



STRATEGIC BUSINESS PLAN – ISO/TC 69

Executive summary

ISO/TC69 is responsible for the development of generic International Standards on the application of statistical methods. These standards are used by ISO technical committees, by industry or service companies, and by certification and accreditation organizations.

The portfolio of ISO/TC69 covers a range of methods and techniques supporting the success of any enterprise such as:

- application of statistical methods in product and process management (control charts, process capability, and process management strategies, etc.),
- acceptance sampling methods that permit the amount of inspection to be reduced as the level of trust in the producer increases,
- statistical solutions for problems related to measurement methods and results,
- application of generic statistical standards as they relate to services as well as products,
- application of statistical and related methodology for new technology and product development, and
- statistical interpretation of data.

This document explores how TC69 supports the vision, mission, and key objectives of ISO. It reviews TC69 performance regarding the objectives the TC set for itself in the previous strategic plan. Four key challenges have emerged that influence our future directions:

1. Erosion of the number of P members countries supporting the TC,
2. Reduction of the number of experts within each P-member country,
3. Standardization of statistical methods and techniques in a fast-changing world with the arrival of sophisticated commercially available statistical software packages and the massive expansion of “Big Data”,
4. Small number of sales of the existing standards published by TC 69.

Strategies developed to meet the key challenges identified in this plan and adopted by the Chair Advisory Group (CAG) for the period 2020-2024 are provided at the end of this document.

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:

TC 69 has three types of customers: ISO, Business/Government, and Certification/Accreditation organizations.

2.1.1. ISO: The first customer of ISO/TC69 is ISO itself and more precisely its 200+ technical committees that develop standards where statistical techniques are needed. These technical committees call upon TC69 to provide expertise that ensures the statistical element of their standards is optimum. The cooperation between ISO/TC69 and other technical committees is reflected in the 20 liaisons that TC69 has with ISO technical committees and 11 external liaisons with other standards development bodies such as IMEKO (International Measurement Confederation), OIML (International Organization of Legal Metrology), and WHO (World Health Organization). Although not an official liaison, TC69 also collaborates with Joint Committee for Guides and Metrology (JCGM)

2.1.2. Business/Government: In the modern business world, a key role is played by the production, collection, analysis, presentation and interpretation of data in order to optimize the decisions that are needed on an on-going basis to compete and to be successful. These activities are present in industry and service sectors, in scientific research in governments and in human sciences. The aim is to transform raw data into usable, understandable and communicable information.

More recently, with the ease of collecting data from any business transaction, in structured and unstructured ways, due to technology, the amount of data stored and available for analysis has grown exponentially over the last 20 years, leading to an era of “Big Data.” This is an era where data availability can be so large that the traditional analytical techniques do not always work efficiently, thus generating a birth of new methodologies and techniques in statistical methodology - that in turn need to be standardized.

2.1.3. Certification/Accreditation organizations: The third category of customers for TC69 documents consists of the organizations that provide assurance that requirements specified in professional or quality standards are met by the organizations seeking certification or accreditation. Such assurance is usually provided on the basis of a sample of tasks, activities, and data and necessitates the assessment of risks that requires the use of statistical techniques.

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 following list of three quantitative indicators describes TC69 business environment.

2.2.1. Table of number of P-member countries and O-member countries

Year	Total number of P-members	Total number of O-members
2004	24	34

2005	N/A	N/A
2006	25	33
2007	26	33
2008	25	33
2009	24	34
2010	24	30
2011	23	29
2012	21	27
2013	21	28
2014	19	31
2015	22	29
2016	22	30
2017	23	30
2018	20	33
2019	20	33
2020	20	33
2021	20	36

2.2.2. Table of number of attendees to annual TC69 meetings.

Year	Location	Number of Attendees
2004	Stockholm, Sweden	48
2005	Paris, France	N/A
2006	Sun City, South Africa	57
2007	Helsingor, Denmark	48
2008	Beijing, China	54
2009	Kuala Lumpur, Malaysia	46
2010	Paris, France	49
2011	Berlin, Germany	46
2012	Tokyo, Japan	38

2013	Milwaukee, USA	52
2014	Vienna, Austria	55
2015	Dalian, China	69
2016	London, UK	60
2017	Cape Town, South Africa	45
2018	Berlin, Germany	56
2019	Nagoya, Japan	58
2020	Virtual due to restricted travel	--
2021	Virtual due to restricted travel	34

2.2.3. Number of ISO/TC69 standards sold over the last 5 years by ISO Geneva or reported to be sold to ISO by national bodies (provided by ISO TPM June 2014 – to be revised when more recent information is made available).

TC69 document series	Sum(Qty over last 5 years)	SC or WG	Document series title
ISO 2859	4892	SC5	Sampling procedures for inspection by attributes
ISO 5725	2838	SC6	Interlaboratory studies
ISO 3951	1534	SC5	Sampling procedures for inspection by variables
ISO 13528	1060	SC6	Proficiency testing
ISO 7870	978	SC4	Control charts
ISO 13053	743	SC7	Six Sigma
ISO 11843	660	SC6	Capability of detection
ISO 3534	636	SC1	Terminology
ISO 22514	452	SC4	Capability and performance
ISO 16269	613	TC9/WG3	Statistical interpretation of data
ISO 21748	354	SC6	Guidance for use of repeatability, etc.
ISO 8258	338	SC4	Shewhart control charts (withdrawn)
ISO 11462	253	SC4	Guidelines for implementation of SPC
ISO/TR 8550	251	SC5	Guidelines on selection of accept. sampling
All others (36)	2683		All others (36 docs, each 160 or less)
Total	18285		

3 Benefits expected from the work of the ISO/TC

Benefits expected from the work of TC69 are:

- Providing standardized statistical approaches for industry
- Providing references for statistical approaches
- Reviewing statistical aspects of standards for other ISO TCs

4 Representation and participation in the ISO/TC

4.1 Membership

<https://www.iso.org/committee/49742.html?view=participation>

4.2 Analysis of the participation

TC69 participation will:

- See Table 2.2.1 for membership numbers
- Reach out to O member countries to encourage participation
- Encourage gender diversity in TC69 leadership

5 Objectives of the ISO/TC and strategies for their achievement

5.1 Defined objectives of the ISO/TC

Key objectives for TC69 are:

- a. deliverables meet customer needs
- b. ISO standards promote innovation and provide solutions to address global challenges
- c. the capacity and participation of developing countries in international standardization is significantly enhanced by the work of ISO
- d. excel in reaching out to and engaging stakeholders
- e. foster partnerships that further increases the value and efficient development of international standards
- f. encourage gender and age diversity among experts and leaders of TC69
- g. strive for gender responsive standards

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

The following strategies will aid TC69 in reaching objectives:

- Hold meetings to enhance productivity:
 - Annual meetings
 - CAG meetings
 - Mid-year meetings
 - Remote quarterly meetings
- Encourage attendance at in-person meetings, and
- Provide capabilities for remote participation.

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

The following factors may have an impact in TC69 reaching its objectives:

- Worldwide pandemic
- Continued secretariat support of SCs
- Countries to host plenary meetings
- International politics influencing ability to work jointly
- Finding sufficient numbers of countries and experts to participate
- Lack of available time and consistent work progress throughout the year, including balancing paid work with ISO volunteer work
- Challenge to find experts to fill leadership positions
- High financial entry barriers (fees) for volunteers
- ISO focus on formal criteria and corporate design in place of focus on contents and technical accuracy
- Onerous correction/corrigendum process

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:

<https://www.iso.org/committee/49742.html>

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](#)