STRATEGIC BUSINESS PLAN 2026 - 2027
ISO/TC 38 Textiles

EXECUTIVE SUMMARY

Textiles are one of the most important and versatile commodities in the global economy. The textile industries involve provisions of raw materials, preparation of fibre production, manufacture of yarns and fibres, manufacture of fabric formation, finishing processing including bleaching, dyeing, printing, coating, special chemical treatments, transformation of the fabric into clothing, upholstery, or industrial/technical textiles, smart textiles and rope and netting formation. Therefore, the textile industry concerns a variety of entities such as suppliers of raw materials, processors, manufacturers, traders, distributors, retailers, associated industries such as the laundry industry, government and educational establishments as well as consumers.

There is also extensive movement among countries as companies take steps to become more innovative and competitive. Fabrics designed and manufactured in one country and may be cut to design in another, then machined in the third and finished in the originating country. In addition, retailing of garments is done now common across national boundaries.

Standards are now the international language for communicating the buyer's requirement to the suppliers. To ensure a textile product meets the desired requirements, the supplier in turn shall ensure the whole of the textile supply chain, from spinner through to garment manufacturer, knows what is required. Each part of the supply chain may in turn be specifically responsible for certain aspects of the desired standards.

The main objectives and priorities in the work of the committee TC 38, *Textiles*, are to develop and publish the International standards in the field of fibres, yarns, threads, cords, rope, cloth and other fabricated textile materials, regarding to test methods, terminology and definitions relating to the textile industries, raw materials, auxiliaries and chemical products required for processing and testing; and test methods and specifications for textile products with respect to health, material and product safety and quality. The ethical, environmental and circular economy issues in textile supply chain were added in the TC38 scope newly. The need for Global relevance is highly considered for sustainable development goals.

The benefits to the market from publication of these standards are explicit for the stake holders stated above. The most standards published are methods of test and specifications, which enable objective assessment of products or processes. Some standards are developed to provide products consistency and harmonization that meet consumer's expectation.

In ISO, the global environment protection policy has been implemented in practice. In TC38, the priority is given to the microplastics from textile sources (i.e. fine fibre wastes coming out during textile production processes - such as dyeing, finishing, etc. - and textile care process, such as domestic washing, professional cleaning or industrial laundering, etc.). On the other hand, the animal welfare in the textile supply chain has been become a topic relevant to ethics. The newly established working groups are dealing with the respective topics. The circular economy regarding to sustainability is another significant topic and required to watch carefully and to collaborate with the emerging projects across the TCs.

Our technical committee liaises for cooperation with other technical fields, such as nanotechnologies and electronic textiles (known as "e-textiles") and will be involved for standardization in such fields when textiles are concerned.

Within the perspective to improve the services of the standardisation towards stakeholders, the tool OSD (Online Standard Development) has been introduced for helping of the standard drafters as well as the project management along the stages. ISO/TC 38 will encourage its project leaders to elaborate their project(s) through OSD.
Regarding the emergence of the new technology, Artificial Intelligence, ISO/TC 38 will take into consideration how this new technology will affect its projects.

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 174 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 38

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 influence how the relevant standards development processes are conducted and the content of the resulting standards:

Traditionally the Textile and Clothing (T&C) industries had been well protected. Major importers such as Europe and the USA had applied a wide range of quantitative restrictions or quotas on imported goods. Similarly, major exporters such as Asia have protected their own markets by applying high import tariffs and/or numerous non-tariff barriers.

Since 1995 global trade in T&C had been governed by the WTO Agreement on Textiles and Clothing (ATC). The Textiles and Clothing quotas of ATC were abolished on January 1, 2005. This abolishment of quotas strongly affected the large textile supplying countries, especially China, other Asian countries and India, who can export freely to Europe or the USA without any quantitative restrictions. The fact of the matter was that China - the USA, and China - EU made quantitative agreements until the end of 2008, to avoid the exploding expansion of imports from China on the immediate aftermath of the quota abolishment. In January 1, 2009 ended the both agreements, and after the date, any agreements were not concluded for the quantities of the T&C trade.

Although the dismantling of the quota system has posed both challenges and benefits, the net result has been positive for those countries where there are inexpensive, abundant and skilled work force suited for labour intensive apparel industries, accompanied by sufficient raw materials.

The USA and EU industries have been exposed to increasing competition from numerous low-labour cost countries, particularly from Asia, for which the sector constitutes one of the most important sources of income and employment. Many developing countries have become very competitive combining low wages with high-quality textile equipment and expertise imported from the more industrialized countries.

The higher labour costs of North America, Europe and Japan have resulted in increased imports into these areas. For the T&C industries in these areas to maintain their position in the global market, they should develop more value-added products and remain competitive by innovation, quality, creativity and design.

In the field of T&C, EC introduced the following legal and binding directives to cover areas where the sustainable products will be functioning and the circular economy model will be established, and safety of the consumer might be at risk. The relevant standards will be developed or have been developed and maintained in ISO and CEN, in some cases under the Vienna Agreement.

a) Ecodesign for sustainable products regulation (ESPR) has been enforced on July 18, 2024

Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (Text with EEA relevance)

b) Regulation (EU) No 1007/2011 – fibre names labelling and the marking of the fibre composition of textile products

Two other general safety legislations that can apply to textiles and clothing are,

c) REACH (Regulation, Evaluation, Authorisation and Restriction of Chemicals), the regulatory framework for the safety of chemicals (Regulation 1907/2006 which came into force on 1st June 2007) (e.g. azo colourants), and

d) The General Products Safety Regulation (EU) 2023/988.

Following to EC, the azo colourants have been legislated in 2003 in China, in July 1, 2009 in Republic of Korea, in April 1, 2016 in Japan, etc.

2.2 Quantitative Indicators of the Business Environment

The following figures of quantitative indicators describe the business environment in latest in order to provide adequate information to support actions of the ISO/TC 38:

The world fibre production quantity was about 116 million tons in 2023, as a total of chemical fibre and natural fibre as shown in Table 1 and Figure 1, even though this is a provisional value. The fibre production quantity is showing uptrend and increased to 150 % compering with in 2010. The increase of the fibre production has been following the fibre consumption demands which are especially relating to the worldwide population growth and increase of GDP in developing countries. These fibres are processed and transformed clothing, commodity products, industrial materials, etc. The textile industries are quite huge and expanding business field as understood from the great quantity of the fibre production.

Table 1 - World fibre production (Unit: x 1,000 tons)

	2010	2015	2020	2021	2022	2023
Chemical fiber	51,527	67,535	75,864	88,899	87,485	91,684
Cotton/Wool	26,178	24,757	25,632	26,091	25,494	25,184
Total	77,705	92,292	101,496	114,990	112,979	116,868

NOTE 1: Source: JCFA [Textile handbook], ICAC [Cotton World Statics], IWTO [Market Information]
NOTE 2 : The data from 2021 to 2023 do not include for acrylic and olefin fibre.

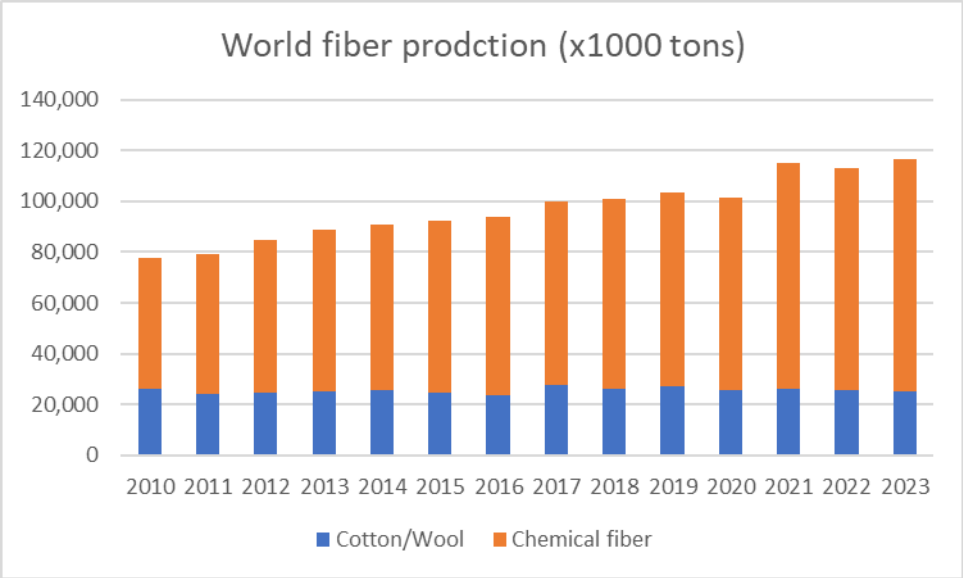


Figure 1 - World fibre production

The major production areas or countries for chemical fibre are shown in Table 2 and Figure 2, in 2020. China accounted for about 81.3 % of the world chemical fibre production and the growing rate from previous year was 3.6 %. Following to China, the share of India was 7.1 % and EU was 4.4 %. Total quantity of the chemical production was increased by 47.2 % in 2020 comparing to in 2010.

Table 2 - Chemical fibre production in 2020 (x1,000 tons)

	Japan	R. Korea	China	C. Taiwan	Indonesia	India	EU	Brazil	Total
Year of 2020	705	1,022	61,679	1,257	1,607	5,372	3,323	225	75,864
Composition %	0.9%	1.3%	81.3%	1.7%	2.1%	7.1%	4.4%	0.3%	

NOTE Source: JCFA

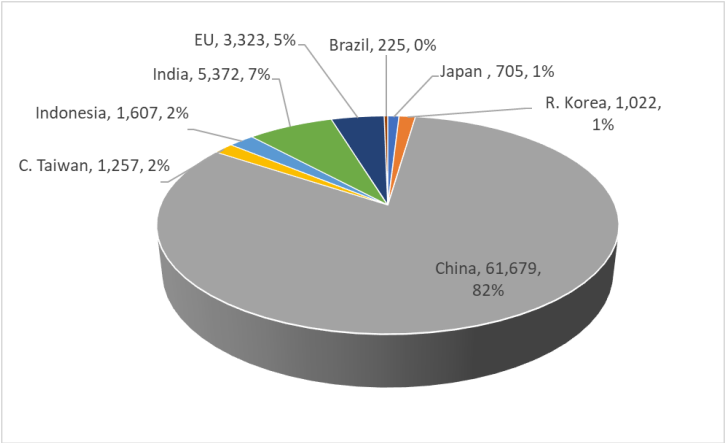


Figure 2 - Chemical fibre production in 2020 (x 1,000 tons)

The amount of T&C worldwide trade is shown in Table 3 and Figure 3 for the export and Table 4 and Figure 4 for the import. The latest data of the worldwide T&C trade amount in 2023 was about 862 billion USD and 3.7 % of the value of the total exported goods.

Table 3 - T&C world export amount (Million USD)

	World	USA	EU	JAPAN	CHINA	ASEAN	INDIA
2005	506,375	21,944	138,040	8,072	107,664		16,037
2010	634,957	23,595	151,274	8,615	199,561	48,700	22,355
2015	764,702	24,925	178,089	7,831	273,584	57,303	35,840
2020	769,047	22,770	187,211	6,596	280,909	81,402	33,380
2021	881,804	25,543	220,191	7,360	305,029	94,409	29,870
2022	929,321	30,813	225,655	7,151	319,950	91,938	42,920
2023	862,673	26,499	230,718	6,897	295,828		35,360

NOTE 1: Source: JETRO, JCFA, WTO
NOTE 2: ASEAN: Association of Southeast Asian Nations: 10 countries of Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
NOTE 3: EU 15 countries before 2012, 27 countries in 2012 and 2013, 28 countries after 2014, this is the total of intra-regional and extra-regional trade
NOTE 4: India: India custom statics

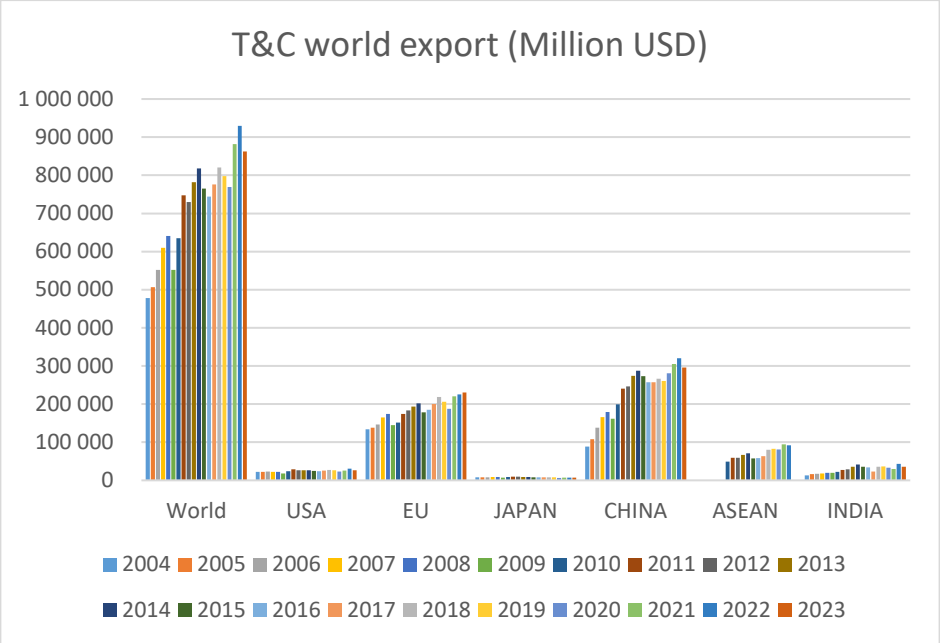


Figure 3 - T&C world export amount (Million USD)

Table 4 - T&C world import amount (Million USD)

	USA	EU	JAPAN	CHINA	INDIA
2005	92,678	173,198	27,532	23,445	
2010	95,450	204,354	32,907	29,565	
2015	115,121	241,846	35,384	35,384	6,172
2020	112,293	251,594	35,973	29,389	8,260
2021	120,501	268,867	33,306	35,479	5,870
2022	137,223	292,223	34,956	31,460	7,670
2023	109,448	274,288	32,392	29,917	9,910

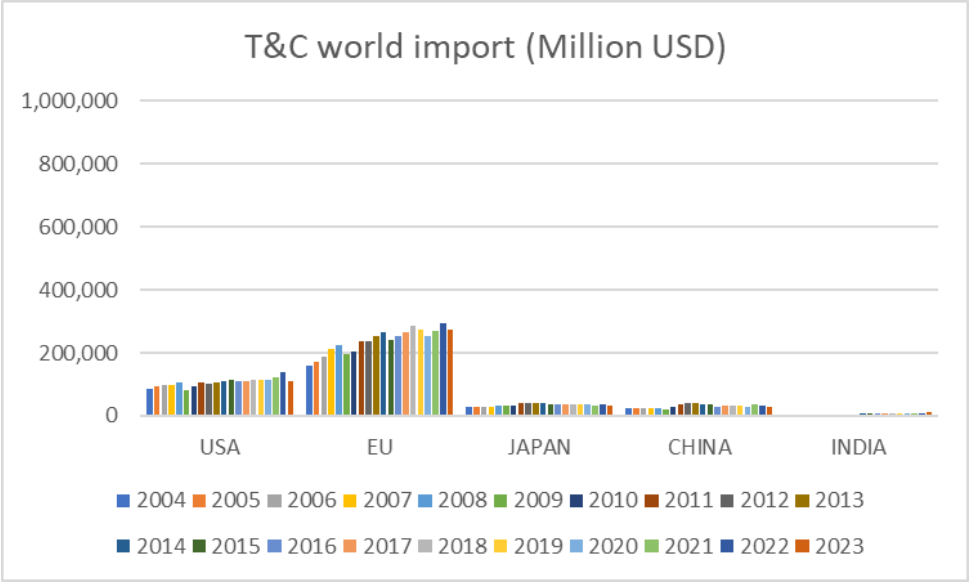


Figure 4 - T&C import amount (Million USD)

As shown above statics, the major production countries are China, EU and Asian area, while the major markets of the textile products are found in EU, USA, Japan, etc. Under the supply chain movement of the T&C production, the cross-border production becomes common and they are seeking China plus one production countries. From this trend, the sewing production has been shifting to ASEAN countries from China. However, the materials for sewing are imported from China to the sewing countries, so the export amount of the China is expected as uptrend.

EU trade content in details of the intra-regional and the extra-regional trade are shown in Table 5 and Figure 5, which shows that EU is the huge T&C market for the intra-regional countries. This implies how important standards are to the EU for fair and proper trade transactions.

Table 5 - EU world trade (Million USD)

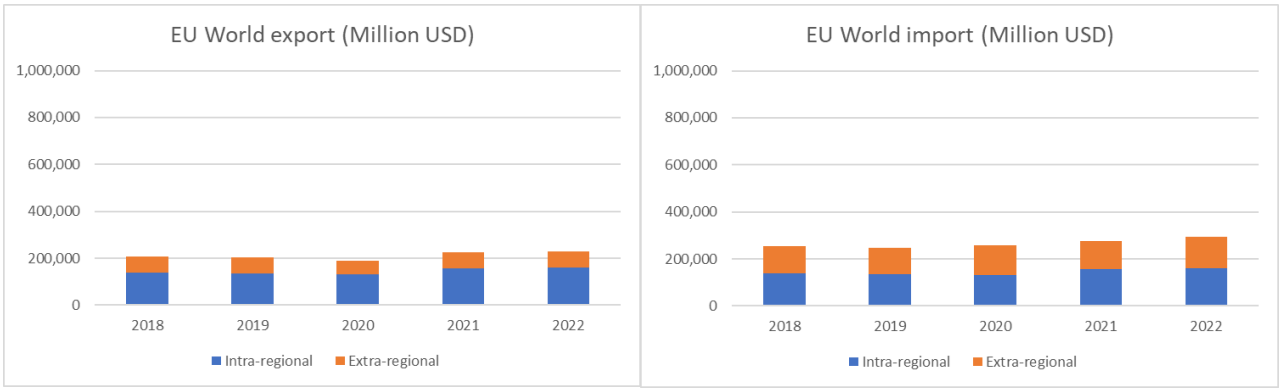
A - Export

Export	2018	2019	2020	2021	2022
Intra-regional	138,520	135,440	130,980	157,050	159,410
Extra-regional	67,640	67,380	59,410	68,080	70,010
Total	206,160	202,820	190,390	225,130	229,420
Intra-regional rate	67.2%	66.8%	68.8%	69.8%	69.5%

B - Import

Import	2018	2019	2020	2021	2022
Intra-regional	138,520	135,440	130,980	157,050	159,410
Extra-regional	114,300	112,120	125,000	119,500	135,830
Total	252,820	247,560	255,980	276,550	295,240
Intra-regional rate	54.8%	54.7%	51.2%	56.8%	54.0%

NOTE Source: JCFA, WTO



A – Export B – Import

Figure 5 - EU Intra-regional and extra-regional trade (Million USD)

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

Standards developed by ISO/TC 38 are primarily specifications and test methods which provide the means to enable objective assessment of process and product. The standards assist the liberalization of world trade in textile commodities, as emphasised by the World Trade Organization.

Standards impose exacting demands on industry in terms of quality, environmental management, fire safety, consumer protection, metrology, the accurate calibration of measuring equipment and the performance of the newly developed products. The results from the testing using those standards give the requisite information to the consumers as well. The published standards and work programmes of the TC 38 including these demands and all the indications are relevant to the continued prosperity of the market.

ISO/TC 38 is structured to develop the specifications and test methods for the variety of textiles and textile products that the market generates. In recognition of this responsibility, the work programme includes standards that pertain to practically the whole supply chain from fibre through fabric to final product. In addition to end-use standards for evaluating finished products for important basic aspects such as colour fastness, burning behaviour, dimensional stability, strength and hygiene or amenity finishing such as antibacterial activity, the TC has also developed important standards relevant to

the processing of textile materials and standards for evaluating raw materials used in their manufacture.

International test procedures for evaluation of product, process and performance are tools used to enable the development of international trade and increase market access. Although in-house specifications may be set by brands, the use of harmonised international test protocols reduces the need for duplicate testing in the world where fabric suppliers serve for European and USA consumers, as well as for global consumers.

These procedures also assist in obviating the occurrence of flammability problem and surface burning in textile products and so reduce the consequential losses of human life or properties due to fire.

A good example of the problems that ISO standards are seeking to obviate is in home laundering. Most apparel garments are subjected to home laundering and most materials sold in commercial outlets are based on their conforming to specific wash fastness criteria. Unfortunately, domestic procedures for home laundering vary around the world and with consumer expectation.

The detergent formulations, water temperatures, degree of agitation, cycle times for washing and rinsing and bleaching systems, all play significant roles in evaluating colour change and staining or durability of applied finishes as well as the dimensional change and mechanical damage of the textile. Without universally accepted test methods of ISO for evaluating the parameters, the difficulties will continue to obstruct increased global trading both for raw materials and finished product. To solve these difficulties, ISO 3758 "*Textiles-Care labelling code using symbols*", based on the GINETEX care labelling system and ISO 6330 "*Textiles-Domestic washing and drying procedure for textile testing*" had been developed. These two standards have been revised in 2021 for ISO 6330 and in 2023 for ISO 3758 to make both standards more consistent and coherent to Global relevance.

4. REPRESENTATION AND PARTICIPATION IN THE ISO/TC

4.1 Membership

Countries/ISO member bodies that are P and O members of the ISO committee –TC 38

4.2 Analysis of the participation

By their market share, resources, experience and historical links with the industry, the USA and the EU have been the most active participants in TC 38. After undertaking the secretariat of TC38 in 2008, the country with the textile highest production, China and a country interested in new functional textile goods, Japan became involved in ISO/TC 38 activity. Following those countries, Republic of Korea participated in the meetings and took roles in ISO/TC 38, such as SC chairs and WG convenors. They had taken roles of host of the meetings as well.

As the textile industry relocates to other regions of the world, there is an increasing role being played by countries such as ASEAN countries as encouraged in ***ISO Action Plan for Developing Countries for 2021-2025***.

There are several movements of ISO activity in Asia, one of them is the international standardization workshop of the Asian Chemical Fiber Industries Federation in which the participants are the chemical fibre experts from Japan, China, Republic of Korea, Thailand, Indonesia, Malesia, India, Pakistan and Chinese Taiwan. The purpose of this workshop is a promotion of the participation to ISO/TC 38 standardization.

Due to COVID-19 pandemic, ISO has been forced to have virtual meetings. WGs of TC 38 held

virtual meetings very proactively. Although the time difference affected the participants, there were chances to participate in the meetings without concern about travel costs and time.
The hybrid meetings by on-line and off-line will help the experts who have any difficulty with the travel costs and time even after COVID-19 pandemic. From the beginning of 2024 to June 2025, 60 WG meetings have been held by virtually, including 11 hybrid meeting.

The TC 38 has recognised the increasing importance of Asia by holding the 2003 plenary meeting of ISO/TC 38 in Republic of Korea. To further encourage participation from newer or smaller National Standardisation Bodies (NSBs), the TC 38 agreed that the venue of each plenary or alternate plenary should take place in a new area of the TC 38 membership, rather than the usual US or European venues. However, this policy has run into the lack of candidate countries for the host and TC 38 plenary meeting has been held in US and European countries recently as the following.

The 14th plenary meeting was held in Cheju Island, Republic of Korea on May 12 & 15, 2003,
The 15th plenary meeting was held in Sao Paulo, Brazil on December 1, 2005,
The 16th plenary meeting was held in New Delhi, India on November 26 & 30,2007,
The 17th plenary meeting was held in Beijing, China on September 24, 2009.
The 18th plenary meeting was held in Osaka, Japan on October 27, 2011.
The 19th plenary meeting was held in Istanbul, Turkey on October 11, 2013.
The 20th plenary meeting was held in Lyon, France on October 15, 2015,
The 21st plenary meeting was held in New Orleans, USA on October 13, 2017.
The 22nd plenary meeting was held in Treviso, Italy on October 18, 2019
The 23rd plenary meeting was held by the virtual meeting on October 15, 2021
The 24th plenary meeting was held in Seoul, Republic of Korea on November 3, 2023.
The 25th plenary meeting was scheduled in Jiaxing city, Zhejiang Province, China on November 7, 2025.

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

5.1 Defined objectives of the ISO/TC 38

a. To elaborate standards within the scope of committee.

b. To develop International Standards on performance requirements, test methods for textile and its products for the industries as well as for the consumers and concerned parties.

c. To adjust the existing work programme to be relevant to the stated needs of the industries as well as the consumers and concerned parties and elaborate a coherent library of standards.

d. To establish a project-based approach to the development of standards throughout the TC and, thereby substantially reduce the period of development.

e. To make standards more relevant to the needs of the industries as well as of the consumers and concerned parties by ensuring timely delivery.

f. To continue working in close liaison with CEN/TC 248 and the other liaison members of the TC and its SCs to avoid repetition and conflict.

g. To enable the progress of the work programme and reduce the cost of organisation by holding concurrent meetings of TC, SCs and WGs.

h. To utilize proactively the virtual measure for the meetings to increase the participants and reduce the concerns for the travel cost and time.

i. To co-locate and co-ordinate arrangements with CEN/TC 248, when meetings are held in Europe

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

ISO/TC 38 will employ the following strategies to satisfy the preceding objectives.

a. Continually monitor the structure of the TC to accurately reflect the changing work programme and the needs of the industries as well as the consumers and the concerned parties.

b. Establish the priority of work items within SCs and WGs.

c. Establish project teams for each work item with the designated project leader.

d. Give priority to the timely circulation of documents and adherence to target dates.

e. Limit meetings to when necessary and encourage further use of Livelink for the electronic distribution of documents.

f. Encourage the virtual meetings or hybrid meetings of on-line and off-line meeting for the development of projects.

g. Continue to make maximum use of the Vienna Agreement to develop standards for global use.

h. Continue using a single language for meetings to obviate the problems and expense of organising interpreters/translation.

i. Continue close liaison with CEN/TC 248.

j. Continue close liaisons with the following international organisations:

— AATCC American Association of Textile Chemists and Colorists
— BISFA International Bureau for the Standardisation of Man-Made Fibres
— CINET International Committee of Textile Care
— EC - European Commission
— ECOS Environmental Coalition on Standards
— EDANA European Disposables and Nonwovens Association - EDANA
— ETSA European Textile Services Association
— EURATEX European Apparel and Textile Confederation
— IWTO International Wool Textile Organization
— TWC The Woolmark Company

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

The following factors have been identified which may affect, to a lesser or greater degree, the development of standards in accordance with the objectives and strategies of this business plan.

a. In such a competitive and rapidly changing market, there is a continuing difficulty in finding both the appropriate project leaders who have the available resource to drive the work and new expert participants at WG level. This can lead to an imbalance of relevant stakeholders.

b. The unavailability of responsive NSB support at WG level to assist the quicker development of

projects, due perhaps to a lack of individual NSB resource. This creates a much-increased workload for the TC and the respective SC Secretariats and a consequent time delay in overall development.

c. The very large existing library of over 441 standards under the responsibility of ISO/TC 38 and its SC needs regular review/confirmation/amendment /revision, to ensure currency. Together with a current programme of over 50 WIs in development, this is having the cumulative effect of creating an overflow; keeping the responsible participants at permanent capacity. This situation may well create a few competing priorities, displace essential planning and disrupt the planned and orderly progress of project development.

d. Where the Vienna Agreement applies, work items subject to delay in CEN/TC 248 may create a consequent delay in the respective project projections.

e. Progress on many test methods is dependent on the technical resources available to Members

f. The cost of hosting meetings continues to be a concern. The lack of offers to host meetings of the TC, a SC together with its WGs and the possibility of concurrent CEN meeting may be a serious restraint. Electronic communication may assist the progress of documents to a degree, but personal networking and discussion remain essential for understanding national positions and limitations.

g. Irrespective of the financial crises within the industry, the costs involved to all concerned for expert participation in meetings of any size/duration are becoming prohibitive and may well reduce the level of participation. This will be severely detrimental to the standardization process.

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 38 and its subcommittees.

7.1 The structure of the ISO committee TC 38

7.2 Current projects of the ISO technical committee and its subcommittees

7.3 Publications of the ISO technical committee and its subcommittees

Click on the tabs and links on this page to find the following information:
- About (Secretariat, Secretary, 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