

# The Role of ISO and IEC

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### **History of ISO and IEC**

مؤسسة الملك عبدالعزيز ورجاله للموهبة والإبداع

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The International Organization for Standardization (ISO) established In London, in 1946, 65 delegates from 25 countries meet to discuss the future of International Standardization. In 1947, ISO officially comes into existence with 67 technical committees (groups of experts focusing on a specific subject).

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The International Electrotechnical Commission (IEC) start 1906 in London under the auspices of the British Institution of Electrical Engineers with aim to standardization of the Nomenclature and Ratings of Electrical Apparatus and Machinery.

Both ISO and IEC represent the International Standardization recognized from The United Nation (UN). ISO and IEC are a global, not-for-profit membership organization that brings together more than 170 countries participate to these International organizations.

In 1951, the first ISO standard (called Recommendations at this time), ISO/R 1:1951 Standard reference temperature for industrial length measurements, is published. Since then, the standard has been updated numerous times and is now ISO 1:2022 Geometrical Product Specifications (GPS) - Standard reference temperature for geometrical product specification.

#### Why we need International standards

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International Standards touch everyone. From enabling you to use your bank card overseas to ensuring your child's toys don't have sharp edges, they are used everywhere. Followed by companies all over the world, ISO standards provide specifications to ensure products and services work the way you expect them to. What's more, they help to improve customer satisfaction. In a world where the customer's voice is increasingly prominent, this is an essential business requirement.

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#### Haw ISO and IEC Develop standards

International Standards also play major rule for Opening up world trade - ISO and IEC- have a strategic partnership with World Trade Organization (WTO). The WTO's Agreement on Technical Barriers to Trade recognizes the contribution international standards can make towards improving the efficiency of production and international trade, and their key role in the harmonization of regulations.

With participation experts from member countries the technical committees (TC) and subcommittees (SC) develop International Standards in ISO and IEC usually by a process with seven Stages:

Stage 1: Preliminary stage

Stage 2: Proposal stage

Stage 3: Preparatory stage

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#### Stage 4: Committee stage

Stage 5: Enquiry stage

Stage 6: Approval stage

#### Stage 7: Publication stage

For special cases, Technical committees may omit certain stages.

Member experts of TC can choose whether they want to be part of a particular TC, and their level of involvement. O-members can observe the standards that are being developed, offering comments and advice. While P-members actively participate by voting on the standard at various stages of its development.

#### 1 - Preliminary stage (PWI)

The preliminary stage comprises projects envisaged for the future but not yet ripe for immediate development.

This stage can be used for the elaboration of a new work item proposal and the development of an initial draft. These work items are subject to approval in accordance with the normal procedures before progressing to the preparatory stage.

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#### 2 - Proposal stage

New work item proposal: A proposal for new work is generally rooted in a specific need by a stakeholder group in one or several countries.

A new work item proposal may be submitted by:

- the secretariat of a TC/SC
- a TC/SC
- an organization in liaison
- The ISO and IEC members.

A new work item proposal is approved by majority.

#### 3 - Preparatory stage

During the preparatory stage, a working draft (WD) is developed in a TC/SC, generally by a project leader within a project team.

The preparatory stage ends when a first committee draft (CD) is ready for circulation to the members of the TC/SC for comments and approval. The draft is registered.

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#### 4 - Committee stage

The committee draft (CD) is submitted to all ISO or IEC Members: those who participate actively in the work, and those who have observer status only (P- and O-members) for comment and approval.

This is the most important commenting stage to get comments with a view of reaching a consensus on the technical content.

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#### 5 - Enquiry stage

This is the last stage at which technical comments for an international standard can be taken into consideration. The committee draft for vote (CDV) is submitted to all members for a 12 week voting period.

The CDV of an international standard is considered approved if a majority of 2/3of votes cast by P-members is in favour. If there are no technical changes, then the CDV can be published directly.

#### 6 - Final approval stage

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### Final draft international standard (FDIS)

After technical changes requested at the CDV stage have been incorporated, an Final draft international standard FDIS is prepared and sent to all members for a 6 week voting period.

The FDIS is approved if 2/3 of Pmembers approve. If the document is approved, it is published as an IEC International Standard.

#### 7 - Publication stage

Following the approval of the FDIS (or CDV - if no technical changes were requested) the ISO or IEC International Standard is published normally within 6 weeks after approval.

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### ISO and IEC Technical work in figures:

The ISO and IEC Technical Committees work:

	ISO	IEC
Technical Committees	268	114
Subcommittees	498	102
Total	766	216
Development of International Standards	25 111	7475

Saudi Arabian Participations in ISO and IEC Technical work:

Participation	P-member	O-member
ISO	20	30
IEC	188	162