BUSINESS PLAN

ISO/TC 149
Cycles

EXECUTIVE SUMMARY

Created in 1971, the ISO/TC 149 is dedicated to the standardisation in the field of cycles, their components and accessories with particular reference to terminology, testing methods and requirements for performance and safety, and interchangeability.

Excluded:

- chains and tooth profile;
- tyres, rims and valves;
- toy cycles.

Note: The meaning hereby assigned to “cycle” is defined in item I of article 1 of the Convention on Road Traffic, Vienna, in 1968 concluded under the auspices of the United Nations:

I. “Cycle” means any vehicle which has at least two wheels and is propelled sololy by the muscular energy of the persons on that vehicle, in particular by means of pedals or hand-cranks.

At present there are 16 Participating member countries and 23 Observer member countries in ISO/TC 149.

The last ISO/TC 149 meeting took place in June 2013.

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.

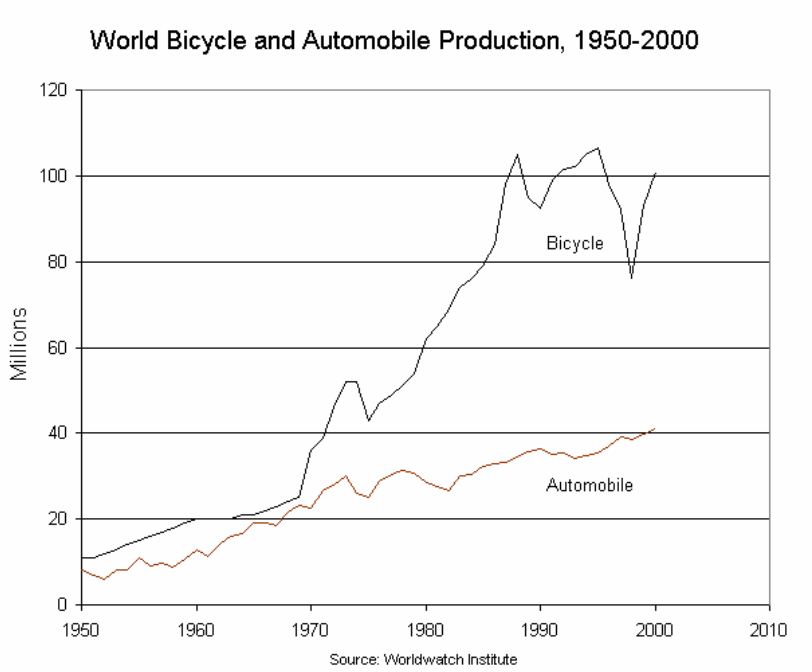
ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and 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 industry of cycle and its development and mass production started during the 19th Century. In the 1880's appeared the first cycle as we know it nowadays. All this development has resulted in a large number of different types of cycles, e.g. city bikes, sport bikes, racing bikes, mountain bikes, roadster, electric pedal assisted bikes, etc. In 2000 approximately 100 million cycles were produced all over the world. If we consider an average production value of 30 $, the total amount of the world trade in what concern cycles is approximately 3 billion.



At present, there are countries like China or India, which have vertically organised industries, form draw, casting and moulding processing to the full assembled cycle ready to be stocked. But most of the countries, like Italy, Germany, Taiwan or France, are horizontally organised, with factories specialised in parts production and the delivery of that parts to the after-market and to the cycle assemblers.

In most of the countries there are policies in course of development to increase the use of cycle either considering cycling as a sport or as a daily mean of transport. In the first case, as a sport, the main problem is the security of the cyclist which includes the cycle itself and all the means for the security, protection and safety. In the second case, as a mean of transport, in addition to the security problem, cycling is a fundamental point to take into account for the protection of environment and the sustainable transport.

The main stakeholders of ISO/TC 149 are the cycle industry, research and testing organisations, certification bodies and regulators.

In our days, the cycle industry is divided in many different sectors which can be classified by:

- The manufactured product:
  Seat posts, forks, frames, chain wheels, hubs, axles, pedals, cables, nipples, chains, crank sets, etc.
- The material:
  Metal, plastic, rubber, etc.
- The process:
  Manufacturers of individual parts, assemblers, manufacturers of the complete cycle, distributors, etc.

Nowadays many national standards are based on the standards developed and maintained by ISO/TC 149. These may be adopted by regional bodies either directly or with some modifications to meet local requirements or environmental conditions.

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:

Cycles are sold and used world-wide, being a very important activity in Asian countries. The activities of the manufacturers and suppliers are driven by market need. Customer requests changing technology, product innovation, increased performance requirements and reductions in individual markets also impact on market development.

The main world producers in 2000 were:

Million units

COUNTRY	1990	1995	2000
China	31,9	41,0	52,2
India	8,4	11,5	11,0
Taiwan	6,8	9,7	7,5
USA	5,6	8,8	1,1
Japan	8,0	6,6	4,7
Italy	3,5	5,3	3,2
Indonesia	2,0	3,0	N/A
Germany	3,9	3,2	3,2
Thailand	0,7	1,8	N/A
France	1,5	1,3	1,9
United Kingdom	1,3	1,2	1,2
Malaysia	0,3	0,8	N/A

N/A: Not available

Source: Bicycle Retailer&Industry

NOTE: The reported quantity of ownerships of cycles is more than 1 billion units, with an average life of 7 years.

- Exportations/Importations:

The main world exporters of cycles are:

COUNTRY	EXPORTING
China	10 000 000
Taiwan	9 064 000
India	4 714 000

COUNTRY	EXPORTING
Italy	2 703 000
USA	605 000
France	507 000
Netherlands	446 814
Portugal	310 000
Germany	294 000
United Kingdom	258 509
Source: CEN	

The main European importers of cycles are:

COUNTRY	IMPORTING
France	720 022
Austria	539 404
Switzerland	451 262
United Kingdom	332 542
Belgium/Luxemburg	285 009
Denmark	144 244
Spain	136 157
Source: CEN	

Percent of trips by travel mode:

COUNTRY	CYCLE	WALKING	PUBLIC TRANSIT	CAR	OTHER
Netherlands	30	18	5	45	2
Denmark	20	21	14	42	3
Germany	12	22	16	49	1
Switzerland	10	29	20	38	1
Sweden	10	39	11	36	4
Austria	9	31	13	39	8
United Kingdom	8	12	14	62	4
France	5	30	12	47	6
Italy	5	28	16	42	9
Canada	1	10	14	74	1
USA	1	9	3	84	3
Source: John Pucher, Transportation Quaterly, 98-1 (from various transport ministries and departments)					

Cycle mode splice by city:

CITY	PERCENT
Paris, Marseille, Lyon, Toulon, Metz and Reims (France)	< 2 %
Rennes, Bordeaux, Toulouse and Nante (France)	2-5 %
Grenoble, Lille, Orleans and Valence (France)	5-10 %
Strasboug (France)	15 %
Copenhagen (Denmark) and Basel (Switzerland)	20 %
New Dehli (India)	22 %
Moscow (Russia)	24 %
Tokyo (Japan) and Odense (Denmark)	25 %
Erlangen (Germany)	26 %
Dhaka (Bangladesh)	40 %
Beijing (China)	48 %
Groningen (Netherlands)	50 %
Shenyang (China)	65 %
Tianjin (China)	77 %
Source: International Bike Fund.	

3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC

Technical regulations, specifications and standards on bicycles are being unified, what is a benefit, as up to the moment each country had different national rules about the technical requirements of bicycles what may result in difficulties for the exports and an additional cost to the manufacturers and importers to adapt their bicycles to the local rules.

The market will be benefited from Standards delivered by ISO/TC 149 and it is expected that the completion of a package of Standards will assist to ensure the provision of a product that will maximise cycle user safety and comfort, the suitable performance, behaviour, marking and labelled of the cycles, including technical performance data and instructions for use.

At European level some standards have been published and other are under development in the European Technical Committees CEN/TC 333 'Cycles' and CEN/TC 158/WG 4 'Head protection. Helmet for cyclists'. This standards are mainly addressed to the product itself and ISO/TC 149 will, when possible, try to implement the Vienna Agreement with CEN, in order not to duplicate standardisation works. As a complement to the European work, ISO/TC 149 will concentrate its efforts in the standardisation of the bicycles components and accessories.

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

At present there is no active participation in the committee, as no work items are being developed.

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

5.1 Defined objectives of the ISO/TC

Prepare and maintain in a timely and cost effective manner ISO Standards and other ISO deliverables concerned with cycles.

These Standards and deliverables will cover the following aspects:

- To improve the safety of the cycles.
- To ensure, as far as practicable, the appropriate function and performance of the product and its components.
- To provide a basis for the testing of products.
- To minimise obstacles to international trade.

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

Revise existing standards where necessary and to develop new ISO Standards if required, based on identified needs, or by adoption either directly or with modification, standards prepared by other organisations and, in particular, those prepared in close co-operation with CEN Technical Committees, that will lead to a greater world-wide harmonisation standardisation.

The type of standards products include those specifying:

- Performance requirements.
- Performance limits to be achieved by the manufacturers.
- Test methods by which specified requirements and limits can be verified or measures.

In addition, informative standards and technical reports will be prepared when the need is identified.

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

No active work items at the moment.

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