



STRATEGIC BUSINESS PLAN

ISO/TC 167

EXECUTIVE SUMMARY

The field of the markets addressed by the committee is design and execution of steel structures and aluminium structures.

Rules for design and execution of steel and aluminium load bearing structures are directly safety related in terms of protection of lives, safeguard economic investments of the society and the owners of the construction works, and protection of the environment from pollution.

Categories of relevant stakeholders for the subjects treated by the committee are the authorities in general, and as a special area the railway and bridges authorities, the construction industry (constructors), engineering companies, private clients for construction works, investors, lending institutions and insurance companies, employees, suppliers of the base materials for the structures (i.e. steel works, aluminium plants etc.) and local communities.

The current priority is to finalize standards for the execution of structural bolting and performance of welded joints for seismic steel structures.

1. INTRODUCTION

1.1 *ISO technical committees and business planning*

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work programme with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

1.2 *International standardization and the role of ISO*

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

2. BUSINESS ENVIRONMENT OF THE ISO/TC

2.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

- A large number of the member states of ISO do have rules for the design and execution of steel structures. It is, however, anticipated that many of the developing countries do not have their own standards and rules.
- Parallel rules for aluminium structures are not developed to the same degree as for steel structures.
- The rules may differ significantly between the countries, based on tradition and different development patterns. The technological level in relation to the present state of the art of the subject may also differ.
- The status of the rules may differ from country to country; in the majority of the countries they have the status of standards, in some countries they are included in or bound directly to the building laws of the country.
- Rules for design and execution of steel and aluminium load bearing structures are directly safety related in terms of protection of lives, safeguard economic investments of the society and the owners of the construction works, and protection of the environment from pollution.
- There has been a significant scientific development in the recent years, a development which particularly in Europe is connected with the preparation of European Standards (ENs) for the same subjects. This work has given basis for research and development works in order to justify and document the rules in an extensive and consistent way not been carried out before.
- Categories of relevant stakeholders for the subjects treated by ISO/TC 167 are the authorities in general, and as a special area the railway and bridges authorities, the construction industry (constructors), engineering companies, private clients for construction works, investors, lending institutions and insurance companies, employees, suppliers of the base materials for the structures (i.e. steel works, aluminium plants etc.) and local communities.

The concerns and perceptions of relevant stakeholders can be listed as follows:

- Safety, health, economy, environmental and cultural issues (architectural issues) related to the public sector and supply of products and materials and execution of disciplines or practices addressed by the scope of the ISO committee.
- Steel and aluminium products in the form of components for direct use or for inclusion in structures will often meet technical barriers to trade related to the scope of the ISO committee, due to diverging national or regional standards and/or technical regulations.

2.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the ISO/TC:

- The total annual world production of steel in recent years for all purposes are in the order of some 1900 million tonnes in 2020, increased from 850 million tonnes in 2000 (World Steel in figures 2021).
- The amount of steel used for structural steelwork based on statistical figures from known areas are in the order of 3-3,5 % of the total production, i.e. the use in structural steelwork should be in the order of some 60 million tonnes. The total annual costs for the execution work can then be estimated to be in the order of more than 100 billion US\$. Additional value (cost) of design, engineering and project management is added to this figure.
- The base materials (i.e. constructional steels, aluminium alloys, mechanical fasteners, welding consumables) are products sold on a global market. Imports and exports in the industry sector of products/materials takes place on a global market.
- All industrialized nations do have companies producing structural steelwork. The companies range from the smallest ones to large integrated companies producing steelworks and or aluminium works.
- All developed countries do have engineering companies working out the engineering specifications necessary for the production of steel and aluminium structures. In total there are tens of thousands companies involved within the scope of ISO/TC 167, many of which are small and medium sized companies.
- The total number of employees is difficult to declare, in total it is estimated to be some millions.

The ISO standards may be used for international contracts for the two subjects covered, i.e. design and execution of steel and/or aluminium structures including the steel parts for composite structures of steel and concrete.

3. BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC

- The intention with standardized rules for design and execution of steel and aluminium structures is to achieve two goals: safe structures which are also cost effective, i.e. not to use more resources than required for the purpose.
- Standardized rules for execution of structures will imply that the constructors will work with known and established technology from project to project, i.e., a cost-effective way of working. This is particularly important for small and medium sized constructors that do not have the resources to develop their own specifications. Standardized rules will give them a fair opportunity to compete in the market.
- The ISO standards may be used directly for ordering an engineering service for design of steel and aluminium components and structures as well as for ordering the structure (construction contract). As such they will contribute to remove technical barriers to trade and open markets in various regions of the world.
- If in the first instance the standards are not used directly as national standards they will be used as basis for national or regional standards and as such represent a step in harmonization between national standards.

The standards will give countries with less resources the opportunity to share the technology developed by contributions from leading specialists. The standards are intended to represent the state of the art for the subjects and will give them the possibility to compete on the market.

4. REPRESENTATION AND PARTICIPATION IN THE ISO/TC

4.1 *Membership*

[Continuously updated list of ISO/TC 167 P-members and O-members.](#)

4.2 *Analysis of the participation*

The bulk of the members come from developed countries. The reason for this is probably the rather high developed technology involved in the drafting work. An effort should be made to try to motivate participation of more members from the developing countries so that they can take advantage of the learning potential by participation. A possible initiative will be to encourage representatives from universities in these countries to take part.

The following organizations are pr. 2025-10-29 registered as liaisons with ISO/TC 167:

CIB : International Council for Building Research, Studies and Documentation

ECCS : European Convention of Constructional Steelwork

FIB : International Federation for Structural concrete

UNECE : United Nations Economic Commission for Europe

In addition several ISO-committees are registered as liaisons, see the above reference to the ISO website.

ISO/TC 167 should continuously evaluate the activity of its present liaisons and formalize connections also to other international and regional organizations/ committees working in the same area.

5. OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

5.1 *Defined objectives of the ISO/TC*

ISO/TC 167 should prepare the package of standards necessary to design and build steel components and structures as well as aluminium components and structures. There is sufficient knowledge to have the standards fully developed to be used as technical specifications in contracts for engineering services as well as in contracts for construction works.

It is intended to use ISO standards developed for the constituent products (mechanical fasteners, aluminium alloys, steel profiles) and for systems and processes (e.g. acceptance criteria for welding) as reference standards.

5.2 *Identified strategies to achieve the ISO/TC's defined objectives*

The focus per October 2025 is to finalize for publication new standards on the execution of structural bolting as well as on performance of welded joints for seismic steel structures.

Other relevant projects are continuously evaluated based on input from the members.

Highly developed regional or national documents from other regions are available and may also be used as background documents.

The structure of ISO/TC 167 should be used with flexibility, depending on the actual work programme of the TC. The current drafting is carried out by working groups organized directly under ISO/TC 167.

It is suggested that meetings are necessary. It shall, however, be aimed at having much work carried out by use of electronic tools, in particular in the Working Groups.

It is intended to base the work on available technology and documents, i.e. to limit pre-normative research as much as possible.

6. FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME

The availability of competent experts with sufficient financial support from interested stakeholders is the most important factor for success.

7. STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC

The [ISO web site lists the current Work Programme](#) of the TC.

ISO 17607-1 to -6 have been developed based on EN 1090-2 but are not developed under the Vienna Agreement.

Publications by the TC are listed in the TC's page on ISO's website, see below.

Information on ISO online

The link below is to the TC's page on ISO's website:
[ISO/TC 167](#)

Reference information

Glossary of terms and abbreviations used in ISO/TC Business Plans

[General information on the principles of ISO's technical work](#)