About the JISC

The Japanese Industrial Standards Committee (JISC), Japan’s national standardization body, plays a central role in developing standards in Japan covering a wide range of products and technologies from robots to pictograms. JISC is also responsible for Japan’s growing contribution to setting international standards through its work with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

The purpose and scope of “standards” have rapidly changed in recent years, driven by technological innovation and evolving social demands on corporate activities. Standardization supports innovation and has a direct impact on people’s lives and living environments.

As a global hub for science and technology, Japan is committed to promoting standardization and contributing to global development in these fields. JISC proactively participates in initiatives to deal with new challenges, most notably in three areas: interoperability, care of the elderly and electric power infrastructure.
Interoperability

In the age of the Internet of Things (IoT), the role of standardization extends to assuring interoperability, which enables computer systems or software to exchange information seamlessly across borders. Japan is actively promoting standardization in the following two areas.

The first is electric power systems. JISC made a proposal to the IEC/Technical Committee (TC) 120 in April 2016 for standardizing the safety performance evaluation requirements for “Electrical Energy Storage Systems” and currently leads this standardization activity in the IEC. This is a key technology to promote the use of renewable energy, achieve CO₂ reduction and for Smart Grids.

The second is smart manufacturing, an area in which Japan is one of the global leaders. JISC aims to standardize the basic requirements for information platforms that promote more efficient plant or factory operations from the procurement of components through to the manufacturing process.

Care of the Elderly

As Japan faces the challenges associated with aging societies and falling birth rates earlier than other nations, JISC aims to take a leadership role in developing standards of social infrastructure for elder care. For example, driven by a proposal made by JISC, an international standard on safety for personal care robots (ISO 13482) was published in 2014. Additionally, in 2016, JISC established new standards in Japan that clarify specific safety requirements by robot type to ensure caregivers’ safety. Moving forward, JISC plans to propose amendments to ISO 13482 to support the wider application of personal care robots around the world.

Electric Power Infrastructure

Global demand for electric power continues to grow. In developed countries, there is a great variation in how operators approach the management of assets for power networks, such as aging electrical equipment. Japan advocates for the establishment of international standards of the management of power network assets. Such standards are designed to help operators optimize the management of their assets and ensure the reliability of power networks. Based on the JISC’s proposal, a new Technical Committee, IEC/TC 123 was established in October 2016.
JISC Activities in 2016

JISC’s standardization initiatives are focused on the following three missions.
- Active participation in international standardization activities (ISO/IEC)
- Development, revision and withdrawal of Japanese Industrial Standards (JIS)
- Administration of accreditation and certification for the JIS Marking and JNLA laboratory accreditation system

Participation in ISO and IEC

1

JISC’s relationship with ISO and IEC

As an active member of ISO since 1952, JISC is a permanent member of the ISO Council and the Technical Management Board (TMB), playing a key role in policy making. In 2016, JISC made 103 new proposals for international standards. JISC joined the IEC in 1953. At the IEC, JISC participates as a permanent member of the Council Board (CB), as well as the Standardization Management Board (SMB) and Conformity Assessment Board (CAB), helping to shape policy. In addition, three Japanese members sit on the Market Strategy Board (MSB). Raising Japan’s profile at the IEC, Dr. Junji Nomura of Panasonic Corporation served as IEC President from 2014 to 2016. JISC made 39 proposals for new standards in 2016.

<table>
<thead>
<tr>
<th>Participation in ISO and IEC (as of Dec. 31, 2016)</th>
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<tbody>
<tr>
<td><strong>ISO</strong></td>
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<tr>
<td>Number of committees</td>
</tr>
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<td>2016 budget (1000 CHF)</td>
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<td>Membership fee by Japan (1000 CHF)</td>
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<td>Technical Committees and Sub-Committees in which Japan participates</td>
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<td>Technical Committees and Sub-Committees for which Japan serves as Secretariat</td>
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<tr>
<td>Technical Committees and Sub-Committees for which Japan serves as a Chair</td>
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* CHF: Swiss Franc * JTC 1 included in ISO

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International Standards Proposed by Japan
(Combined ISO and IEC Total)

International standards led by JISC

Low modulus adhesives for exterior tile finishing

In October 2016, an international standard for adhesives for external tiles (ISO 14448: low modulus adhesives for exterior tile finishing) proposed by Japan and based on JIS, was officially published. These adhesives offer more flexibility and keep tiles safety installed longer than traditional mortar. This new standard is expected to promote the wider application of these organic adhesives in regions such as Southeast Asia, where the use of exterior tile finishing for buildings has increased in recent years.

Disaster evacuation signage

The Tokyo 2020 Olympic and Paralympic Games are expected to be a big draw for international visitors to Japan. As part of preparations to ensure the safety of visitors to the Games, JISC has established a new JIS standard for a “hazard specific evacuation guidance sign system,” featuring universally recognizable hazard-specific symbols. In 2016, JISC proposed this guidance sign system to the ISO as an international standard.
1 Development, revision and withdrawal of JIS
Based on JISC recommendations, 166 new standards were published, 296 standards were revised, 166 standards were withdrawn and 2,077 standards were confirmed in 2016. As of December 31, 2016, there are 10,587 active JIS.

2 Harmonization of JIS with international standards
Japan has stepped up efforts to harmonize JIS with international standards since the World Trade Organization (WTO)/Agreement on Technical Barriers to Trade (TBT) came into force in January 1995.

<table>
<thead>
<tr>
<th>Consistency between JIS and International Standards</th>
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<tbody>
<tr>
<td>Total number of JIS</td>
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<tr>
<td>Number of JIS with corresponding international standards</td>
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<tr>
<td>JIS identical to international standards (IDT)</td>
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<tr>
<td>JIS modified from international standards (MOD)</td>
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<tr>
<td>JIS not equivalent to international standards (NEQ)</td>
</tr>
<tr>
<td>(Figures as of Dec. 31, 2016)</td>
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</tbody>
</table>

(Note 1) The degree of correspondence of the standards with international standards (IDT, MOD, NEQ) is in accordance with the definition of ISO/IEC Guide 21-1.

(Note 2) The rate of harmonization is measured based on the "percentage of JIS with corresponding international standards."

Harmonizing the washing care labels on clothes
In March 2012, the international standard governing the symbols used in washing care labels for clothes (ISO 3758: Textiles—Care labelling code using symbols) was revised based on a proposal from JISC. Following this, in October 2014, JISC introduced JIS L 0217, a new standard harmonized with the international standard. These revisions were made to eliminate differences between the original standards. Since December 1, 2016, Japan's apparel industry has been required to use identical care labels aligned with the international standard under the Household Goods Quality Labeling Law. The creation of universal care labels is set to end confusion about washing care for clothes, benefitting consumers and apparel makers worldwide.

Revision of JIS for website accessibility
In March 2016, JISC revised JISX 8341-3, which ensures that all users, regardless of age or disability have access to information on the Internet. Consistency with the corresponding international standard, ISO/IEC 40500, will enable global companies to operate standardized websites in each country, which will improve universal accessibility.

3 References to JIS in technical regulations
As of December 31, 2016, there are 7,529 citations of JIS in 206 Japanese laws and regulations.

<table>
<thead>
<tr>
<th>Name of laws and regulations</th>
<th>Number of JIS References</th>
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</thead>
<tbody>
<tr>
<td>Act on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices (former Pharmaceutical Affairs Act)</td>
<td>1,349</td>
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<tr>
<td>Fire Service Act</td>
<td>640</td>
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<tr>
<td>Building Standards Act</td>
<td>604</td>
</tr>
<tr>
<td>Industrial Safety and Health Act</td>
<td>445</td>
</tr>
<tr>
<td>Measurement Act</td>
<td>395</td>
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<tr>
<td>Act on Safety Assurance and Quality Improvement of Feeds</td>
<td>289</td>
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(Note) In addition to the above, there are approximately 340 references to JIS in notifications under the Electrical Appliances and Materials Safety Act.
1 Conformity assessment under IEC

JISC actively participates in all four international conformity assessment (CA) systems administered by IEC/CAB: IECEE, IECEx, IECQ and IECRE. Issuing or recognizing certificates by certification bodies in Japan under these CA systems promotes global trade in goods and services in the field of electrotechnology. JISC currently serves as a Vice-Chair of the Certification Management Committee (CMC), the highest policy making body of the IECEE.

### Conformity assessment activities under IEC in Japan

<table>
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<tr>
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<th>CBs</th>
<th>Certified TLs</th>
<th>Issued certificates</th>
<th>Recognized certificates</th>
<th>Related legislation</th>
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<tr>
<td>IECEE</td>
<td>4</td>
<td>4</td>
<td>17,012 (in 2016)</td>
<td>628 (in 2016)</td>
<td>The Electrical Appliances and Materials Safety Act</td>
</tr>
<tr>
<td>IECEx</td>
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<td>1</td>
<td>7 (in 2016)</td>
<td>16 (in 2016)</td>
<td>The Industrial Safety and Health Law</td>
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<tr>
<td>IECQ</td>
<td>1</td>
<td>1</td>
<td>18 (as of the end of 2016)</td>
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<tr>
<td>IECRE*</td>
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</table>

CB: Certification Body  TL: Testing Laboratory
IECRE*: System launched in 2014

2 Conformity assessment related to JIS

The Ministry of Economy, Trade and Industry operates the following conformity assessment systems.

### JIS Mark

Manufacturers that receive certificates of conformity from accredited certification bodies are eligible to put the JIS Mark on their products. All certification bodies accredited for the JIS Marking System must be compliant with ISO/IEC 17065. The certification process consists of two elements: evaluation of the conformity of products with the relevant JIS and evaluation of the manufacturer’s quality management system. As of March 2016, there are 24 JIS-accredited certification bodies, including three outside of Japan, which have issued about 8,700 certifications for JIS Marks.

![JIS Mark](image)

### Japan National Laboratory Accreditation System (JNLA)

JNLA is responsible for Japan’s system of assessing and accrediting the competence of testing laboratories to issue test reports based on JIS testing methods.

![JNLA](image)
International Cooperation

JISC fosters cooperative relationships with countries around the world through standardization initiatives that contribute to regional economic development.

March & December 2016
Regional Training Course for Chairs and Convenors in Tokyo, Japan
Organized by JISC with ISO to enhance leadership and consensus-building skills of ISO Chairs and Convenors. In March, 22 participants from Japan, Malaysia and Cambodia attended. In December, 26 participants from Japan, Indonesia, Malaysia, the Philippines, Bhutan and Singapore attended.

May 2016
The 39th Annual General Meeting of Pacific Area Standards Congress (PASC 39) in Bali, Indonesia
PASC aims to strengthen collaboration and promote participation in international standardization activities, including ISO/IEC-related activities in the Asia-Pacific region. At the 2016 Annual General Meeting, members introduced new ISO/IEC proposals and reported on their regional activities. Japan introduced proposals for standardization in response to ageing societies.

July 2016
The 15th Northeast Asia Standards Cooperation Forum in Matsue, Japan
Convened annually since 2002, the forum aims to strengthen cooperation on standardization activities between Japan, China and Korea, as well as promote collaboration in some specific fields. In 2016, the forum convened in Matsue, Japan, and reached an agreement to cooperate in four fields, including in the newly proposed area of smart manufacturing.

August 2016
JISC/IEC/Asia-Pacific Steering Group Human Resource Development Seminar in Bangkok, Thailand
The seminar aims to cultivate specialists and build networks to vitalize IEC international standardization activities in Asia. In 2016, the seminar convened in Bangkok, Thailand, and focused on the theme of Renewable/Alternative Energy.

January 2017
CEN-CENELEC-JISC Secretariat Meeting in Tokyo, Japan
JISC has worked with the European Committee for Standardization (CEN) and European Committee for Electrotechnical Standardization (CENELEC) since the late 1990s and renewed its Cooperation Agreement with CEN-CENELEC in 2014. This agreement promotes cooperation by experts from both sides in several technical areas. The 2017 meeting discussed Japan-Europe cooperation in the fields of industrial digitalization, service standards, and international outreach activities.