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:

Social:
Industrial trucks play a vital social and economic function in the material handling industry especially for the transport and handling of unit loads. Industrial trucks are manufactured in great variety (low lift, with mast or variable reach) and are used on smooth level ground or rough terrain wherever the transportation and handling of unit loads is required. Industrial trucks are used world-wide in a great range of varieties according to market needs.

Technical:
The transport and handling of loads and the environmental impact thereof as well as the safety of the user including the operator will depend on the performance of the industrial trucks. And with the growth of new technology of automation and digitalization integrated into industrial trucks, the application of driverless industrial trucks will increase. Therefore, there is a need for precise specification as to the characteristics and performance of industrial trucks of all kinds for a given application. International standards on performance requirements and their verification through test methods give the industrial truck industry and the many industrial and distribution sectors concerned the tools and references needed which will help:

1. Set up clear adequate requirements.
2. Ensure and monitor needed quality level.
3. Reduce costs.
4. Ensure safety.
5. Reduce risk.
6. Improve sustainability

Economical:
Industrial trucks are sold and used world-wide throughout industry. Major customers are warehouses of all kinds, metal industry, commerce, construction sites, agriculture or earth-moving applications, ports, farms etc. The activities of suppliers are driven by market needs, i.e. the customer's request, the changing of technology and product innovation as well as environmental and social aspects, i.e. industrial trucks are designed following the customer's need taking into account the ergonomic requirements for the operator and the environment where the truck shall operate. In addition, and due to diverging regulations, some trucks face barriers to international trade which affect their product costs. Standardisation in the field of industrial trucks will provide a positive economic impact by achieving an improvement of the design, harmonisation of technical requirements and simplification of test methods for verification which generally contribute to the removal of possible technical obstacles to trade by the free exchange of industrial trucks which then lead to lower costs.

Environmental:
With the development of global industry, the ownership of industrial trucks is increasing year by year. Therefore, the demand for resources and energy, as well as the impact on the ecological environment are also growing. What is more, with the concept of green and sustainable
development deeply rooted in the hearts of the people, the needs of customers have also changed. Industrial truck sustainability standardization activities are guided by the concept of sustainability with the aim to reduce the negative impact of products on human health and the environment and meet customers’ needs.

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:

Industrial trucks covered by the scope of this committee are everyday items of use in a great part in the world. They are manufactured in many countries and are used to transport and handle unit loads of all kinds.

The market for powered industrial trucks is international in size and scope with 2019 estimates for units shipped given according to WITS (World Industrial Truck Statistics) as approx. 1.5 Mio. Worldwide, 300 000 in North America, 650 000 in Asia, 23 000 in Oceania, 19 000 in Africa and 500 000 in Europe. Manual and semi-powered industrial trucks are not included in these figures. A significant number of industrial truck manufacturers are multi-national companies. Industrial trucks are used world-wide throughout industry, commerce, and agriculture, in warehouses, shops, factories construction sites, ports, farms etc.

Due to the specific environment of rough-terrain trucks, SC 4 is in charge of developing their own standards, when necessary. They cover both masted and variable-reach type trucks.

3 Benefits expected from the work of the ISO/TC

The market has already benefited from standards produced by this committee.

TC 110 will when and where possible implement the Vienna Agreement parallel procedure in order to not duplicate standardisation work in different economic areas.

A major goal is to finally have ISO / EN standards for all types of trucks in place and to remove all technical and possibly legal barriers to trade throughout the world and to reduce costs and improve sustainability.

4 Representation and participation in the ISO/TC

4.1 Membership

See this link: https://www.iso.org/committee/51588.html?view=participation

4.2 Analysis of the participation

When and where possible, standardisation work is carried out in ISO by use of the Vienna Agreement. The participation is mainly North America, the European countries, Asia and Oceania (Australia). Active participation on the working group level is reasonably balanced within these areas. The major market forces in our committee are the manufacturers who are interested in removing the barriers to trade world-wide, representatives from government bodies interested in watching if those standards really cover the essential safety and environmental requirements in their countries, test laboratories and consumer bodies.
5 Objectives of the ISO/TC and strategies for their achievement

5.1 Defined objectives of the ISO/TC

Elaboration of standards within the scope of the committee, adjusting the work programme as needed to meet the needs of the market and changing technology. It is currently expected to complete the rather large number of standards and their content following the respective target dates. These standards which are mainly related to safety, when and wherever possible will undergo the Vienna Agreement parallel voting procedure. This is especially the case for the EN ISO 3691 family of Standards.

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

The whole work programme of the committee is being led by ISO, some work items being processed via the Vienna Agreement. The work is carried out in active working groups in the several subcommittees which meet 2 to 5 times a year. The Technical Committee and the subcommittees (SC) meet every year to review the work of the SCs and working groups to promote the communication and contact between SCs.

6 Factors affecting completion and implementation of the ISO/TC work programme

1. Experience shows that work takes longer than planned because industry expertise is not always made available as expected. As individuals move on from participation in standardisation there is a reluctance from industry to provide replacement. With the pressure to reduce manufacturing costs, this situation is likely to become worse and even seasoned delegates have difficulty in allocating time and resources to carry out their task to meet programme dates.

2. ISO/TC 110/SC 2/WG 2 may delay its work on revision of the EN ISO 3691 family of Standards if the existing technical barriers between US and Europe and Australia cannot be resolved.

3. Therefore, delays in the delivery of standards may occur when there is a lack of consensus caused by different national regulations.

4. There is always the danger that a working group of experts produce a document which is voted against by bodies which did not assist in its development.

5. It happens that these factors that may arise are not in the hands of the committee, e.g. external factors over which the TC has no control, such as document turnaround time for parallel processing in CEN and ISO, can influence progress.
7  Structure, current projects and publications of the ISO/TC

Information on ISO online

The link below is to the TC’s page on ISO’s website:
ISO TC 110 on ISO Online

Click on the tabs and links on this page to find the following information:
• About (Secretariat, Committee Manager, Chair, Date of creation, Scope, etc.)
• Contact details
• Structure (Subcommittees and working groups)
• Liaisons
• Meetings
• Tools
• Work programme (published standards and standards under development)

Reference information

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

General information on the principles of ISO’s technical work