International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

STRATEGIC BUSINESS PLAN – ISO/TC 332

Executive summary

ISO/TC 332 is responsible for developing a complete set of standards for addressing the security needs of burglary resistant products like safes, security cabinets, vault rooms, vault room doors, lockers and record protection equipment like fire resistant filing cabinets, fire resistant record cabinets, data cabinets, electronic high security locks, etc.

Security Products like Safes, Vault Rooms, Fire Resistant Cabinets can generally be defined as equipment that provide safe and secure space for storage of cash, valuables and critical documents. The sectors served by these products include banks, non-banking financial institutions, jeweler stores, diamond merchants, commercial establishments, equipment manufacturers, regulatory bodies, etc.

Though the digital transactions are on continuous rise, the need for safe and secured storage of valuables and documents is also growing throughout the world. The standards being developed by ISO/TC 332 would benefit the buyers and users by enabling them to choose the desired product from a very large & competitive market. It would also benefit the safety equipment manufacturers by providing uniform norms for manufacturing of products, choice of raw material, and test procedures that will have acceptance across the globe. This would also reduce the cost of multiple certifications for different markets and also enable the manufacturers to compete in the worldwide marketplace.

By acting as a link between international regulatory bodies and physical security equipment industry, ISO/TC 332 would focus on both regulatory and industry requirements.

1 Introduction

1.1 ISO technical committees and business planning

The extension of formal business plan to ISO Technical Committees (ISO/TCs) is an important measure which forms a major part of review business. The aim of Strategic Business Plan is to align the ISO work programme with the expressed business environment needs and trends. It would enable ISO/TCs to prioritize choice among different projects, to identify 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 by elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: (i) ISO (International Organization for Standardization) is responsible for development of standards for all sectors excluding Electrotechnical subjects; (ii) IEC (International Electrotechnical Committee) is responsible formulation standards for most of Electrotechnical sectors; and (iii) ITU (International Telecommunication Union) is responsible for formulation of standards on Telecommunications Technologies.

ISO (International Organization for Standardization) is an independent, non-governmental international organization with a membership of 168 national standards bodies. The Central Secretariat of ISO is located at Geneva, Switzerland.

The principal deliverable of ISO is the International Standard.

The International Standard embodies the essential principles of global openness, 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 therefore they do not have same status as an International Standard.

ISO also offers 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 political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector. The products, materials, disciplines or practices related to the scope of ISO/TC 332 may significantly influence the standards development processes and the content of resulting standards.

The physical security industry is driven by the standards set by local and international regulatory bodies. Most parts of global market have their own standards in practice, which are developed by national standard formulation organizations of that region. The fundamental principles behind these standards are similar, though the deployment of them differs in terms of gradation or classification of products based on security levels, the methods of testing of products and the acceptance norms.

There are two major systems for evaluation of Burglary Resistant Products:

- Time Based Evaluation; and
- Point Based Evaluation

Similarly, there are two major systems for evaluation of Fire Resistant Products:

- Fire Resistance with post-test soaking; and
- Fire Resistance without soaking

A continuous research and development activity is going-on within the industry to improve the performance of security equipment without impacting the cost of manufacturing. These research include the development of composite materials which impart resistance to penetration, the development of various types of insulation materials which could offer resistance to heat transmission for longer time, the introduction of innovative mechanisms to increase safety such as automated system of deadlocking of equipment on tampering, etc. Since most of these developments are proprietary in nature, the emphasis is mainly on consistency in obtaining consistent results obtained during testing.

In some of the regions of global market, the level of security is linked with cash rating and thereby with the insurance. However, this is not a common practice across the world.

The relevant stakeholders in the physical security equipment domain are the banks, commercial institutions, security equipment manufacturing industry, consumer protection groups, employees, suppliers and national/ regional regulatory bodies.

There are national/ regional regulatory bodies like UL in USA, ECBS in Europe, VdS in Germany, RISE in Sweden, JIS/ KIS in East Asia, SAC in China and BIS in India. National/multi-national standards bodies after prolonged study and trials have established standards on various security products. However, the requirements, classification of products and test methods differ among these regional standards.

A significant barrier for the development of this industry as a whole, is a strong barrier to trade due to presence of different standards prevalent in different countries/markets. Since the needs of customers like banks and commercial institutions are driven by local regulatory standards, the manufacturers have to comply multiple certifications prevalent in each region they want to cater to. This poses a limitation for reach the manufacturers and also increase the cost of

manufacturing. On the other hand, the consumer gets option of a limited source of products that comply to the specifications of local regulatory standards only. Therefore, an apex body for standards formulation enabling uniformity in testing practices and synchronization with latest technological advancements would benefit all the stakeholders.

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:

- As the market for physical security product depends significantly on the growth of world economy, the growth of physical security product market closely follows global economic growth.
- As mentioned earlier, there are continuous efforts being taken world over to develop newer materials/ composites which could offer high resistance to forced opening or penetration and to heat transmission due to fire. The outcome of these efforts need to be validated in a uniform manner, so that the efforts are streamlined for the stakeholders.
- Currently, there are multiple ways by which the standards cover a wide range of applications of physical security products. e.g. there is one UL standard which covers most of high security burglary resistant products and one fire testing standard which cover fire resistant cabinets. Similar is the case with EN standards. On the other hand, Bureau of Indian Standards (BIS) has released many product-specific standards through its technical committee.
- It is estimated that the international trade of Physical Security Products including High Security Locks is close to **4 billion USD**.
- There are more than 100 major manufacturers in the field of Physical Security Products, along with nearly 1000 small manufacturers and suppliers of allied equipment like Locks, SPMs, Alarm systems, etc.
- The total employment (world-wide) in this sector is estimated to be **1.5 million people** which includes manufacturing as well as trading of physical security products.
- Currently, there are is no organization (worldwide) that insists on compliance to ISO standards by their suppliers, contractors, or service providers in this segment, as the global standards in this segment are non-existent. However, majority of such organizations insist on compliance to standards prevalent in their respective regions. All the major manufacturers' products comply with their local/ regional standards.

3 Benefits expected from the work of the ISO/TC

- The main priority in the work of committee would be:
  - To set standards for various applications in physical security domain, which would focus on expected product performance at various levels of security requirements
  - To set standards on Test Methods.
  - To set standards for classification of products based on required security levels
  - To establish equivalence among various national/ regional standards

- Currently, different standards prevailing in various segments of global market indirectly act as barriers to global trade. A manufacturer of security equipment meeting security requirements in a particular regional market is not able to explore other regional markets unless he/she subjects his product to different testing standards prevailing in the market segments that he/she wants to be present. And since the national/ regional standards have different methods of testing and acceptance, a single product needs to be manufactured in multiple versions to meet the requirements of the respective local/regional standards. This makes manufacturing process costly. Also, the multiple testing and certifications/ audits add to the final price of the product.

- A consumer/ end user of the product gets limited choice for selecting appropriate and competitive product for his specific application as there would be limited manufacturers following the national/ regional standards for that region.

- A global ISO standard applicable in all the regional markets will help manufacturers and suppliers to expand their reach. It will also help the consumers and end users to select from a wide range of products meeting uniform quality and security requirements.

- Cost of manufacturing would come down drastically. It would also help in standardizing the safety and social/ environmental considerations across the globe.

4 Representation and participation in the ISO/TC

4.1 Membership

https://www.iso.org/committee/8031077.html?view=participation

4.2 Analysis of the participation

https://www.iso.org/committee/8031077.html

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

5.1 Defined objectives of the ISO/TC

The ISO/TC 332 shall work for the development of International Standards for physical security products including aspects like uniformity in testing and evaluation of the products for the purpose of defining level of security required for the intended purpose.

The standards formulated by this technical committee will encompass:

- Physical security products used in Banks, Financial Institutions, Commercial Organizations and Jewelers, as listed below:
    - Burglary Resistant Products
        - Safes
        - Security Cabinets
        - Locker Cabinets
        - Cash Boxes
        - Modular Panels for Strong Rooms/ Vault Rooms
        - Doors for Strong Rooms/ Vault Rooms
        - ATM Safes
    - Fire Resistant products
        - Filing Cabinets
        - Record Cabinets
        - Data Cabinets
        - Security Cabinets
        - Doors for Strong Rooms/ Vault Rooms
    - High Security Locks
        - Key locks
        - Mechanical Combination Locks
        - Electronic locks
    - Test methods for above products

It will exclude:

- Material specifications (a substance or a mixture of substances)
- Physical protection of person
- Products for small office/home office/domestic use
- Accessories with functions not concerning physical security of the product
- Field covered by ISO/IEC JTC1/SC 27; ISO/IEC JTC1/SC 37; IEC/TC 79 and ISO/TC 68 (Financial services)

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

The ISO/TC 332 intends to work on standards covering Burglary Resistant Products, Fire Resistant products, including electronic locks. The products covered under this category are widely used across the globe and there is a need to streamline the testing and acceptance standards as there are many regional standards and each one of those use different methodology.

For the purpose of developing uniform standards, the TC would work on comparative study of prevailing regional/ National standards and drawing relevant good points together to arrive at final contents of the standard. For this purpose, it would be prudent to form various Working Groups (WGs) assigned to work on various aspects of standards.

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

In near future, it may require financial support for testing and validating various options suggested by the WGs, so that only the best options are incorporated in the final standard document.

Additionally, the following factors may affect the completion of the standards:

- The ISO standard may not be accepted by all the member bodies. Instead national standard may still be needed for certain countries.
- A standard using certain burglary methods may not fit into regions where other burglary methods are dominant.
- Test procedures are preferred not to be described in detail, which complicates a worldwide standard which is interpreted in the same way by every reader.
- Testing result could differ between laboratories.

Medium and small sized companies may not have the resources to (re)test their products.

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/8031077.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 program (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