

## **ISO/TC 031 Business Plan**

**Date: 2019-06-07**

**Approved via TC 31 RESOLUTION 502/2019 (KANAZAWA)**

# **BUSINESS PLAN**

**ISO/TC 31**

**Tyres, rims and valves**

## **EXECUTIVE SUMMARY**

### **Business Environment**

The tyre, rim and valve industries function in a truly global environment. Their products are used on virtually all types of vehicles (e.g., highway, agricultural, off-road, industrial, cycle and aircraft), as the nearly exclusive means of mobility of such vehicles operating on the ground. The size of the annual international market for the tyre industry alone is currently about \$233 billion US.

The global business environment for tyres, rims and valves is very competitive. Therefore, improvements to existing products and new developments are made on a continuous basis. Furthermore, highway and aircraft tyres are extensively regulated globally. Other types of tyres, and rim/wheels to a lesser extent, are also regulated in some regions and countries of the world.

### **Benefits**

It is not uncommon for a tyre, rim/wheel, and valve to each be manufactured in a different country and installed on a vehicle manufactured in yet another country. It is, therefore, essential to have functional interchangeability standards for tyres, rims, and valves of like sizes to assure proper fit, capacity, and regulatory compliance, as well as for customer convenience.

Since 1968, ISO/TC31 and its subcommittees have developed and published interchangeability standards for all types of tyres, rims and valves. These standards have served as a basis for harmonizing national and regional tyre, rim and valve standards throughout the world.

### **Objectives**

Standardize the classification, size designation, dimensions, and ratings of tyres, rims, and valves. Within the ISO framework, maintain exclusive jurisdiction for such standardization of tyres, rims, and valves (i.e., the preparation of the content of any NP, WD, CD, DIS, FDIS, and/or IS). Revise existing ISO/TC31 standards and create new standards to keep pace with industry and regulatory requirements.

## **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 140 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:

The tyre, rim, and valve industries function in a truly global environment. It is not uncommon for a tyre, wheel, and valve to each be manufactured in a different country and installed on a vehicle produced in yet another country. It is, therefore, essential to have functional interchangeability standards for tyres, rims and valves of like sizes to assure proper fit and capacity as well as for customer convenience. Consequently, regional standardisation organisations throughout the world must have coordinated guidelines to follow, and ISO/TC31 has served and will continue to serve as the focal point and catalyst for that co-ordination.

Tyres, rims, and valves are part of a highly competitive global business environment. Therefore, improvements to existing products and new developments are made on a continuous basis. Highway tyres (passenger car, light truck, and truck-bus tyres) and aircraft tyres are extensively regulated globally. Other types of tyres, and wheels to a lesser extent, are also regulated in many regions and countries of the world. There are trade barriers (with potential for more) for these products in various regions where there are regulatory performance and marking

requirements that differ from one another. For example, tyres currently have to meet different regulatory compliance requirements in the United States, Europe, Brazil, China and Saudi Arabia. Other examples could be cited.

A significant development in terms of potential regulations for passenger and light truck tires has been the Global Technical Regulation (GTR-16), under the oversight of the United Nations (UN/ECE) 1998 agreement. While a GTR has no direct regulatory effect, it is a compendium of agreed regulatory language for global application. In the future, these provisions may become actual regulations. In the meantime, they act as model provisions available to signatories of the '98 agreement. Many of the procedures included in the GTR-Tyres are based on ISO standards. Examples include Rolling Resistance, Noise, Wet Grip, Snow Grip, pending Ice Grip. Additional ISO standards have been developed for off-highway tires, but these are typically not covered by 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:

Tyre Industry Only:

Total international trade:

\$233 Billion - 2017  
\$242 Billion - 2018 (est)  
\$251 Billion - 2019 (est)

Estimated number of new tyre manufacturers: 175

Regulations in the United States and Europe predated most ISO/TC31 standards. Regulations in other countries typically copied those in the US or Europe or a combination of the two. However, there have been, and continue to be newer regulatory developments around the world. Many of these do cite ISO standards.

## **3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC**

Since 1968, ISO/TC31 and its subcommittees have developed and published interchangeability standards for all types of tyres (passenger car, light truck, truck-bus, off-the-road, agricultural, industrial, cycle, and aircraft). These standards have served as a basis for harmonising national and regional standards throughout the world. The "service description" that originated in ISO/TC31 standards has been adopted by regional standardizing organizations and incorporated in most tyre regulations.

The current work of ISO/TC31 and its subcommittees continues the effort to further harmonise the standards of the major regional tyre and rim standardising bodies of the world, and to anticipate/respond to current items of interest to the industry or to governmental organisations.

## 4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC

### 4.1 [Countries/ISO members bodies that are P and O members of the ISO committee](#)

#### 4.2 *Analysis of the participation*

ISO/TC31 was among the original committees, aligned with basic industrial and service segments, which were established in 1947 by the United Nations Economic Commission for Europe (UN/ECE). However, it did not become active until 1968, mainly in response to the beginning of major national tyre safety regulations. ISO/TC31 and its subcommittees have been developed and have remained active from that time to the present.

North America, Europe, Russian Federation, China, South Korea, India, Australia and Japan are well represented and have been active participants in most of the meetings of ISO/TC31 and its subcommittees. This coincides closely with countries that have had national tyre safety regulations for the past **50+** years.

Countries in South America, Africa, and **smaller Asian countries** have had little or no active participation in the meetings of ISO/TC31 or its subcommittees. However, the tyre, rim and valve industries in those countries are aware of and have copies of many of the ISO/TC31 International Standards.

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

### 5.1 *Defined objectives of the ISO/TC*

The objective of ISO/TC31 is to standardise the classification, size designation, dimensions, and ratings of tyres, rims, and valves.

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

Much of the original objective of ISO/TC31 has been accomplished. Terminology standards were established, then guideline standards, then actual product standards were published for each product group. Now, the primary strategy is to keep up to date with industry activities and to revise existing ISO/TC31 standards or to create new standards to keep pace with industry requirements.

This strategy is reflected in the fact that some ISO/TC31 standards are in their fifth edition. Originally, testing standards within TC31 were established only for aircraft tyres. More recently, TC31 subcommittees have established and are continuing to establish test procedures to verify the ratings of tyres and valves. An example is a series of standards concerning RFID application for tyres. These standards will facilitate tyre identification with current technology.

ISO/TC31 is structured as follows:

TC31 – Set policy and co-ordinate subcommittee activities.

SC – Subcommittees have been established for individual product types (for example, passenger car tyres and rims, aircraft tyres and rims, valves, etc.). Each subcommittee is responsible to develop standards for their specific product group.

WG – Working Groups are established to develop specific proposals for a subcommittee or the main committee. These Working Groups have proven to be the most efficient way to develop proposals for consideration by the appropriate committee.

The work of ISO/TC31 and its subcommittees and working groups is conducted through physical meetings (which are held only when there are sufficient agenda items), and webconferencing.

Meetings are conducted in English although simultaneous translation has been provided on occasion by specific request. Working Group meetings have always been conducted without translations. Within the ISO framework, ISO/TC31 maintains that it has exclusive jurisdiction for the standardisation, i.e., the preparation of the content of any NP, WD, CD, DIS, FDIS, and/or IS, of tyres, rims and valves.

ISO/TC31 maintains liaisons with each of the ISO/TCs for vehicles of all types, so that ISO/TC31 and its subcommittees can respond to any tyre, rim and valve issues that may arise in those committees or their subcommittees.

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

Completion of the work of some of the current working groups will depend on global regulatory activity.

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

This section gives an overview of the ISO/TC's structure, scopes of the ISO/TCs and any existing subcommittees and information on existing and planned standardization projects, publication of the ISO/TC and its subcommittees.

### **[7.1 Structure of the ISO committee](#)**

### **[7.2 Current projects of the ISO technical committee and its subcommittees](#)**

### **[7.3 Publications of the ISO technical committee and its subcommittees](#)**

## **Reference information**

**[Glossary of terms and abbreviations used in ISO/TC Business Plans](#)**

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