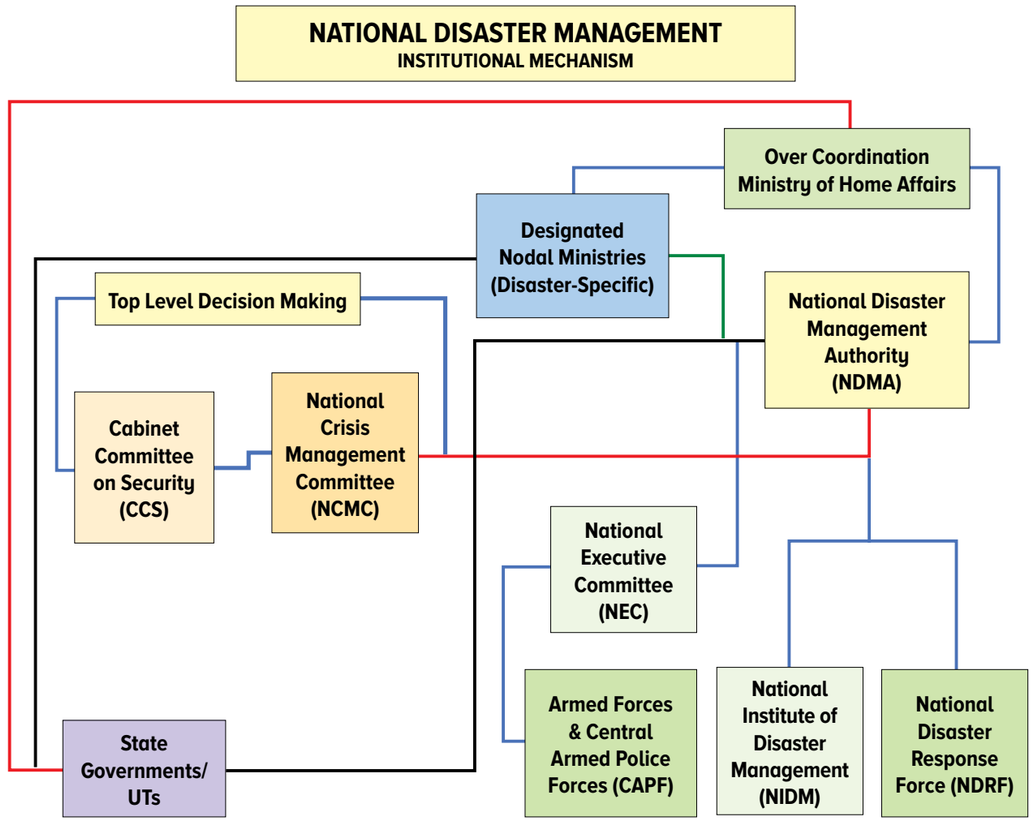


FIGURE 2: NATIONAL-LEVEL DISASTER MANAGEMENT - BASIC INSTITUTIONAL FRAMEWORK

ROLE OF STANDARDS IN DISASTER PREVENTION AND MITIGATION AS PART OF DISASTER MITIGATION EFFORTS

Built environment, the abode to every individual and the network of infrastructure that support human activities and provide comfort, which are erected on/above/below surface of earth are subjected to vagaries of nature in terms of rain, heat, snow, wind, impact, effects due to earthquake, landslides, floods, etc. An element of safety, thus, is pertinent to be intrinsically added right from the planning and design of buildings and structures, and the same needs diligent erection in the site as intended. Standards, being technical documents frequently referred in the contracts ensure to instil a high level of confidence in the minds of parties concerned. Standards are evolved on a consensus basis both at the national level through Bureau of Indian Standards and at international level by International Standardization Organization through Indian participation.

NATIONAL PERSPECTIVE

Geographically, for instance, India is bound on one side by the young

but active mighty mountain range (Himalayas), by sea/ocean on three sides, and also within it contains the enormous Indo-Gangetic, plains which pose a challenging soil type to the built environment. Considering the vast history of earthquakes recorded even before the 19th century, the ensuing devastation and failure of buildings and structures, the then BIS (Indian Standards Institution) rightly codified the necessary engineering design requirements for earthquake resistant design as early as 1960s. Similarly, in the field of cyclones, landslides, fires, etc., the relevant guidelines were enshrined to be followed by the relevant professionals. A brief list of the relevant Indian Standards related to preparedness and mitigation w.r.t natural and human-induced disasters is provided in Annex A.

The basic tools for land and building development rely very much on the Building Bye Laws which are evolved basically out of another premium publication of BIS, namely the National Building Code of India 2016 (NBC 2016) which in turn refer copiously to over 1,000 Indian Standards as accepted standards and good practices.

Around 30 guidelines related to disasters, templates for preparing Disaster Management Plans (including at District level), and guidelines on Crowd Management (to deter stampedes and the like) have since published by the NDMA. For details, visit *https://ndma.gov.in/en/policy-and-plan/ndma-guidelines.html*

INTERNATIONAL SCENARIO

The International Standardization Organization (ISO) supported by various National Standards Bodies (including by BIS- the NSB of India) of the world countries has a dedicated technical committee on 'Security and Resilience' ISO/TC 292 operating with the scope: "Standardization in the field of security to enhance the safety and resilience of society". Also, ISO/TC 262 deals with 'Risk Management' within the scope of, "Standardization in the field of risk management". A list of some of the important standards relevant to the theme of response and recovery of Disaster Management is included in Annex B.

Over 180 UN member countries of the World including India resolved in the year 2015 to adopt a 15-year plan called the 'Sendai Framework' in the 3rd UN World Conference on Disaster Risk Reduction (DRR) at Sendai, Japan. Through this, by the end of 2030, under 04 Priority Areas (at Local, National, Regional and Global level), 07 Targets (see Fig. 3) have been agreed to be met by all the countries including by India. India has since accomplished successfully its first commitment through organizing the Asian Ministerial Conference for Disaster Risk Reduction in New Delhi in 2017 with the aim of providing a platform to member countries for sharing best practices in the field of Disaster Risk Reduction (DRR). In the event attended by around 4,000 participants from the Asian Region, two important documents namely 'New Delhi Declaration' and 'Asian Regional Plan' were adopted which revolved around political commitments of the participating governments and focus on 'How to' reduce disaster risk at national and local levels respectively. Every professional involved in the cycle of building and infrastructure right from conceptualization through planning, design and construction to maintenance have an enormous role to play to continuously achieve and maintain the fabric of safety by scrupulously following the standards and best practices to help accomplish the above DRR objectives.

India is a disaster prone country with around 59% of its area susceptible to one or the other types of natural disasters coupled with number of man-made disasters which are on an increase with the passage of development of the country

CONCLUSION

India is a disaster prone country with around 59% of its area susceptible to one or the other types of natural disasters coupled with number of man-made disasters which are on an increase with the passage of development of the country. Many of these disasters can be mitigated by minimizing the damages through better planned and built environment following the provisions of Standards. BIS has formulated a series of Indian Standards covering estimation of various loads, forces and effects; good design and construction practices; specific structural design codes using various material streams; earthquake engineering, landslide control, wind and cyclone resistant design, fire and life safety, etc. The scrupulous implementation of these Standards would bring desired resilience in the built facilities and infrastructure, thus protecting and minimizing the damages from the onslaught of the forces of calamities. A thorough and considered use of standards on disaster management would ensure achieving not only a safer society as envisaged but also the key items of the UN Sustainable Development Goals namely SDG 11 'Sustainable Cities and Communities' and SDG 13 'Climate Action' as well.

FIGURE 3: SEVEN GLOBAL TARGETS OF SENDAI FRAMEWORK

— Sanjay Pant is Scientist 'F' & Head, Civil Engineering Department, BIS and Arun Kumar S is Scientist 'D', Civil Engineering Department, BIS

References:

a) Publicly available resources of National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of INDIA, New Delhi;
b) Publicly available resources of National Disaster Management Authority (NDMA), an apex Body of Government of India, New Delhi
c) National Building Code of India 2016 (SP 7:2016), Bureau of Indian Standards, New Delhi

ANNEX A

NATIONAL STANDARDS ON DISASTERS

A-1 INDIAN STANDARDS ON EARTHQUAKE ENGINEERING

IS	Title
IS 1893:1984	Criteria for earthquake resistant design of structures *(fourth revision)*
IS 1893 (Part 1):2016	Criteria for earthquake resistant design of structures: Part 1 General provisions and buildings *(sixth revision)*
IS 1893 (Part 2):2014	Criteria for earthquake resistant design of structures: Part 2 Liquid retaining tanks *(fifth revision)*
IS 1893 (Part 3):2014	Criteria for earthquake resistant design of structures: Part 3 Bridges and retaining walls
IS 1893 (Part 4):2015	Criteria for earthquake resistant design of structures: Part 4 Industrial structures including stack-like structures *(first revision)*
IS 4326:2013	Code of practice for earthquake resistant design and construction of buildings *(third revision)*
IS 4967:1968	Recommendations for seismic instrumentation for river valley projects
IS 4991:1968	Criteria for blast resistant design of structures for explosions above ground
IS 6922:1973	Criteria for safety and design of structures subject to underground blasts
IS 13827:1993	Guidelines for improving earthquake resistance of earthen buildings
IS 13828:1993	Guidelines for improving earthquake resistance of low strength masonry buildings
IS 13920:2016	Code of practice for ductile design and detailing of reinforced concrete structures subjected to seismic forces *(first revision)*
IS 13935:2009	Guidelines for seismic evaluation, repair and seismic strengthening of masonry buildings *(first revision)*
IS 15988:2013	Guidelines for seismic evaluation and strengthening of existing reinforced concrete buildings

A-2 INDIAN STANDARDS ON LANDSLIDE HAZARD

IS	Title
IS 14496 (Part 2):1998	Preparation of landslide hazard zonation maps in mountainous terrains — Guidelines: Part 2 Macro-zonation
IS 14680:1999	Landslide control — Guidelines
IS 14458 (Part 1):1998	Retaining wall for hill area — Guidelines: Part 1 Selection of type of wall
IS 14458 (Part 2):1997	Retaining wall for hill area — Guidelines: Part 2 Design of retaining/breast walls
IS 14458 (Part 3):1998	Retaining wall for hill area — Guidelines: Part 3 Construction of dry stone walls
IS 14458 (Part 4):2018	Retaining wall for hill area — Guidelines: Part 4 Construction of banded dry stone masonry walls
IS 14458 (Part 5):2018	Retaining wall for hill area — Guidelines: Part 5 Construction of cement stone masonry walls
IS 14804:2000	Siting design and selection of materials for residential buildings in hilly areas — Guidelines
IS xxxx:2020	Site specific investigations and stability analysis of landslides — Guidelines (under publication)
IS xxxx:2020	Indian Standard preparation of landslide hazard zonation maps in mountainous terrains — Guidelines: Part 1 Meso zonation (under publication)
IS xxxx:2020	Indian Standard preparation of landslide risk assessment maps in mountainous terrains — Guidelines (under publication)
IS xxxx:2020	Draft Indian Standard Retaining wall for hill area — Guidelines: Part 6 Construction of gabion walls [IS 14458 (Part 6)]

A-3 INDIAN STANDARDS ON CYCLONES

IS	Title
IS 15498:2004	Guidelines for improving the cyclonic resistance of low rise houses and other buildings/structures
IS 15499:2004	Guidelines for survey of housing and building typology in cyclone prone areas for assessment of vulnerability of regions and post cyclone damage estimation
IS xxxx:2020	Indian Standard design and construction of cyclone shelters — Guidelines *(under publication)*

A-4 INDIAN STANDARDS ON FIRE SAFETY

IS	Title
FIRE FIGHTING	
***IS 9972:2002**	Specification for automatic sprinkler heads for fire protection service (first revision)
IS 15105 : 2020	Design, installation and maintenance of fixed automatic sprinkler fire extinguishing systems – Code of Practice *(first revision)* (under publication)
IS 15519:2020	Water mist fire protection systems – System design, installation and commissioning — Code of practice *(first revision)*
IS 15325:2020	Design and installation of fixed automatic high and medium velocity water spray system — Code of practice *(first revision)*
IS/ISO 7240 (in Parts)	Fire detection and alarm systems (in various Parts)
IS 16095:2013	Hazmat vehicle — Specification (on Hazardous Materials)
Various standard specifications relating to:	• Gaseous fire extinguishing systems • Fire extinguishers (portable & wheeled) • Monitors (for short & long range application of water and foam in various industries) • Smoke detectors • Hydrants • Fire fighting equipment like hose reel (& its accessories)
FIRE SAFETY	
IS 3614 : 2020	Specification for fire doors and doorsets *(first revision)* (under publication)
IS 15381:2020	Specification for fire blanket *(first revision)* (under publication)
IS/ISO 21927-1:2008	Smoke and heat control systems – Part 1: Specification for smoke barriers
Series of standards	Relating to various Industrial buildings and structures

** Currently under revision*

A-5 INDIAN STANDARDS ON SUSTAINABLE AND SMART HABITATS & COMMUNITIES

IS	Title
SP 7: 2016	National Building Code of India 2016 (Vol. 1 & 2)
IS 17000:2019	Sustainable development of habitats — Indicators
IS xxxxx:2020	Sustainable development of habitats — Vocabulary *(under publication)*
IS xxxxx:2020	Smart community infrastructure — Guidance on smart transportation for allocation of parking lots of cities *(under publication)*
IS xxxxx:2020	Smart community infrastructure — Best practices for transportation — Guidelines *(under publication)*
IS xxxxx:2020	Sustainable development of habitats — Indicators for resilient cities (Working Draft stage)

ANNEX B

INTERNATIONAL STANDARDS RELATING TO DISASTERS

UNDER ISO/TC 292 SECURITY AND RESILIENCE	
ISO	**Title**
ISO 22315:2014	Societal security — Mass evacuation — Guidelines for planning
ISO 22316:2017	Security and resilience — Organizational resilience — Principles and attributes
ISO 22319:2017	Security and resilience — Community resilience — Guidelines for planning the involvement of spontaneous volunteers
ISO 22320:2018	Security and resilience — Emergency management — Guidelines for incident management
ISO 22322:2015	Societal security — Emergency management — Guidelines for public warning
ISO 22324:2015	Societal security — Emergency management — Guidelines for colour-coded alerts
ISO 22325:2016	Security and resilience — Emergency management — Guidelines for capability assessment
ISO 22326:2018	Security and resilience — Emergency management — Guidelines for monitoring facilities with identified hazards
ISO 22327:2018	Security and resilience — Emergency management — Guidelines for implementation of a community-based landslide early warning system
ISO/TR 22351:2015	Societal security — Emergency management — Message structure for exchange of information
ISO/TR 22370:2020	Security and resilience — Urban resilience — Framework and principles
ISO 22395:2018	Security and resilience — Community resilience — Guidelines for supporting vulnerable persons in an emergency
ISO 22396:2020	Security and resilience — Community resilience — Guidelines for information exchange between organizations
ISO 22398:2013	Societal security — Guidelines for exercises
ISO 28002:2011	Security management systems for the supply chain — Development of resilience in the supply chain — Requirements with guidance for use
UNDER ISO/TC 262 RISK MANAGEMENT	
ISO 31000:2018	Risk management — Guidelines
ISO/TR 31004:2013	Risk management — Guidance for the implementation of ISO 31000
IEC 31010:2019	Risk management — Risk assessment techniques

NOTE: Information about various other standards published under above ISO Technical Committees may be accessed from: https://www.iso.org/committee/629121.html; https://www.iso.org/committee/5259148.html

STANDARDS FIRST

THE LIST OF INDIAN STANDARDS PUBLISHED/REVISED

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 11951 : 2016 Cold-Reduced Tinmill Products Blackplate (First Revision)	आईएस/ आईएसओ 11951:2016 कोल्ड-कम किए गए टिनमिल उत्पाद ब्लैकप्लेट (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	10 July 2018	10 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS/ISO 11951 : 1995 Cold Reduced Blackplate in Coil Form for the Production of Tinplate or Electrolytic Chromium /Chromium Oxide- Coated Steel	आईएस/आईएसओ 11951: 1995 कोल्ड फॉर्मेट में ब्लैकप्लेट कोल्ड फॉर्म टिनप्लेट या इलेक्ट्रोलाइटिक क्रोमियम/ क्रोमियम ऑक्साइड- लेपित स्टील के उत्पादन के लिए
Date Of Withdrawal रद्द होने की तिथि	9 Oct. 2018	9 अक्टूबर 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12591 : 2018/ ISO 11950 : 2016 Cold-Reduced Tinmill Products Electrolytic Chromium/Chromium Oxide Coated Steel (Second Revision)	आईएस 12591: 2018 / आईएसओ 11950: 2016 कोल्ड-कम किया गया टिनमिल उत्पाद इलेक्ट्रोलाइटिक क्रोमियम/ क्रोमियम ऑक्साइड लेपित इस्पात (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	10 July 2018	10 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 12591 : 2006/ISO 11950 : 1995 Cold-Reduced Electrolytic Chromium/Chromium Oxide– Coated Steel (First Revision)	आईएस 12591: 2006 : आईएसओ 11950: 1995 कोल्ड-रेडियेटेड इलेक्ट्रोलाइटिक क्रोमियम/क्रोमियम ऑक्साइड-लेपित स्टील (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	9 Oct. 2018	9 अक्टूबर 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16046 (Part 1) : 2018/ IEC 62133-1 : 2017 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Safety Requirements for Portable Sealed Secondary Cells and for Batteries Made from Them for Use in Portable Applications Part 1 Nickel Systems (Second Revision)	आईएस 16046 (भाग 1): 2018/ आईईसी 62133-1:2017 माध्यमिक सेल और बैटरी युक्त क्षारीय या अन्य गैर-एसिड इलेक्ट्रोलाइट्स पोर्टेबल सील माध्यमिक कोशिकाओं के लिए सुरक्षा आवश्यकताएं और पोर्टेबल अनुप्रयोगों में उपयोग के लिए उनसे बने बैटरियों के लिए भाग 1 निकल सिस्टम (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 16046 : 2015/ IEC 62133 : 2012 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Safety Requirements for Portable Sealed Secondary Cells and for Batteries Made from Them for Use in Portable Applications (First Revision)	आईएस 16046:2015 / आईईसी 62133: 2012 माध्यमिक सेल और बैटरियों में क्षारीय या अन्य गैर-एसिड इलेक्ट्रोलाइट्स सुरक्षा आवश्यकताओं पोर्टेबल मुहरबंद माध्यमिक कोशिकाओं के लिए और पोर्टेबल अनुप्रयोगों (पहले संशोधन) में उपयोग के लिए उन्हें से बनी बैटरियों के लिए
Date Of Withdrawal रद्द होने की तिथि	11 July 2019	11 जुलाई 2019

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16046 (Part 2) : 2018/IEC 62133- 2 : 2017 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Safety Requirements for Portable Sealed Secondary Cells and for Batteries Made from Them for Use in Portable Applications Part 2 Lithium Systems (Second Revision)	आईएस 16046 (भाग 2): 2018 / आईईसी 62133-2: 2017 माध्यमिक सेल और बैटरी युक्त क्षारीय या अन्य गैर-एसिड इलेक्ट्रोलाइट्स पोर्टेबल सील माध्यमिक कोशिकाओं के लिए सुरक्षा आवश्यकताएं और पोर्टेबल अनुप्रयोगों में उपयोग के लिए उनसे बने बैटरियों के लिए पार्ट 2 लिथियम सिस्टम (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 16046 : 2015/ IEC 62133 : 2012 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Safety Requirements for Portable Sealed Secondary Cells and for Batteries Made from Them for Use in Portable Applications (First Revision)	आईएस 16046:2015/ आईईसी 62133: 2012 माध्यमिक सेल और बैटरियों में क्षारीय या अन्य गैर-एसिड इलेक्ट्रोलाइट्स सुरक्षा आवश्यकताएं पोर्टेबल सील माध्यमिक कोशिकाओं के लिए सुरक्षा आवश्यकताएं और पोर्टेबल अनुप्रयोगों में उपयोग के लिए निर्मित बैटरियों के लिए (प्रथम संशोधन)
Date Of Withdrawal रद्द होने की तिथि	11 July 2019	11 जुलाई 2019
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16047 (Part 3) : 2018/ IEC 61960- 3 : 2017 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Secondary Lithium Cells and Batteries for Portable Applications Part 3 Prismatic and Cylindrical Lithium Secondary Cells, and Batteries Made From Them (First Revision)	आईएस 16047 (भाग 3): 2018 / आईईसी 61960-3: 2017 माध्यमिक कोशिकाओं और बैटरियों में अल्कलाइन या अन्य गैर-एसिड इलेक्ट्रोलाइ. ट्स युक्त माध्यमिक लिथियम कोशिकाएं और पोर्टेबल अनुप्रयोगों के लिए बैटरियां भाग 3 प्रिज्मीय और बेलनाकार लिथियम माध्यमिक कोशिकाएं, और बैटरियों से उन्हें (पहले संशोधन) बनाया गया है
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 16047 : 2012/ IEC 61960 : 2011 Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes Secondary Lithium Cells and Batteries for Portable Applications	आईएस 16047: 2012 / आईईसी 61960: 2011 माध्यमिक सेल और बैटरी क्षारीय या अन्य गैर-एसिड इलेक्ट्रोलाइट्स माध्यमिक लिथियम सेल और पोर्टेबल अनुप्रयोगों के लिए बैटरी युक्त
Date Of Withdrawal रद्द होने की तिथि	12 July 2018	12 जुलाई 2018

NEWS YOU CAN USE

MANAGEMENT SYSTEMS CERTIFICATION

During the month of November, 2019, 04 new licences were granted and 02 licences were cancelled/ expired, thereby bringing the number of operative licences to 1286 under the Management System Certification Schemes. As on 25 November 2019, 20 Integrated Management Certification for Hazard Analysis & Critical Control Points (HACCP) and Quality Management System were in operation. Besides, two standalone licences for HACCP were also in operation.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1893 (Part 4) : 2015 Criteria for Earthquake Resistant Design of Structures Part 4 Industrial Structures Including Stack-Like Structures (First Revision)	आईएस 1893 (भाग 4): 2015 संरचनाओं के भूकंप प्रतिरोधी डिजाइन के लिए मानदंड भाग 4 औद्योगिक संरचनाएं जिसमें रैक जैसी संरचनाएं शामिल हैं (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	12 July 2018	12 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 252 : 2013 Caustic Soda – Specification (Fourth Revision)	आईएस 252: 2013 कास्टिक सोडा – विशिष्टता (चौथा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	11 Oct. 2018	11 अक्टूबर 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1397 : 1990 Kraft Paper – Specification (Second Revision)	आईएस 1397: 1990 क्राफ्ट पेपर – विशिष्टता (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 4 July 2018	संशोधन संख्या 4 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	12 July 2018	12 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13213 : 2018 Polyurethane Full Gloss Enamel (Two Pack) – Specification (First Revision)	आईएस 13213: 2018 पॉलीयूरेथेन पूर्ण ग्लोस ताम. चीनी (दो पैक) – विशिष्टता (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 1 July 2018	संशोधन नंबर 1 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 Oct. 2018	24 अक्टूबर 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 2061 : 1995 Bicycles – Front Forks – Specification (First Revision)	आईएस 2061: 1995 साइकिलें – फ्रंट फोर्क्स – स्पेसिफिकेशन (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	10 July 2018	10 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	9 Oct. 2018	9 अक्टूबर 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12640 (Part 1) : 2016/IEC 61008-1 : 2012 Residual Current Operated Circuit-Breakers Without Integral Overcurrent Protection for Household and Similar Uses (RCCBs) Part 1 General Rules (Second Revision)	आईएस 12640 (भाग 1): 2016 / आईईसी 61008-1: 2012 अवशिष्ट वर्तमान परिचालित सर्किट-घरेलू और समान उपयोगों ($I_{\Delta n}$) के लिए अभिन्न वअमतबनततमदज संरक्षण के बिना ब्रेकर भाग 1 सामान्य नियम (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	10 July 2018	10 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 4 July 2018	संशोधन नंबर 4 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	10 July 2018	10 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12640 (Part 2) : 2016/IEC 61009-1 : 2012 Residual Current Operated Circuit-Breakers With Integral Overcurrent Protection for Household and Similar Uses (RCBOs) Part 2 General Rules (Second Revision)	आईएस 12640 (भाग 2): 2016 / आईईसी 61009-1: 2012 अवशिष्ट वर्तमान परिचालित सर्किट-ब्रेकर्स के साथ घरेलू और समान उपयोगों के लिए अभिन्न सुरक्षा (आरसीबीओ) भाग 2 सामान्य नियम (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	30 Oct. 2018	30 अक्टूबर 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12640 (Part 2) : 2016/IEC 61009-1 : 2012 Residual Current Operated Circuit-Breakers With Integral Overcurrent Protection for Household and Similar Uses (RCBOs) Part 2 General Rules (Second Revision)	आईएस 12640 (भाग 2): 2016 2 आईईसी 61009-1: 2012 अवशिष्ट वर्तमान परिचालित सर्किट-ब्रेकर्स के साथ घरेलू और समान उपयोगों के लिए अभिन्न सुरक्षा आरसीबीओ) भाग 2 सामान्य नियम (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	12 July 2018	12 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 3 July 2018	संशोधन संख्या 3 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	12 July 2018	12 जुलाई 2018
No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 17018 (Part 1) : 2018 Solar Photovoltaic Water Pumping Systems Part 1 Centrifugal Pumps – Specification	आईएस 17018 (भाग 1): 2018 सौर फोटोवोल्टिक जल पम्पिंग सिस्टम भाग 1 केन्द्रापसारक पंप्स – विशिष्टता
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1459 : 2018 Kerosene – Specification (Fourth Revision)	आईएस 1459: 2018 केरोसिन – विशिष्टता (चौथा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 1459 : 2016 Kerosene – Specification (Third Revision)	आईएस 1459: 2016 केरोसिन – विशिष्टता (तीसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16833 : 2018 Automotive Tracking Device (ATD) and Intgrated Systems	आईएस 16833: 2018 ऑटोमोटिव ट्रैकिंग डिवाइस (एटीडी) और इंट्ग्रेटेड सिस्टम्स
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 17017(Part 1) : 2018 Electric Vehicle Conductive Charging System Part 1 General Requirements	आईएस 17017 (भाग 1): 2018 इलेक्ट्रिक वाहन चालकता चार्जिंग सिस्टम भाग 1 सामान्य आवश्यकताएँ
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

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During the month of November 2019, 317 new certification licences were granted, 191 expired and 11 were cancelled, thereby bringing the number of operative licences to 36068. As on November 25, 2019, total number of Standards covered under Product certification was 961. During the month, 522 surveillance inspections were carried out. In addition, 479 inspections took place for clearing lots of LPG, CNG & Industrial Gas Cylinders/ Valves/ Regulators and 147 other inspections like Resumption of marking, Inclusion by factory testing, shifting of premises, etc.

No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 17021 : 2018 E 20 Fuel – Admixture of Anhydrous Ethanol and Gasoline – As Fuel for Spark Ignited Engine Powered Vehicles – Specification	आईएस 17021: 2018 ई 20 ईंधन – निर्जल इथेनॉल और गैसोलीन का मिश्रण – स्पार्क प्रज्वलित इंजन संचालित वाहनों के लिए ईंधन के रुप में – विशिष्टता
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No., Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 582 (Part 6/Sec 2) : 2018/ISO 17072-2 : 2011 Methods of Chemical Testing of Leather Part 6 Determination of Metal Content Section 2 Total Metal Content	आईएस 582 (भाग6/ सेक 2): :2018/ आईएसओ17072-2:2011 चमड़े के भाग के रासायनिक परीक्षण के तरीके ६ धातु सामग्री का निर्धारण धारा २ कुल धातु सामग्री
Date of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 826 : 2018 Ammonium Sulphate, Fertilizer Grade – Specification (Third Revision)	आईएस 826: 2018 अमो. नियम सल्फेट, उर्वरक ग्रेड – विशिष्टता (तीसरा संशोधन)
Date of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 826 : 1980 Specification for Ammonium Sulphate, Fertilizer Grade (Second Revision)	आईएस 826: 1980 अमोनियम सल्फेट, उर्वरक ग्रेड (दूसरा संशोधन) के लिए विशिष्टता
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1367 (Part 6) : 2018/ISO 898-2 : 2012 Technical Supply Conditions for Threaded Steel Fasteners Part 6 Mechanical Properties of Fasteners Made of Carbon Steel and Alloy Steel – Nuts with Specified Property Classes – Coarse Thread and Fine Pitch Thread (Fourth Revision)	आईएस 1367 (भाग 6): 2018/आईएसओ 898-2: 2012 ग्रेडेड स्टील फास्टनरों के लिए तकनीकी आपूर्ति की स्थिति भाग 6 कार्बन स्टील और मिश्र धातु इस्पात से बने फास्टनरों के यांत्रिक गुणों – निर्दिष्ट संपत्ति वर्गों के साथ पागल – मोटे धागे और ठीक छेद वाला धागा (चौथा) संशोधन)
Date of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 1367 (Part 6) : 1994/ISO 898-2 : 1992 Technical Supply Conditions for Threaded Steel Fasteners Part 6 Mechanical Properties and test methods for Nuts with Specified Proof Loads (Third Revision) IS 13096 : 2000/ISO 898-6 : 1994 Fasteners – Hexagon Nuts with Specified Proof Load Values – Fine Pitch Thread – Mechanical Properties (First Revision)	आईएस 1367 (भाग 6): 1994/आईएसओ 898-2: 1992 ग्रेडेड स्टील फास्टनरों के लिए तकनीकी आपूर्ति की स्थिति भाग 6 यांत्रिक गुणों और निर्दिष्ट प्रूफ भार (तीसरे संशोधन) के साथ पागल के लिए परीक्षण के तरीके आईएस 13096: 2000 / आईएसओ 898-6: 1994 फास्टनरों – निर्दिष्ट सबूत लोड मानों के साथ हेक्सागोन पागल – ठीक पिच धागा – यांत्रिक गुण (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title of the Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1885 (Part 84) : 2018/IEC 60695-4 : 2012 Electrotechnical Vocabulary Part 84 Terminology Concerning Fire Tests for Electrotechnical Products (Second Revision)	आईएस 1885 (भाग 84): 2018/आईईसी 60695-4: 2012 इलेक्ट्रोटेक्निकल वोकैब्लरी पार्ट 84 टर्मिनोलॉजी कंज्यूमिंग फायर टेस्ट फॉर इलेक्ट्रोटेक्निकल प्रोडक्ट्स (दूसरा संशोधन)
Date of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 1885 (Part 84) : 2008/IEC 60695-4 : 2005 Electrotechnical Vocabulary Part 84 Terminology Concerning Fire Tests for Electrotechnical Products (First Revision)	आईएस 1885 (भाग 84): 2008/आईईसी 60695-4: 2005 इलेक्ट्रोटेक्निकल वोकैब्युलरी पार्ट 84 टर्मिनोलॉजी कंज्यूमिंग फायर टेस्ट फॉर इलेक्ट्रोटेक्निकल प्रोडक्ट्स (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 3025 (Part 6) : 2018 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water Part 6 Odour Threshold (Second Revision)	आईएस 3025 (भाग 6): 2018 पानी और अपशिष्ट जल के लिए नमूना और परीक्षण (भौतिक और रासायनिक) के तरीके 6 गंध थ्रेशोल्ड (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 3025 (Part 6) : 1983 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water Part 6 Odour Threshold (First Revision)	आईएस 1885 (भाग 84): 2008/आईईसी 60695-4: 2005 इलेक्ट्रोटेक्निकल वोकैब्युलरी पार्ट 84 टर्मिनोलॉजी कंज्यूमिंग फायर टेस्ट फॉर इलेक्ट्रोटेक्निकल प्रोडक्ट्स (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 3649 : 2018 Automotive Vehicles – Clutch Facing for Automotive Transmission – Specification (First Revision)	आईएस 3649: 2018 ऑटोमोटिव वाहन – ऑटोमोटिव ट्रांसमिशन के लिए क्लच फेसिंग – विशिष्टता (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 3649 : 1966 Specification for Clutch Facing for Automotive Transmission	आईएस 3649: 1966 ऑटोमोटिव ट्रांसमिशन के लिए क्लच फेसिंग के लिए विशिष्टता
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 3708 (Part 5) : 2018/ISO 127 : 2012 Methods of Test for Natural Rubber Latex Part 5 Determination of KOH Number (Third Revision)	आईएस 3708 (भाग 5): 2018/आईएसओ 127: 2012 प्राकृतिक रबर लेटेक्स भाग 5 के परीक्षण के तरीके केओएच संख्या का निर्धारण (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 3708 (Part 5) : 2005/ISO 127 : 1995 Methods of Test for Natural Rubber Latex Part 5 Determination of KOH Number (Second Revision)	आईएस 3708 (भाग 5): 2005/आईएसओ 127: 1995 प्राकृतिक रबर लेटेक्स के लिए परीक्षण के तरीके भाग 5 केओएच नंबर का निर्धारण (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4011 : 2018 Methods of Test for Safety Evaluation of Cosmetics (Third Revision)	आईएस 4011: 2018 सौंदर्य प्रसाधनों के सुरक्षा मूल्यांकन के लिए परीक्षण के तरीके (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 4011 : 1997 Methods of Test for Safety Evaluation of Cosmetics (Second Revision)	आईएस 4011: 1997 सौंदर्य प्रसाधनों के सुरक्षा मूल्यांकन के लिए टेस्ट के तरीके (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 5062 (Part 5) : 2018/ISO 1017 : 2006 Methods of Test for Brown Coals and Lignites Part 5 Determination of Acetone-Soluble Material (Resinous Substance) in the Benzene-Soluble Extract (Second Revision)	आईएस 5062 (भाग 5): 2018/आईएसओ 1017: 2006 ब्राउन कोल और लिग्नाइट के लिए परीक्षण के तरीके भाग 5 बेंजीन-घुलनशील निकालने (दूसरा संशोधन) में एसीटोन-घुलनशील सामग्री (राल पदार्थ) का निर्धारण
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 5062 (Part 5) : 2004/ISO 1017 : 1985 Methods of Test for Brown Coals and Lignites Part 5 Determination of Acetone-Soluble Material (Resinous Substance) in the Benzene-Soluble Extract (First Revision)	आईएस 5062 (भाग 5): 2004/आईएसओ 1017: 1985 ब्राउन कोल और लिग्नाइट के लिए परीक्षण के तरीके भाग 5 बेंजीन-घुलनशील निकालने (प्रथम संशोधन) में एसीटोन-घुलनशील सामग्री (राल पदार्थ) का निर्धारण
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 6101 : 2018/ISO 1580 : 2011 Slotted Pan Head Screws – Product Grade A (Third Revision)	आईएस 6101: 2018/ आईएसओ 1580: 2011 स्लेटेड पैन हेड स्क्रू – उत्पाद ग्रेड ए (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 6101 : 2005/ISO 1580 : 1994 Slotted Pan Head Screws – Product Grade A (Second Revision)	आईएस 6101: 2005/ आईएसओ 1580: 1994 स्लोटेड पैन हेड स्क्रू – उत्पाद ग्रेड ए (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 6661 : 2018 Potassium Schoenite – Specification (First revision)	आईएस 6661: 2018 पोटेशियम स्कोनाइट – विशिष्टता (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 6661 : 1972 Specification for Potassium Schoenite	आईएस 6661: 1972 पोटेशियम स्कोनाइट के लिए विशिष्टता
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10052 (Part 2/Sec 1) : 2018/CISPR 16-2-1 : 2014 Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods Part 2 Methods of Measurements of Disturbances and Immunity Section 1 Conducted Disturbance Measurements (Second Revision)	आईएस 10052 (भाग 2 / सेक 1): 2018 / सीआईपी. आर 16-2-1: 2014 रेडियो गड़बड़ी और प्रतिरक्षा मापने के लिए विशिष्टता उपकरण और तरीके भाग 2 गड़बड़ी और प्रतिरक्षा के माप के तरीके खंड /संचालित गड़बड़ी माप (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 10052 (Part 2) : 1999/CISPR 16-2 : 1996 Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods Part 2 Methods of Measurements of	आईएस 10052 (भाग 2): 1999/सीआईपीआर 16-2: 1996 रेडियो गड़बड़ी और प्रतिरक्षा माप उपकरणों और तरीकों के लिए विशिष्टता भाग 2 की माप के तरीके
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 13273-1 : 2015 Energy Efficiency and Renewable Energy Sources – Common International Terminology Part 1 Energy Efficiency	आईएस/आईएसओ/आईईसी 13273-1: 2015 ऊर्जा दक्षता और नवीकरणीय ऊर्जा स्रोत – सामान्य अंतर्राष्ट्रीय शब्दावली भाग 1 ऊर्जा दक्षता
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 13273-2 : 2015 Energy Efficiency and Renewable Energy Sources – Common International Terminology Part 2 Renewable Energy Sources	आईएस/आईएसओ/आईईसी 13273-2: 2015 ऊर्जा दक्षता और नवीकरणीय ऊर्जा स्रोत – सामान्य अंतर्राष्ट्रीय शब्दावली भाग 2 नवीकरणीय ऊर्जा स्रोत
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

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STANDARDIZATION

During the month of November 2019, 23 sectional committee meetings were held and 39 new standards were formulated and 32 standards were revised. Besides, 83 draft standards were issued for wide circulation and 33 draft standards were finalized. During the month, 155 standards were reviewed and 155 standards were reaffirmed. As on 25 November 2019, 20,591 standards were in force.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	S 13360 (Part 6/Sec 24) : 2018/ISO 9772 : 2012 Plastic – Method of Testing Part 6 Thermal Properties Section 24 Cellular Plastics – Determination of Horizontal Burning Characteristics of Small Specimens Subjected to a small flame of cellular Plastic	आईएस 13360 (भाग 6 / सेक 24): 2018 / आईएसओ 9772: 2012 प्लास्टिक – परीक्षण का तरीका भाग 6 तापीय गुण धारा 24 सेलुलर प्लास्टिक – छोटे नमूनों की क्षैतिज जलती हुई विशेषताओं का निर्धारण सेलुलर प्लास्टिक की एक छोटी सी लौ के लिए इंजेक्शन
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/TS 14441 : 2013 Health Informatics – Security and Privacy Requirements of HER Systems for Use in Conformity Assessment	आईएस/ आईएसओ /टीएस 14441:2013 स्वास्थ्य सूचना विज्ञान – सुरक्षा और गोपनीयता आवश्यकताएं एचआरई सिस्टम के उपयोग के लिए अनरुपता मूल्यांकन
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15039 : 2018/CISPR 24 : 2010 Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement (First Revision)	आईएस 15039: 2018 / सीआईएसपीआर 24: 2010 सूचना प्रौद्योगिकी उपकरण – प्रतिरक्षा विशेषताएँ – माप की सीमाएँ और तरीके (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15039 : 2001/CISPR 24 : 1997 Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement	आईएस 15039: 2001/ सीआईएसपीआर 24: 1997 सूचना प्रौद्योगिकी उपकरण – प्रतिरक्षा विशेषताएँ – सीमाएँ और मापन के तरीके
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16707 : 2018 Carbosulfan Granules – Specification	आईएस 16707: 2018 कार्बोसल्फान ग्रैन्यूल – विशिष्टता
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16788 : 2018/ISO/ TR 13028 : 2010 Information and Documentation – Implementation Guidelines for Digitization of Records	आईएस 16788: 2018/ आईएसओ/टीआर 13028: 2010 सूचना और प्रलेखन – रिकॉर्ड्स के डिजिटलीकरण के लिए कार्यान्वयन दिशानिर्देश
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16789 : 2018/ ISO 13008 : 2012 Information and Documentation – Digital Records Conversion and Migration Process	आईएस 16789: 2018/ आईएसओ 13008: 2012 सूचना और प्रलेखन – डिजिटल रिकॉर्ड :पांतरण और प्रवासन प्रक्रिया
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16981 : 2018/ISO/TS 16179 : 2012 Footwear – Critical Substances Potentially Present in Footwear and Footwear Components – Determination of Organotin Compounds in Footwear Materials	आईएस 16981: 2018/ आईएसओ/टीएस 16179: 2012 जूते – महत्वपूर्ण पदार्थ जूते और जूते घटकों में संभावित रुप से मौजूद हैं – जूते सामग्री में ऑर्गोटिन यौगिकों का निर्धारण
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16991 : 2018/ISO/TS 16186 : 2012 Footwear – Critical Substances Potentially Present in Footwear and Footwear Components – Test Method to Quantitatively Determine Dimethyl Fumarate (DMFU) in Footwear Materials	आईएस 16991: 2018/ आईएसओ/टीएस 16186: 2012 जूते – जूते और जूते घटकों में महत्वपूर्ण पदार्थ संभावित :प से मौजूद हैं – जूते की सामग्री में मात्रात्मक रुप से निर्धारित डाइमेथाइल फ्यूमरेट (डीएमएफयू) के लिए टेस्ट विधि
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 17006 : 2018/ISO 24521 : 2016 Activities Relating to Drinking Water and Wastewater Services – Guidelines for the Management of Basic On-Site Domestic Wastewater Services	आईएस 17006:2018/ आईएसओ 24521:2016 पेयजल और अपशिष्ट जल सेवाओं से संबंधित गतिविधियाँ – मूल ऑनसाइट घरेलू अपशिष्ट जल सेवाओं के प्रबंधन के लिए दिशानिर्देश
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC/TR 29163-1 : 2009 Information Technology – Sharable Content Object Reference Model (SCORM®) 2004 3rd Edition Part 1 Overview Version 1.1	आईएस / आईएसओ / आईईसी / टीआर 29163-1: 2009 सूचना प्रौद्योगिकी – साझा करने योग्य विषय वस्तु संदर्भ मॉडल एससीआरएमें) 2004 तीसरा संस्करण भाग 1 अवलोकन संस्करण 1.1
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC/IEEE 60079-30-1 : 2015 Explosive Atmospheres Part 30 Electrical Resistance Trace Heating Section 1 General and Testing Requirements (First revision)	आईएस/आईईसी/आईईईई 60079-30-1: 2015 विस्फोटक वायुमंडल भाग 30 विद्युत प्रतिरोध ट्रेस ताप धारा 1 सामान्य और परीक्षण आवश्यकताएँ (प्रथम संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS/IEC/IEEE 60079-30-1 : 2007 Explosive Atmospheres Part 30 Electrical Resistance Trace Heating Section 1 General and Testing Requirements	आईएस/आईईसी/आईईईई 60079-30-1: 2007 विस्फोटक वायुमंडल भाग 30 विद्युत प्रतिरोध ट्रेस ताप धारा 1 सामान्य और परीक्षण आवश्यकताएँ
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60079-31 : 2013 Explosive Atmospheres Part 31 Equipment Dust Ignition Protection by Enclosure "t" (First Revision)	आईएस/आईईसी 60079-31: 2013 विस्फोटक वायुमंडल भाग 31 उपकरण डस्ट इग्निशन प्रोटेक्शन इनक्लोजर "टी" (प्रथम संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS/IEC 60079-31 : 2008 Explosive Atmospheres Part 31 Equipment Dust Ignition Protection by Enclosure "t"	आईएस/आईईसी 60079-31: 2008 विस्फोटक वायुमंडल भाग 31 उपकरण धूल प्रज्वलन संरक्षण द्वारा संलग्नक "टी"
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 60794-3-21 : 2015 Optical Fibre Cables Part 3 Outdoor Cables Section 21 Product Specification for Optical Self-Supporting Aerial Telecommunication Cables for Use in Permises Cablimg	आईएस/आईईसी 60794-3-21:2015 ऑप्टिकल फाइबर केबल भाग 3 आउटडोर केबल अनुभाग 21 उत्पाद स्वयं के लिए ऑप्टिकल सपोर्टिंग एरियल टेलीकम्यु. निकेशन केबल्स की अनुमति के लिए उत्पाद की अनुमति
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 7532 : 2018 Soft Soap – Specification (First Revision)	आईएस 7532: 2018 सॉफ्ट साबुन – विशिष्टता (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 7532 : 1974 Specification for Soft Soap	आईएस 7532: 1974 सॉफ्ट साबुन के लिए विशिष्टता
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 617 : 1994 Aluminium and Aluminium Alloy Ingots and Casting for General Engineering Purposes	आईएस617:1994 एल्युमिनियम और एल्युमिनियम अलॉय इनगॉट्स और जनरल इंजीनियरिंग पर्पस के लिए कास्टिंग
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 733 : 1983 Specification for Wrought Almunium and Aluminium Alloy Bars, Rods and Sections (For General Engineering Purposes) (Third Revision)	आईएस 733: 1983 गढ़ा अल्मुनियम और एल्यूमीनियम मिश्र धातु बार, छड़ और अनुभाग (सामान्य इंजीनियरिंग प्रयोजनों के लिए) (तीसरा संशोधन) के लिए विशिष्टता
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16459 : 2016/ISO 17557 : 2003 Plastics – Film and Sheeting – Cast Polypropylene (PP) Films	आईएस 16459: 2016 / आईएसओ 17557: 2003 प्लास्टिक – फिल्म और शीटिंग – कास्ट पॉलीप्रोपाइलीन (पीपी) फिल्म्स
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 1 July 2018	संशोधन नंबर 1 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16460 : 2016/ISO 17555 : 2003 Plastics – Biaxially Oriented Polypropylene (PP) Films	आईएस 16460: 2016 / आईएसओ 17555: 2003 प्लास्टिक – बाईऐक्सइयली ओरिएंटेड पॉलीप्रोपाइलीन (पीपी) फिल्म्स
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 1 July 2018	संशोधन नंबर 1 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 1303 : 1983 Glossary of Terms Relating to Paints (Second Revision)	आईएस 1303: 1983 पेंट्स से संबंधित शब्दावली की शब्दावली (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No.1 July 2018	संशोधन नंबर 1 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4707 (Part 2) : 2017 Classification for Cosmetic Raw Materials and Adjuncts Part 2 List of Raw Materials Generally not Recognized as Safe for Use in Cosmetics (Fourth Revision)	आईएस 4707 (भाग २): 2017 च्वज कॉस्मेटिक कच्चे माल और सहायक उपकरण के लिए वर्गीकरण भाग 2 कच्चे माल की सूची आमतौर पर सौंदर्य प्रसाधन में उपयोग के लिए सुरक्षित के रूप में मान्यता प्राप्त नहीं है (चौथा संशोधन)
Date Of Establishment जारी करने की तिथि	24 July 2018	24 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 3 July 2018	संशोधन संख्या 3 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	24 July 2018	24 जुलाई 2018

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PLENARY MEET

I36th Plenary meeting of ISO/IEC JTC 1 'Information Technology was held on November 03, 2019 at IHC, New Delhi. An update on all the work done by subcommittees of JTC 1 was discussed at the meeting, attended by BIS officials. Emerging technologies like quantum computing, digital twin, digital manufacturing and the security, privacy and ethical aspects of these technologies were also part of the discussions.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 6911 : 2017 Stainless Steel Plate, Sheet and Strip – Specification (Second Revision)	आईएस 6911: 2017 स्टेनलेस स्टील प्लेट, शीट और पट्टी – विशिष्टता (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	Amendment No. 2 July 2018	संशोधन संख्या 2 जुलाई 2018
Date Of Withdrawal रद्द होने की तिथि	27 Oct. 2018	27 अक्टूबर 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 582 (Part 8) : 2018/ ISO 13365 : 2011 Methods of Chemical Testing of Leather Part 8 Determination of the Preservative (TCMTB, PCMC, OPP, OIT) Content in Leather by Liquid Chromatography	आईएस 582 (भाग 8): 2018 / आईएसओ 13365: 2011 चमड़ा भाग 8 के रासायनिक परीक्षण के तरीके परिरक्षक (टीसीएमटीबी, पीसीएमसी, ओपीपी, ओआईटी) तरल क्रोमैटोग्राफी द्वारा चमड़े में सामग्री का निर्धारण
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 2328 : 2018/ISO 8492 : 2013 Metallic Materials – Tube – Flattening Test (Third Revision)	आईएस 2328:2018/ आईएसओ 8492:2013 धातु सामग्री – ट्यूब – चपटे परीक्षण (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 2328 : 2005/ISO 8492 : 1998 Metallic Materials – Tube – Flattening Test (Second Revision)	आईएस2328:2005/आईएसओ 8492:1998 धातु सामग्री – ट्यूब – समतल परीक्षण (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4258 : 2018/ISO 18265 : 2013 Metallic Materials – Conversion of Hardness Values (Third Revision)	आईएस 4258: 2018 / आईएसओ 18265: 2013 धातु सामग्री – कठोरता मूल्यों का रुपांतरण (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 4258 : 2011/ ISO 18265 : 2003 Metallic Materials – Conversion of Hardness Values (Second Revision)	आईएस 4258:2011 / आईएसओ18265:2003 धातु सामग्री – कठोरता मूल्यों का रुपांतरण (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10068 (Part 1) : 2018 Press Working Die Sets (Plain Type) – Specification Part 1 Centre Post Rectangular Die Sets (First Revision)	आईएस 10068 (भाग 1): 2018 प्रेस वर्किंग डाई सेट्स (सादा प्रकार) – विशिष्टता भाग 1 केंद्र पोस्ट आयताकार डाई सेट्स (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 10068 (Part 1) : 1982 Specification for Press Working Die Sets (Plain Type) Part 1 Centre Post Rectangular Die Sets	आईएस 10068 (भाग 1): 1982 प्रेस वर्किंग डाई सेट्स (सादे प्रकार) के लिए विशिष्टता भाग 1 केंद्र पोस्ट आयताकार डाई सेट्स
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

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REGISTRATION SCHEME

During the month of November 2019, 405 new registrations of Electronics & Information Technology products had been made under the scheme. By November end, BIS had made 20583 registrations under the BIS registration scheme covering different product categories.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 10373-6 : 2016 Identification Cards – Test Methods Part 6 Proximity Cards	आईएस/ आईएसओ/ आईईसी 10373-6: 2016 पहचान पत्र - टेस्ट तरीके भाग 6 निकटता कार्ड
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO/IEC 10536-1 : 2000 Identification Cards – Contactless Integrated Circuits(s) Cards – Close-Coupled Cards Part 1 Physical Characteristics	आईएस/ आईएसओ/ आईईसी 10536-1: 2000 पहचान पत्र - संपर्क रहित एकीकृत सर्किट (कार्ड) - क्लोज-कपल्ड कार्ड भाग 1 भौतिक अभिलक्षण
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 11917 : 2018/ISO 8968-1 : 2014 Milk and Milk Products – Determination of Nitrogen Content – Kjeldahl Principle and Crude Protein Calculation (First Revision)	आईएस 11917: 2018 / आईएसओ 8968-1: 2014 दूध और दूध उत्पाद - नाइट्रोजन सामग्री का निर्धारण - कजदाहल सिद्धांत और क्रूड प्रोटीन गणना (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 11917 : 1987/ISO 5549 : 1978 Method for Determination of Protein content in Caseins and Caseinates (Reference Method)	आईएस 11917: 1987 / आईएसओ 5549: 1978 मामलों और मामलों में प्रोटीन सामग्री के निर्धारण के लिए विधि (संदर्भ विधि)
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12114 (Part 1) : 2018/ ISO 3160- 1 : 1998 Watch-Cases and Accessories – Gold Alloy Coverings Part 1 General Requirements (First Revision)	आईएस 12114 (भाग 1): 2018 / आईएसओ 3160-1: 1998 वॉच-केस और एक्सेसरीज - गोल्ड मिश्र धातु आवरण भाग 1 सामान्य आवश्यकताएँ (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 12114 (Part 1) : 1987 Specification for Gold Alloy Coverings on Watch-Cases and Their Accessories Part 1 General Requirements	आईएस 12114 (भाग 1): 1987 वॉच-केस और उनके सहायक उपकरण भाग 1 सामान्य आवश्यकताओं पर गोल्ड मिश्र धातु आवरण के लिए विशिष्टता
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12114 (Part 2) : 2018/ ISO 3160- 2 : 2015 Watch-Cases and Accessories – Gold Alloy Coverings Part 2 Determination of Fineness, Thickness, Corrosion Resistance and Adhesion (First Revision)	आईएस 12114 (भाग २): 2018आईएसओ 3160-2:2015 वॉच-केसेस एंड एक्सेसरीज - गोल्ड एलॉय कवरिंग भाग २ निर्धारण, मोटाई, संक्षारण प्रतिरोध और आसंजन का निर्धारण (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 12114 (Part 2) : 1987 Specification for Gold Alloy Coverings on Watch-Cases and Their Accessories Part 2 Determination of Fineness, Thickness, Corrosion Resistance and Adhesion	आईएस 12114 (भाग 2): 1987 वॉच-केस और उनके सहायक उपकरण भाग 2 पर गोल्ड मिश्र धातु आवरण के लिए विशिष्टता, मोटाई, संक्षारण प्रतिरोध और आसंजन का निर्धारण
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13834 (Part 1) : 2018/ ISO 4301- 1 : 2016 Cranes – Classification Part 1 General (First Revision)	आईएस 13834 (भाग 1): 2018/आईएसओ 4301- 1: 2016 क्रेन - वर्गीकरण भाग 1 सामान्य (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 13834 (Part 1) : 1994/ ISO 4301-1 : 1986 Cranes – Classification Part 1 General	आईएस 13834 (भाग 1): 1994/आईएसओ 4301-1: 1986 क्रेन - वर्गीकरण भाग 1 सामान्य
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 14258 : 2018/ISO 8424 : 1996 Raw Optical Glass – Testing of the Resistance to Attack by Aqueous Acidic Solutions at 25°C and Classification (First Revision)	आईएस 14258: 2018/ आईएसओ 8424: 1996 रॉ ऑप्टिकल ग्लास - 25 डिग्री सेल्सियस और वर्गीकरण (प्रथम संशोधन) पर जलीय अम्लीय समाधान द्वारा हमले के प्रतिरोध का परीक्षण
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 14258 : 1995/ISO 8424 : 1987 Raw Optical Glass – Testing of the Resistance to Attack by Aqueous Acidic Solutions at 25°C and Classification	आईएस 14258: 1995/ आईएसओ 8424: 1987 रॉ ऑप्टिकल ग्लास - 25 डिग्री सेल्सियस और वर्गीकरण में जलीय अम्लीय समाधान द्वारा हमले के प्रतिरोध का परीक्षण
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 14536 : 2018 Selection, Installation, Operation and Maintenance of Submersible Pumpset – Code of Practice (First Revision)	आईएस 14536: 2018 सबमर्सिबल पंपसेट का चयन, स्थापना, संचालन और रखरखाव - व्यवहार संहिता (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 14536 : 1998 Selection, Installation, Operation and Maintenance of Submersible Pumpset – Code of Practice	आईएस 14536: 1998 चयन, स्थापना, संचालन और रखरखाव सबमर्सिबल पंपसेट - अभ्यास संहिता
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15257 : 2018/ISO 1503 : 2008 Spatial Orientation and Direction of Movement – Ergonomics Requirements (First Revision)	आईएस 15257: 2018/ आईएसओ 1503: 2008 स्थानिक अभिविन्यास और आंदोलन की दिशा - एर्गोनामिक्स आवश्यकताएँ (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15257 : 2002/ ISO 1503 : 1977 Geomatrical Orientation and Direction of Movements	आईएस 15257: 2002/ आईएसओ 1503: 1977 जियोमेट्रिक ओरिएंटेशन एंड मूवमेंट ऑफ मूवमेंट्स
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं श्शीर्षक	IS 15424 (Part 1) : 2018/ ISO 9182- 1 : 2013 Tools for Pressing – Guide Pillars Part 1 Types (First Revision)	आईएस 15424 (भाग 1): 2018/आईएसओ 9182-1: 2013 दबाने के लिए उपकरण - गाइड स्तंभ भाग 1 प्रकार (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15424 (Part 1) : 2004/ ISO 9182-1 : 1992 Tools for Pressing – Guide Pillars Part 1 Types	आईएस 15424 (भाग 1): 2004/आईएसओ 9182-1: 1992 टूल्स फॉर प्रेसिंग - गाइड पिलर्स भाग 1 प्रकार
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15424 (Part 4) : 2018/ ISO 9182- 4 : 2013 Tools for Pressing – Guide Pillars Part 4 Type C, Pillars with Taper Lead and Bush (First Revision)	आईएस 15424 (भाग 4): 2018/आईएसओ 9182-4: 2013 दबाने के लिए उप. करण - गाइड खंभे भाग 4 प्रकार सी, टेपर लीड और बुश के साथ स्तंभ (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15424 (Part 4) : 2004/ISO 9182-4 : 1992 Tools for Pressing – Guide Pillars Part 4 Type C, Pillars with Taper Lead and Bush	आईएस 15424 (भाग 4): 2004/आईएसओ 9182-4: 1992 प्रेसिंग के लिए उपकरण - गाइड स्तंभ भाग 4 प्रकार सी, स्तंभ लीड के साथ और बुश
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15424 (Part 5) : 2018/ISO 9182- 5 : 2013 Tools for Pressing – Guide Pillars Part 5 Type D, End-Locking Pillars with Flange (First Revision)	आईएस 15424 (भाग 5): 2018/आईएसओ 9182-5: 2013 दबाने के लिए उपकरण - गाइड स्तंभ भाग 5 प्रकार डी, निकला हुआ किनारा (प्रथम संशोधन) के साथ अंत-ताला स्तंभ
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15424 (Part 5) : 2004/ISO 9182-5 : 1992 Tools for Pressing – Guide Pillars Part 5 Type D, End-Locking Pillars with Flange	आईएस 15424 (भाग 5): 2004/आईएसओ 9182-5: 1992 टूल्स फॉर प्रेसिंग - गाइड पिलर्स पार्ट 5 टाइप डी, एंड-लॉकिंग पिलर्स विथ फ्लेंगे
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15448 (Part 4) : 2018/ ISO 9448- 4 : 2013 Tools for Pressing – Guide Bushes Part 4 Form C, Gliding Bushes, Headed, Type 1 (First Revision)	आईएस 15448 आईएसओ (भाग 4): 2018 आईएसओ 9448-4:2013 टूल फॉर प्रेसिंग - गाइड बुश पार्ट 4 फॉर्म सी, ग्लाइडिंग बुश, हेडेड, टाइप 1 (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15448 (Part 4) : 2004/ISO 9448-4 : 1991 Tools for Pressing – Guide Bushes Part 4 Form C, Gliding Bushes, Headed, Type 1	आईएस 15448 (भाग 4): 2004 / आईएसओ 9448-4: 1991 प्रेसिंग के लिए टूल्स - गाइड बुश पार्ट 4 फॉर्म सी, ग्लाइडिंग बुश, हेडेड, टाइप 1
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15448 (Part 7) : 2018/ ISO 9448- 7 : 2013 Tools for Pressing – Guide Bushes Part 7 Form F, Ball Cage Bushes, Flanged, Type 1 (First Revision)	आईएस 15448 (भाग 7): 2018/आईएसओ 9448-7: 2013 प्रेस करने के लिए उपकरण - गाइड बुश भाग 7 फॉर्म एफ, बॉल केज बुश, फ्लांग्ड, टाइप 1 (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15448 (Part 7) : 2004/ISO 9448-7 : 1991 Tools for Pressing – Guide Bushes Part 7 Form F, Ball Cage Bushes, Flanged, Type 1	आईएस 15448 (भाग 7): 2004/आईएसओ 9448-7: 1991 प्रेसिंग के लिए टूल्स - गाइड बुश पार्ट 7 फॉर्म एफ, बल्ल केज बुश, फ्लांग्ड, टाइप 1
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15448 (Part 8) : 2018/ISO 9448- 8 : 2013 Tools for Pressing – Guide Bushes Part 8 Form G, Gliding Bushes, Stepped, Type 1 (First Revision)	आईएस 15448 (भाग 8): 2018/आईएसओ 9448-8: 2013 प्रेस करने के लिए उपकरण - गाइड बुश भाग 8 फॉर्म जी, ग्लाइडिंग बुश, स्टेप्ड, टाइप 1 (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15448 (Part 8) : 2004/ ISO 9448-8 : 1991 Tools for Pressing – Guide Bushes Part 8 Form G, Gliding Bushes, Stepped, Type 1	आईएस 15448 (भाग 8): 2004/आईएसओ 9448-8: 1991 दबाने के लिए उपकरण - गाइड बुश भाग 8 फॉर्म जी, ग्लाइडिंग बुश, स्टेप्ड, टाइप 1
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15548 (Part 9) : 2018/ISO 9448- 9 : 2013 Tools for Pressing – Guide Bushes Part 9 Form B, Ball Cage Bushes, Plain, Type 2 (First Revision)	आईएस 15548 (भाग 9): 2018/आईएसओ 9448- 9: 2013 उपकरण दबाने के लिए - गाइड बुश भाग 9 फॉर्म बी, बॉल केज बुश, प्लेन, टाइप 2 (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15548 (Part 9) : 2004/ISO 9448-9 : 1992 Tools for Pressing – Guide Bushes Part 9 Form B, Ball Cage Bushes, Plain, Type 2	आईएस 15548 (भाग 9): 2004/आईएसओ 9448-9: 1992 टूल्स फॉर प्रेसिंग - गाइड बुश पार्ट 9 फॉर्म बी, बॉल केज बुश, प्लेन, टाइप 2
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15448 (Part 10) : 2018/ISO 9448-10 : 2013 Tools for Pressing – Guide Bushes Part 10 Form E, Gliding Bushes, Flanged, Type 2 (First Revision)	आईएस 15448 (भाग 10): 2018/आईएसओ 9448-10: 2013 टूल्स फॉर प्रेसिंग - गाइड बुश पार्ट 10 फॉर्म ई, ग्लाइडिंग बुश, फ्लैंग्ड, टाइप 2 (प्रथम संशोधन)
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15548 (Part 10) : 2004/ISO 9448-9 : 1992 Tools for Pressing – Guide Bushes Part 10 Form E, Gliding Bushes, Flanged, Type 2	आईएस 15548 (भाग 10): 2004/ आईएसओ 9448-9: 1992 टूल फॉर प्रेसिंग - गाइड बुश पार्ट 10 फॉर्म ई, ग्लाइडिंग बुश, फ्लांग्ड, टाइप 2
Date Of Withdrawal रद्द होने की तिथि	28 July 2018	28 जुलाई 2018

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HALLMARKING CERTIFICATION

During the month of November 2019, 353 licences for Hallmarking of gold and 35 licences for Hallmarking of silver were granted, whereas 306 licences for Hallmarking of gold, 21 licences for silver were cancelled/ expired. Total number of operative licences under this scheme as on 25 November 2019, stood at 26066 and 2306 for gold and silver respectively. During the month, 08 Assaying & Hallmarking centres were recognized. As on 25 November 2019, 882 Assaying and Hallmarking centres recognized by BIS, were in operation.

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16595 (Part 5) : 2018/ISO 9241- 5 : 1998 Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) Part 5 Workstation Layout and Postural Requirements	आईएस 16595 (भाग 5): 2018/आईएसओ 9241-5: 1998 दृश्य प्रदर्शन टर्मिनलों (वीडीटीस) भाग 5 वर्कस्टेशन लेआउट और पोस्टुरल आवश्यकताओं के साथ कार्यालय के काम के लिए एर्गोनोमिक आवश्यकताएँ
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16611 : 2018/ISO 20904 : 2006 Hard Coal – Sampling of Slurries	आईएस 16611: 2018/ आईएसओ 20904: 2006 हार्ड कोल - नमूने का नमूना
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16617 : 2018 /ISO 9931 : 1991 Coal – Sampling of Pulverized Coal Conveyed by Gases in Direct Fired Coal Systems	आईएस 16617: 2018/ आईएसओ 9931: 1991 कोयला - प्रत्यक्ष कोयला प्रणाली में गैसों द्वारा प्रदूषित कोयला उत्खनन का नमूना
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16727 : 2018/ISO 23480 : 2013 Tools for Pressing – Sliding Plates	आईएस 16727:2018/ आईएसओ 23480:2013 टूल्स फॉर प्रेसिंग - स्लाइडिंग प्लेट्स
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16728 : 2018/ISO 23481 : 2013 Tools for Pressing – Cam Driver Plates	आईएस 16728: 2018/ आईएसओ 23481: 2013 टूल्स फॉर प्रेसिंग - कैम ड्राइवर प्लेट्स
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16897 : 2018 Tobacco and Tobacco Products – Portion Packed Snus – Specification	आईएस 16897: 2018 टोबैको एंड टोबैको प्रोडक्ट्स - पार्टिशन पैक्ड स्नस - स्पेसिफिकेशन
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 17005 : 2018/ISO 6266 : 2013 Alpine Skis – Determination of Fatigue Indexex – Cyclic Loading Test	आईएस 17005: 2018/ आईएसओ 6266: 2013 अल्पाइन स्की - थकान सूच. कांक का निर्धारण - चक्रीय लोड परीक्षण
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/IEC 61331-1 : 2014 Protective Device Against Diagnostic Medical X-Radiation Part 1 Determination of Attenuation Properties of Materials	आईएस/आईईसी 61331-1: 2014 मेडिकल मेडिकल एक्स-रेडिएशन पार्ट 1 के खिलाफ सुरक्षात्मक उपकरण सामग्री के गुणन गुणों का निर्धारण
Date Of Establishment जारी करने की तिथि	28 July 2018	28 जुलाई 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 12615 : 2018 Line Operated Three Phase a.c. Motors (IE CODE) "Efficiency Classes and Performance Specification" (Third Revision)	आईएस 12615: 2018 लाइन संचालित तीन चरण ए.सी. मोटर्स (आईई सीओडीई) "दक्षता कक्षाएं और प्रदर्शन विशिष्टता" (तीसरा संशोधन)
Date Of Establishment जारी करने की तिथि	4 August 2018	4 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 12615 : 2011 Energy Efficient Induction Motors – Three Phase Squirrel Cage (Second Revision)	आईएस 12615: 2011 एनर्जी एफिशिएंट इंडक्शन मोटर्स - थ्री फेज स्क्वरेल केज (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	3 February 2019	3 फरवरी 2019
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 302-2-75 : 2018 Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 75 Commerc ial Dispensing Appliances and Vending Machines	आईएस 302-2-75: 2018 घरेलू और इसी तरह के बिजली के उपकरणों की सुरक्षा भाग 2 विशेष आवश्यकताएं धारा 75 व्यावसायिक वितरण उपकरण और वेंडिंग मशीनें
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	NA	लागू नही
Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 2182 : 2018/ISO 369 : 2009 Machine Tools – Symbols for Indications Appearing on Machine Tools (Second Revision)	आईएस 2182: 2018/ आईएसओ 369: 2009 मशीन टूल्स - मशीन टूल्स पर दिखाई देने वाले संकेतों के लिए प्रतीक (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 2182 : 1993 Symbols to be Given on Indication Plates of Machine Tools – Recommendations (First Revision)	आईएस 2182: 1993 सिंबल को मशीन टूल्स के संकेत प्लेटों पर दिया जाना है - सिफारिशें (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 3028 (Part 1) : 2018 Automotive Vehicles – Noise Emitted by Moving Vehicles – Specification and Method of Measurement Part 1 L 2 Category	आईएस 3028 (भाग 1): 2018 ऑटोमोटिव वाहन - चलते वाहनों द्वारा उत्सर्जित शोर - मापन 1 माप एल 3 पृष्ठ की विशिष्टता और विधि
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 3028 : 1998 Automotive Vehicles – Noise Emitted by Moving Vehicles – Method of Measurement (Second Revision)	आईएस 3028: 1998 ऑटोमोटिव वाहन - बढ़ते वाहनों द्वारा शोर - माप की विधि (दूसरा संशोधन)
Date Of Withdrawal रद्द होने की तिथि	6 August 2018	6 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 4294 : 2018 Jig Buttons – Specification (Second Revision)	आईएस 4294: 2018 जिग बटन - विशिष्टता (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 4294 : 1982 Specification for Jig Buttons (First Revision)	आईएस 4294: 1982 जिग बटन के लिए विशिष्टता (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS/ISO 7439 : 2015 Copper-Bearing Contraceptive Intrauterine Devices – Requirements and Tests (First Revision)	आईएस/आईएसओ 7439: 2015 कॉपर-असर गर्भनिरोधक अंतर्गर्भाशयी उपकरण - आवश्यकताएँ और परीक्षण (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS/ISO 7439 : 2002 Copper-Bearing Intra- Uterine Contraceptive Devices – Requirements, Tests	आईएस/आईएसओ 7439: 2002 कॉपर-असर इंट्रा- यूट्रे. राइन कॉन्ट्रासेप्टिव डिवाइसेस - आवश्यकताएँ, टेस्ट
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018

No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 9490 : 2018 Method for Determination of Thermal Conductivity of Thermal Insulation Materials (Water Calorimeter Method) (First Revision)	आईएस 9490: 2018 थर्मल इन्सुलेशन सामग्री (जल कैलोरीमीटर विधि) (पहले संशोधन) की तापीय चालकता के निर्धारण के लिए विधि
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 9490 : 1980 Method for Determination of Thermal Conductivity of Thermal Insulation Materials (Water Calorimeter Method)	आईएस 9490: 1980 थर्मल इन्सुलेशन सामग्री (जल कैलोरीमीटर विधि) की तापीय चालकता के निर्धारण के लिए विधि
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 10260 (Part 3) : 2018/ISO 4378-3 : 2009 Plain Bearings – Terms, Definitions, Classification and Symbols Part 3 Lubrication (First Revision)	आईएस 10260 (भाग 3): 2018/ आईएसओ 4378-3: 2009 सादा बियरिंग्स – शर्तें, परिभाषाएँ, वर्गीकरण और प्रतीक भाग 3 स्नेहन (पहला संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 10260 (Part 3) : 1982 Terms, Definitions and Classification of Plain Bearings Part 3 Lubrication	आईएस 10260 (भाग 3): 1982 शर्तें, परिभाषा और सादा बियरिंग्स का वर्गीकरण भाग 3 स्नेहन
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं श्शीर्षक	IS 10793 (Part 1) : 2018/ISO 6520-1 : 2007 Welding and Allied Processes – Classification of Geometric Imperfections in Metallic Materials Part 1 Fusion Welding (First Revision)	आईएस 10793 (भाग 1): 2018/आईएसओ 6520-1: 2007 वेल्डिंग और संबद्ध प्रक्रियाएं – धातु सामग्री में ज्यामितीय आवृत्तियों का वर्गीकरण भाग 1 फ्यूजन वेल्डिंग (प्रथम संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 10793 : 1983/ ISO 6520 : 1982 Classification of Imperfections in Metallic Fusion Welds, with Explanations	आईएस 10793: 1983/ आईएसओ 6520: 1982 मेटालिक फ्यूजन वेल्ड्स में खामियों का वर्गीकरण, स्पष्टीकरण के साथ
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13406 : 2018/ISO 8443 : 2010 Rolling Bearings – Radial Ball Bearings with Flanged Outer Ring – Flange Dimensions (First Revision)	आईएस 13406: 2018/ आईएसओ 8443: 2010 रोलिंग बियरिंग्स – रेडियल बॉल बियरिंग विथ फ्लैंग्ड आउटर रिंग – फ्लेंज डायमेंशन (पहला संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 13406 : 1992/ISO 8443 : 1985 Radial Ball Bearings with Flanged Outer Ring – Flange Dimensions	आईएस 13406: 1992/ आईएसओ 8443: 1985 रेडियल बॉल बियरिंग्स के साथ निकला हुआ बाहरी रिंग – निकला हुआ किनारा
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13429 (Part 2) : 2018 Solar Cooker – Box Type – Specification Part 2 Components (Second Revision)	आईएस 13429 (भाग 2): 2018 सोलर कुकर – बॉक्स प्रकार – विशिष्टता भाग 2 घटक (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 13429 (Part 2) : 2000 Solar Cooker – Box Type – Specification Part 2 Components (First Revision)	आईएस 13429 (भाग 2): 2000 सोलर कुकर – बॉक्स प्रकार – विशिष्टता भाग 2 घटक (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 13773 : 2018/IEC 60984 : 2014 Live Working – Electrical Insulating Sleeves (First Revision)	आईएस 13773: 2018/ आईईसी 60984: 2014 लाइव वर्किंग – इलेक्ट्रिकल इंसुलेटिंग स्लीव्स (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 13773 : 1993/IEC Pub 984 : 1990 Sleeves of Insulating Materials for Live Working	आईएस 13773: 1993/ आईईसी पब 984: 1990 स्लीव्स ऑफ इंसुलेटिंग मटी. रियल फॉर लाइव वर्किंग
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15250 (Part 1) : 2018/ ISO 10791-1 : 2015 Test Conditions for Machining Centres Part 1 Geometric Tests for Machines with Horizontal Spindle (Horizontal ZAxis) (First Revision)	आईएस 15250 (भाग 1): 2018/आईएसओ 10791-1: 2015 मशीनिंग केंद्रों के लिए टेस्ट की शर्तें भाग 1 क्षैतिज धुरी (क्षैतिज ज्यडएएक्से) (प्रथम संशोधन) के साथ मशीनों के लिए ज्यामितीय परीक्षण
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15250 (Part 1) : 2002/ISO 10791-1 : 1998 Test Conditions for Machining Centres Part 1 Geometric Tests for Machines with Horizontal Spindle and with Accessory Heads (Horizontal ZAxis)	आईएस 15250 (भाग 1): 2002/आईएसओ 10791-1: 1998 मशीनिंग केंद्रों के लिए परीक्षण की स्थिति भाग 1 क्षैतिज स्पिंडल के साथ मशीनों के लिए ज्यामितीय परीक्षण और गौण सिर (क्षैतिज ज्यडएएक्स) के साथ
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15327 : 2018/ISO 14731 : 2006 Welding Coordination – Tasks and Responsibilities (First Revision)	आईएस 15327: 2018/ आईएसओ 14731: 2006 वेल्डिंग समन्वय – कार्य और जिम्मेदारियां (पहला संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15327 : 2003/ISO 14731 : 1997 Welding Coordination – Tasks and Responsibilities	आईएस 15327: 2003/ आईएसओ 14731: 1997 वेल्डिंग समन्वय – कार्य और जिम्मेदारियां
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं श्शीर्षक	IS 15413 : 2018/ISO 4217: 2015 Codes for the Representation of Currencies (Second Revision)	आईएस 15413: 2018/ आईएसओ 4217: 2015 संहिता के प्रतिनिधि संहिता (दूसरा संशोधन)
Date Of Establishment जारी करने की तिथि	7 August 2018	7 अगस्त 2018
No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15413 : 2013/ISO 4217 : 2008 Codes for the Representation of Currencies and Funds (First Revision)	आईएस 15413:2013/ आईएसओ 4217:2008 ब्वकमे संहिताएँ मुद्रा और धन के प्रतिनिधित्व के लिए (पहला संशोधन)
Date Of Withdrawal रद्द होने की तिथि	7 August 2018	7 अगस्त 2018
No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15480 (Part 1) : 2018/IEC 60869-1 : 2012 Fibre Optic Interconnecting Devices and Passive Components – Fibre Optic Passive Power Control Devices Part 1 Generic Specification (First Revision)	आईएस 15480 (भाग 1): 2018/आईईसी 60869-1: 2012 फाइबर ऑप्टिक इंटर. कनेक्टिंग डिवाइसेस एंड पैसिव कम्पोनेंट्स – फाइबर ऑप्टिक पैसिव पॉवर कंट्रोल डिवाइसेस पार्ट 1 जेनेरिक स्पेसिफिकेशन (फर्स्ट रिविजन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15480 (Part 1) : 2004/IEC 60869-1 : 1999 Fibre Optic Attenuators Part 1 Generic Specification	आईएस 15480 (भाग 1): 2004/आईईसी 60869-1: 1999 फाइबर ऑप्टिक एटेन्यूएटर्स भाग 1 सामान्य विशिष्टता
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15586 : 2018/ ISO 10962 : 2015 Securities and Related Financial Instruments – Classification of Financial Instruments (CFI Code) (First Revision)	आईएस 15586: 2018/ आईएसओ 10962: 2015 प्रतिभूति और संबंधित वित्तीय उपकरण – वित्तीय साधनों का वर्गीकरण (सीएफआई कोड) (प्रथम संशोधन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15586 : 2005/ISO 10962 : 1997 Securities – Classification of Financial Instruments (CFI CODE)	आईएस 15586: 2005/ आईएसओ 10962: 1997 प्रतिभूति – वित्तीय साधनों का वर्गीकरण (सीएफआई सीओडीई)
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 15963 (Part 4) : 2018/ ISO 12647-4 : 2014 Graphic Technology – Process Control for the Production of Half-Tone Colour Separations, Proof and Production Prints Part 4 Publication Gravure Printing (First Revision)	आईएस 15963 (भाग 4): 2018/आईएसओ 12647-4: 2014 ग्राफिक प्रौद्योगिकी – अर्ध-टोन रंग पृथक्करण, प्रूफ और उत्पादन प्रिंट भाग 4 प्रकाशन ग्राव मुद्रण (प्रथम संशोधन) के उत्पादन के लिए प्रक्रिया नियंत्रण
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 15963 (Part 4) : 2012/ ISO 12647-4 : 2005 Graphic Technology – Process Control for the Production of Half- Tone Colour Separations, Proof and Production Prints Part 4 Publication Gravure Printing	आईएस 15963 (भाग 4): 2012/आईएसओ 12647-4: 2005 ग्राफिक प्रौद्योगिकी – आधा उत्पादन के लिए प्रक्रिया नियंत्रण–टोन रंग पृथक्करण, सबूत और उत्पादन प्रिंट भाग 4 प्रकाशन मुद्रण
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16167 (Part 1) : 2018/ IEC 60855-1 : 2016 Live Working – Insulating Foam-Filled Tubes and Solid Rods Part 1 Tubes and Rods of a Circular Cross-Section (Second Revision)	आईएस 16167 (भाग 1): 2018/आईईसी 60855-1: 2016 लाइव वर्किंग – फोमिंग-फिल्ड ट्यूब्स और सॉलिड रॉड्स को इंसुलेट करते हुए एक सर्कुलर क्रॉस-सेक्शन के सेकेंड ट्यूब्स और रॉड्स (दूसरा रिविजन)
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No. and year of the Withdrawn Standard संशोधन की तिथि एवं वर्ष	IS 16167 (Part 1) : 2014/IEC 60855-1 : 2009 Live Working – Insulating Foam-Filled Tubes and Solid Rods Part 1 Tubes and Rods of a Circular Cross-Section (First Revision)	आईएस 16167 (भाग 1): 2014/आईईसी 60855-1: 2009 लाइव वर्किंग – फोमिंग-फिल्ड ट्यूब्स और सॉलिड रॉड्स इंसुलेटिंग क्रॉस-सेक्शन की एक ट्यूब और रॉड्स- सेक्शन (पहला रिविजन)
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No.,Year & Title Of The Indian Standards Established भारतीय मानकों की संख्या, वर्ष एवं शीर्षक	IS 16322 : 2018/ISO 12646 : 2008 Graphic Technology – Displays for Colour Proofing – Characteristics and Viewing Conditions	आईएस 16322: 2018/ आईएसओ 12646: 2008 ग्राफिक प्रौद्योगिकी – रंग प्रू. फिंग के लिए प्रदर्शन – लक्षण और देखने की स्थिति
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Date Of Withdrawal रद्द होने की तिथि	NA	लागू नही

NEWS YOU CAN USE

CONSUMER AFFAIRS: AWARENESS PROGRAMMES

During the month of November 2019, 22 consumer awareness programmes were organized at NRO, ERO, WRO, SRO & CRO. A total of 1692 consumers/ participants attended this programme. Also, during the month, 30 grievances/complaints regarding Product Certification were received and 15 grievances /complaints were closed. In addition, five search and seizures were conducted by the BIS for misuse of Standard mark, as part of enforcement activity during the month.

RECOVERY

CHALLENGES & LEARNINGS

The UNDP's 2018-2021 Strategic Plan encompasses six signature solutions, including resilience and recovery. These hold significant importance in prevention and recovery protocol development, especially in the context of disaster risk. Here are some key takeaways

DISASTERS OCCUR AROUND THE world on a continual basis and have the potential to cause large-scale damage and losses to countries and communities, destroying public infrastructure, disrupting basic services, impacting livelihoods and causing loss of lives. Developing countries with vulnerable populations face the highest risk, though overcrowded urban centres due to rapid population growth and more people living in cities are putting people, assets and critical infrastructure at extreme risk.

In addition, climate change is leading to an increased frequency and intensity of hydro-meteorological-related disasters. Changing temperatures, extreme weather patterns, variations in precipitation and rising sea levels are altering hazard levels and exacerbating disaster risks. Heat waves, droughts, floods, cyclones, wildfires and other such disasters are having a greater impact on human and natural environments.

Future predictions suggest that these trends will not only continue, but will dramatically worsen. These trends threaten to increase poverty levels worldwide, fuelling more rural to urban migration and further destroying ecosystems to dangerous and unpredictable levels.

In 2018, 55 percent of the world's population resided in urban areas, compared with only 30 percent in 1950—a trend which is predicted to increase to 68 percent by 2050. Unplanned urbanization often results in the poorest living in slums with inadequate housing and civic amenities, and results in more people and assets being at risk in a disaster.

Estimates suggest that by 2050, 40 percent of the world's population will live in river basins exposed to severe droughts or floods. Human settlements are often more concentrated in coastal areas than elsewhere, due to the economic benefits that populations can accrue from access to navigation, coastal fisheries, tourism and recreation. At present, around 40 percent of the world's population lives within 100 miles of the coast. Estimates project that almost 75 percent of the world's population, or six billion people, will live along coasts within the next three decades, exposing a huge number of people to storm surges, typhoons, floods and tsunamis.

TELLING STATISTICS

- On average, 218 million people are affected by disasters each year.
- In 2018, there were 281 climate-related and geophysical events recorded in the Emergency Events Database (EM-DAT) that affected over 60 million people across the world.
- From 2005 to 2015, approximately 23 million people were left homeless due to the impact of disasters.
- In 2017, overall losses totalled $340 billion worldwide, with insured losses totalling $138 billion.
- There were 318 natural disasters, which impacted 122 countries and affected 96 million people.
- Losses due to disasters have risen significantly in the last three decades.
- Economic losses resulting from tropical cyclones were 396 percent higher than the 2000–2016 average of $47 billion.
- Up to 325 million extremely poor people are expected to live in the 49 most hazard-prone countries by 2030.
- By the end of the 21st century, it is predicted that global warming will likely cause cyclones to increase in intensity by 1–10 percent, which means such storms with have higher destructive potential.
- Temperature increases with continued population growth and increased food demand is likely to have a negative impact on food security.
- The Arctic Ocean is likely to be free of sea ice in the summer at least once per decade.

COMPOUNDED EFFECT

A large-scale disaster can cause economic slowdown, loss of employment

and decreased entrepreneurial activity. If a recovery programme fails to restore livelihoods and assets, people find themselves even more vulnerable in the face of future disasters. Various studies also conclude that natural disaster risks are causing rising inequality in the quality of life, and are having a greater impact on low-income households.

Although poverty rates are decreasing overall, almost 800 million people are at risk of falling back into poverty if setbacks such as natural disasters occur, as revealed by the Multidimensional Poverty Index (MPI) of the United Nations Development Programme (UNDP).

It is, therefore, crucial that recovery processes are approached in an adequate and appropriate manner from the very start to prevent secondary disasters from occurring, which tend to have equally grave effects. The lack of an adapted recovery programme may further worsen the impact of disasters, as this derails developmental gains and results in widespread losses, thus increasing vulnerabilities and risk conditions to chronic levels.

Some of the key areas where recovery efforts fall short are:

- Recovery needs are not properly identified through a formal and comprehensive assessment process.
- Recovery programming is ad hoc and is not informed by a needs assessment.
- Recovery interventions are not guided by an overarching recovery strategy and a clear set of priorities.
- Recovery strategies do not take into account existing or potential vulnerabilities and cultural considerations.
- Recovery is not supported by adequate financial resources. Disaster aid is typically provided for immediate humanitarian relief with few resources provided for longer-term recovery needs.
- Recovery favours rebuilding infrastructure over socio-economic and household recovery needs.
- Recovery efforts often fail to encourage local participation and ownership.

MULTI-PRONGED APPROACH

In crisis situations, life-saving relief is the most important priority, but affected populations also want to start rebuilding their lives. Immediate support to steady the situation can reduce further setbacks and cement a successful recovery.

Humanitarian funding instruments focus predominantly on immediate life-saving interventions, while development funding focuses on promoting long-term and sustained socio-economic change. If recovery is not funded during the humanitarian phase, funding gaps are likely to occur when the humanitarian funding is phased out and before developmental funds can be accessed and mobilised. The risk of this is that recovery needs may remain largely unmet, leaving affected populations highly vulnerable to secondary disasters or dependent on relief assistance for extended periods.

Implementing effective recovery interventions requires a thorough needs assessment to gain a clear understanding of the damage, losses and needs of all affected people and sectors. Such an assessment will also allow affected populations' existing capacities to be identified, thus enabling local resources, abilities and knowledge to play a primary role in inclusive recovery processes.

A Post-Disaster Needs Assessment (PDNA) is an internationally-accepted methodology for determining the physical damages, economic losses and costs of meeting recovery needs after a natural disaster. It seeks to produce four core deliverables:

- One consolidated assessment report, based on sector reports, presenting the disaster's overall effect and impact on social and productive sectors, the recovery needs of each sector and the explicit impact on gender, governance, risk reduction and the environment.
- A recovery strategy, which defines the vision for national recovery, provides a strategy for recovery actions within each sector and affected region, with clear objectives and interventions.
- The basis for resource mobilisation to support the country's recovery, including a donor conference where required.
- The outline for a country-led implementation mechanism for recovery.

A Disaster Recovery Framework (DRF) is the operational tool used to implement the recovery strategy. It presents the recovery vision, while also describing the results expected from the recovery programme and the approach to be taken to implement it. In addition, the DRF prioritises and orders recovery interventions and calculates their cost. It also guides funding decisions and functions as a living baseline document to monitor progress and evaluate impacts.

Successive recovery interventions will help affected communities address early recovery challenges at the same time as they tackle longer-term issues using sustainable and innovative measure. Interventions that focus on capacity development, coordination and information management can make recovery much more effective.

There are a few established benchmarks that underline successful recovery efforts. These include:

- Needs are assessed in order to design an actionable recovery strategy.
- Recovery efforts focus on reducing risk and vulnerabilities.
- Recovery efforts draw on and learn from past experiences.
- Policy frameworks and clear institutional roles and responsibilities are laid down.
- Robust resource mobilization strategies ensure adequate financial resources.
- Recovery teams, personnel and organisations communicate openly with the public and encourage participation.
- Information management and continuous monitoring and evaluation of recovery progress are supported.
- Dedicated personnel and resources are crucial for delivering a successful recovery programme in an effective and timely manner.

218 Million

The number of people affected by disasters each year on an average, as per the Centre for Research on the Epidemiology of Disasters

$415 Billion

The projected global average for annual economic losses resulting from natural disasters by 2030 for urban infrastructure, as per the United Nations Office for Disaster Risk Reduction

68%

Estimated percentage of world's population residing in urban areas by 2050 (compared to 30 percent in 1950), as per the United Nations Department of Economic and Social Affairs, Population Division

- Recovery processes are as transparent and accountable as possible.

For recovery processes to be efficient and effective, it is crucial that recovery institutions have strong management capacities and enabling policies in place. To this end, governments are placing greater emphasis on strengthening institutional capacity, adopting supportive policies and securing resources for recovery. Several disaster-prone countries, such as Ecuador, Indonesia and Mozambique have established institutions with dedicated personnel and resources, making recovery assistance more predictable and better tailored to local needs and contexts.

BUILDING RESILIENCE

Recovery is an inclusive set of interventions that improves the well-being of all who are affected by crisis, and ultimately seeks to build the resilience of communities in the aftermath of crisis.

Through its emphasis on positive change, development and resilience, recovery programmes seek to achieve the following outcomes:

- Better preparedness of people to anticipate natural hazard events, and take steps to prevent or respond to them.
- More inclusive processes and systems to deliver basic services and a better risk governance system.
- Improved access to justice and redress, strengthened community-based security and more robust human rights protection compared with before the crisis.
- Government support for a macro-economy that can withstand and/or adapt to future shocks and stresses, with more diversified livelihoods for people.
- Increased awareness of and community support for people and civil society organisations (CSOs) to protect and regenerate the ecosystem.
- Better empowerment and active engagement of marginalised populations to reduce vulnerabilities.

An example of this is the inclusive rebuilding in Nepal. With the Government of India's assistance, UNDP launched a programme in March 2018 to help around 27,000 home-owners rebuild their houses. In framing the recovery programme after the Nepal earthquake in 2015, UNDP strongly emphasised the inclusion of marginalised groups, in particular initiating the study "Supporting the Inclusion of Persons with Disabilities in Post-Earthquake Recovery and Reconstruction" to inform the policy process at the central and local levels.

REBUILDING LIVES

Disasters affect millions of people every year, causing displacement and loss of livelihoods, infrastructure, local businesses, farms and local economies. Recovery efforts are directed at rebuilding peoples' livelihoods and assets and reducing their vulnerabilities. This cannot be achieved unless communities are at the centre of recovery programmes. Participation of communities in decision-making, implementation and monitoring and evaluation of local programmes, therefore, increases the appropriateness of recovery interventions.

BUILDING BACK BETTER

The post-disaster recovery context presents a short window of opportunity for making the right development decisions through the recovery programmes. Resources and a favourable policy climate following a disaster make it possible to introduce changes that will build resilience against future disasters and build back better to ensure that disaster risks are not recreated during the recovery proves.

"Build back better" not only means restoring conditions to pre-disaster levels, but improving them by addressing the underlying risks and vulnerabilities that caused the natural hazard to turn into a disaster in the first place.

According to the United Nations Department of Economic and Social Affairs (UN DESA), World Urbanisation Prospects: The 2014 Revision, "Disaster recovery periods are opportunities for reflecting on the root causes of a disaster and recasting development priorities to reduce human vulnerability to natural hazards. Simply reinventing pre-disaster conditions is a wasted opportunity".

Estimates suggest that if all countries were to build back stronger during a 20-year window, then global asset losses due to natural disasters would be reduced by 11.2 percent from $382 billion to $339 billion annually. Building back better could generate benefits of up to $173 billion per year globally. The benefits for well-being are even greater: well-being losses due to natural disasters would be reduced by 11.7 percent from $555 billion to $490 billion annually.

The concept of recovery and resilience is anchored in the 2030 Agenda for Sustainable Development. Of course, recovery support and interventions need to be planned and implemented in a way that reduces risks and vulnerabilities and strengthens resilience. Build back better is now a widely accepted approach to post-disaster recovery. This approach is not just based on the physical reconstruction of infrastructure, but the understanding that crises present opportunities to bring out the best in communities and strengthen their cohesion, and also improve governance mechanisms, service provision, markets and employment.

Taken from the report by Stefanie Afonso, supported by Krishna Vatsa, Rita Missal and Jeannette Fernandez of the Disaster Risk Reduction and Recovery for Building Resilience Team, UNDP Crisis Bureau.

$173 Billion

Estimated annual benefits of building back better globally, as per the Global Facility for Disaster Reduction and Recovery (GFDRR)

281

The number of climate-related and geophysical events recorded in the Emergency Events Database (EM-DAT) in 2018

19%

The percentage by which climate risks could cost countries of their total GDP by 2030, as per the Economics of Climate Adaptation (ECA) by the Economics of Climate Adaptation Working Group

NEW ADDITIONS TO OUR SHELVES

The BIS' collection of standards literature is always being supplemented

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UNEP EMISSIONS GAP REPORT 2019

INDIA AMONG LEADING COUNTRIES LOOKING FOR ELECTRIC VEHICLE DEVELOPMENT

The United Nations Environment Programme (UNEP) Emissions Gap Report-2019 warns that the Earth's average temperature may rise by 3.2 degrees Celsius by 2100. Moreover, despite all scientific warnings and political commitments, emissions of greenhouse gases (GHG) couldn't decrease globally.

It states that GHG emissions have increased by 1.5% since last decade and that carbon dioxide (CO_2) emissions have reached an all-time high figure of 55.3 gigatons.

Key Findings of UNEP Emissions Gap Report 2019: China, United States of America (USA), European Union (28) and India are among the top four greenhouse gas emitters.

India: UNEP report highlights that India is regularly considering deadlines and targets to curb carbon emission. As per the report, India's per capita emission is one of the lowest within G20 countries. Also, India is one of the leading countries that are looking for electric vehicle development.

Globally: The report suggested that if Green House Gas (GHG) emissions are reduced by 7.6% every year during the 2020 to 2030 period, only then the target of reducing global temperature can be achieved. As per the report, the largest GHG contribution comes from energy sector and its fossil fuel emissions. Thus, to achieve the target of limiting temperature rise to no more than 1.5 ° C, all countries must reduce GHG emissions by up to 5 times.

The report also highlights that if global temperature reaches a level of 1.5 degrees, then coral reefs would be reduced by 70-90%. It also clarifies that by 2100, the world would be warmer 3.2 degrees than pre-industrial levels.

Key Recommendations of Emissions Gap Report 2019: The report suggested that each country has its own unique opportunities to protect livelihoods, natural resources and lives. Moreover, complete de-carbonization of energy sector is possible and necessary. With renewable energy electricity, the emission reduction can achieve a target of 12.1 gigatonnes (GT) by 2050. Also, the electrification of transport can help to reduce carbon emissions up to 72% by 2050.

FIRST LICENCE GRANT

BIS GRANTS FIRST LICENCE ON ALL-INDIA BASIS

BIS has granted the First Licence on all-India basis for Fabricated High Density Polyethylene (HDPE) fittings for potable water supplies as per IS 8360 (Part 1)to M/s Oza Piping System Private Limited, Plot No. H-23, MIDC Kupwad, Taluka: Miraj, District: Sangli , Maharashtra.

HDPE pipes are widely used in water supplies and agricultural irrigation projects. Fittings such as tees, bends, etc., are required for laying of such pipelines. Presently, users are using moulded HDPE fittings for such purposes. However, IS 8360 (Part 1 to 3) provide guidelines for manufacturing of such fittings from PE Pipes as per IS 4985 and its requirements. These fittings are easy to manufacture and can be used by user as per their requirements. This Indian Standard helps manufacturing industry and users for selection of fittings and use appropriate fittings in laying pipelines.

UNDP'S NEW INITIATIVE

UNDP TO LAUNCH ACCELERATOR LAB IN NEW DELHI AS PART OF SDGS BY 2030

The United Nations Development Programme (UNDP) has launched the India chapter of its new initiative, Accelerator Lab in New Delhi. The objective behind launching the lab is to address some of the most pressing issues facing India, including air pollution, through innovation. To achieve its objectives, the UNDP has also partnered with NITI Aayog's Atal Innovation Mission (AIM). The laboratory will be housed in UNDP's office based in New Delhi. The vision behind setting up the lab, is to make faster progress in terms of meeting the United Nation's ambitious Sustainable Development Goals (SDGs) by 2030. At the Accelerator Lab, innovators will seek to bring in their energy together to come up with solutions for common problems facing the country. Issues that laboratory will seek to address through innovation includes: air pollution, sustainable water management and client-resilient livelihoods. The Indian lab will be among 60 global ones that will find, test and try to scale up innovative solutions, helpful in combating both climate change as well as social inequity.

INTERNATIONAL MEET

MEET ON ORGANIC FERTIGATION STANDARDS

The 37th meeting of ISO/TC 23/SC 18 titled "Irrigation Equipment and Drainage Systems Sub-Committee" was held from November 04-08, 2019, at Hangzhou, China. The Indian delegation comprised of Dr. S K Ambast, Director, ICAR-IIWM, Bhubaneswar and the Food and Agriculture Department (FAD) officials of BIS. The participation of the Indian delegation was successful and appreciated by the members of the sub-committee. The BIS offical made a presentation on new standard proposed by India on "Guidelines for organic fertigation", and was also nominated as the project leader for the same. The meeting was well attended by seven participating countries with more than 20 delegates.

GEOTECH AND PROTECH STANDARDS

MEETING DISCUSSES MANDATORY USE OF GEOTECH STANDARDS FOR RAILWAY APPLICATIONS

Organised by ANSI, the 25th Plenary Meeting of ISO/TC 71 'Concrete, Reinforced Concrete and Prestressed Concrete' and its sub-committees was held from October 14-17, 2019, at Birmingham, Detroit, Michigan, USA. The meeting was attended by a five-member Indian delegation. Officials of the CED, BIS, were a part of the delegation. Following are the important resolutions vis-à-vis India: 1) ISO/FDIS 1920 - Part 6 'Testing of concrete — Part 6: Sampling, preparing and testing of concrete cores' (prepared by India) will be submitted for publication after collating comments. 2) The draft on the International Standard on the new proposal, ISO NP 1920 Part 16 'Testing of concrete—Part 16: Capillary Absorption of Concrete' will be prepared by V. V Arora (India). 3) It was resolved to establish a working group for revision of ISO 22966 'Execution of concrete structures'. India to provide the convener of the working group. 4) It was resolved to revise ISO 19338 'Performance and assessment requirements for design standards on structural concrete' based on comments received on the systematic review ballot that closed on September 2, 2019, and to form a working group that would be composed of experts from ABNT, ANSI, BIS (India), GOST-R, ICONTEC, JISC, KATS, and SA with the Convenor Jim Wight from ANSI. 5) It was resolved that the concerned working group would undertake revision of ISO 28841 'Guidelines for simplified seismic'.

News courtesy: BIS and gktoday.in/

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