ISO/IEC JTC 1 "Information technology"
Secretariat: **ANSI**
Committee manager: **Rajchel Lisa Mrs.**

SC 7 Business Plan 2025-2026

Document type	Related content	Document date	Expected action
Project / Other	Meeting: Chengdu (China) 10 Nov 2025	2025-09-14	**COMMENT/REPLY** by 2025-10-13

Description

This document is circulated for review and consideration at the November 2025 JTC 1 Plenary.

ISO/IEC JTC 1/SC 7 – Software & Systems Engineering

Business Plan for the period 2024-2026

Secretariat Email: cm-sc7@bis.gov.in

1 Executive Summary

ISO/IEC JTC1/SC7 is required to prepare and publish a new business plan for the period 2023 to 2026. In the previous plan emphasis was placed on the trends of system resilience which is the ability to deliver required capability when facing adversity. A new Working Group on System Resilience was initiated which has started working on the initial standard on key resilience concepts & relationships.

The previous business cycle went through the turbulent times of Covid-19 pandemic with recovery towards the end of the cycle giving hope and motivation. However, the impact of such an event will continue to influence and reflect in our work program and personally as well. SC7 intends to strongly pursue the following themes in the future.

- Digital Engineering
- System Resilience
- Machine Readable Standards
- Green Software
- Uniform architectural concepts to be understood in common formats.

The Committee had established an institutional mechanism on anticipating trends, being responsive to its constituency and popularising its work through various Advisory Groups and the same are working to give their recommendations to the SC 7 community.

The work of SC7 already contribute to the following UN SDGs

Goal 4 – Quality Education

Goal 9 – Industry, Innovation and Infrastructure

Goal 10 – Reduced Inequality

Goal 11 – Sustainable Cities and Communities

With an emphasis on system resilience we intend to contribute towards the SDGs as well

Goal 3 – Good Health and Well Being

Goal 8 – Decent Work and Economic Growth

2 Environment

2.1 Macro Trends

- The COVID-19 pandemic forced every organization and every individual to respond rapidly. In many cases our underlying systems were simply not resilient enough. Systems Resilience is the way forward.
- The past years were witness to a trend of being more “agile” to responding to a rapidly changing business environment. There was and continues to be a focus on being able to leverage emerging technologies and ecosystems. This trend of pursuing a goal of “agility” continues unabated.
- Most software development is now some sort of evolution of vast existing ecosystems of software. The questions which then arises for the enterprises are How are these systems to be kept “evergreen”?
- There is at least a bi-modal set of concerns
    - Continuous and relatively small changes – Agility/DevOps.
    - Slower moving evolution needing a more “flexible” notion of architecture
- Many of these software ecosystems may not have been developed based upon sound practices but we need them to be “trustworthy “ – i.e. provide assurance that stakeholder expectations will be met
    - Is there a need for “dipstick” standards that will assess the situation and guide evolution?

2.2 Implications

- **Low Code – No Code** - On these low-code platforms, app creation might pose some governance issues. It can be difficult due to the stand-alone nature of no-code apps. Moreover, unmanaged data formats and levels of data quality can spread widely. For a successful governance approach, you must consider the user’s identity and the technology.
- **Systems must be engineered for resilience** - The need for a system engineering approach to resilience of processes, systems and indeed systems of systems has been highlighted.
    - **the need for systems to continue to deliver acceptable outputs in the face of adversity – i.e. have an acceptable level of resilience.**
    - **the need for remote forms of working even in areas where systems were largely physical –** There is likely to be a significant increase in deployments of Cyberphysical systems.
- **The need for agility continues as strongly as before** – processes and techniques appropriate to incremental and iterative system development are needed.
- **The trend towards leveraging ecosystems in preference to creating captive systems continues as strongly as before** – System of System techniques are increasingly relevant is designing and understanding the interactions in these ecosystems

3 Achievements & Benefits

3.1 New Working Groups / Adhoc Groups

The Working Group on System Resilience (WG 30) was constituted in the June plenary of 2021. The Adhoc on Cyber physical systems completed their work and AG 5 has been given the responsibility of watching the cyber physical space development critically and report in the plenary. The Adhoc on Digital Engineering was constituted which is nearing its completion of work program. The Adhoc on Open Source Software has been initiated which is expected to provide their recommendations in this business cycle.

3.2 Alignment to Sustainable Development Goals

The standards produced by ISO/IEC JTC1/SC7 already contributes to the following Sustainable Development Goals

Goal 4 – Quality Education

Goal 9 – Industry, Innovation, and Infrastructure

Goal 10 – Reduced Inequality

Goal 11 – Sustainable Cities and Communities

This community has risen to the challenge and have started developing system resilience standards which contribute towards systems being able to operate in severe adversity and thereby contribute towards the following UN SDGs as well

Goal 3 – Good Health and Well Being

Goal 8 – Decent Work and Economic Growth

4 Participation & Cooperation

The full JTC 1/SC7 Membership (34 Participating Members and 25 Observing Members, see Fig. 2) list can be found at *SC7 Member Listing*. SC7 has made a conscious effort to increase co-operation with other standards groups by establishing an extensive network of liaisons both internal and external to JTC 1. A list of liaisons can be found at *JTC 1/SC 7 Liaisons* .

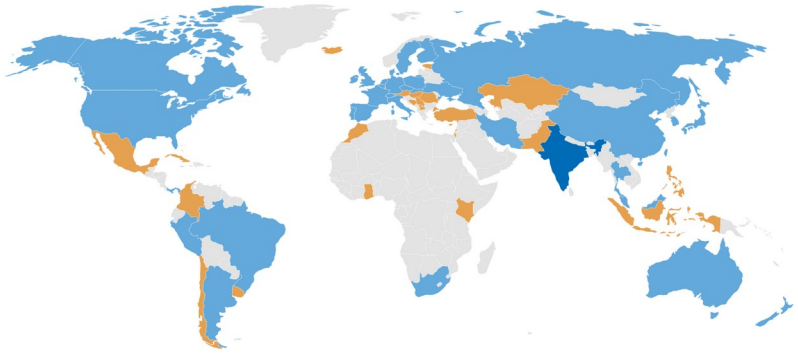
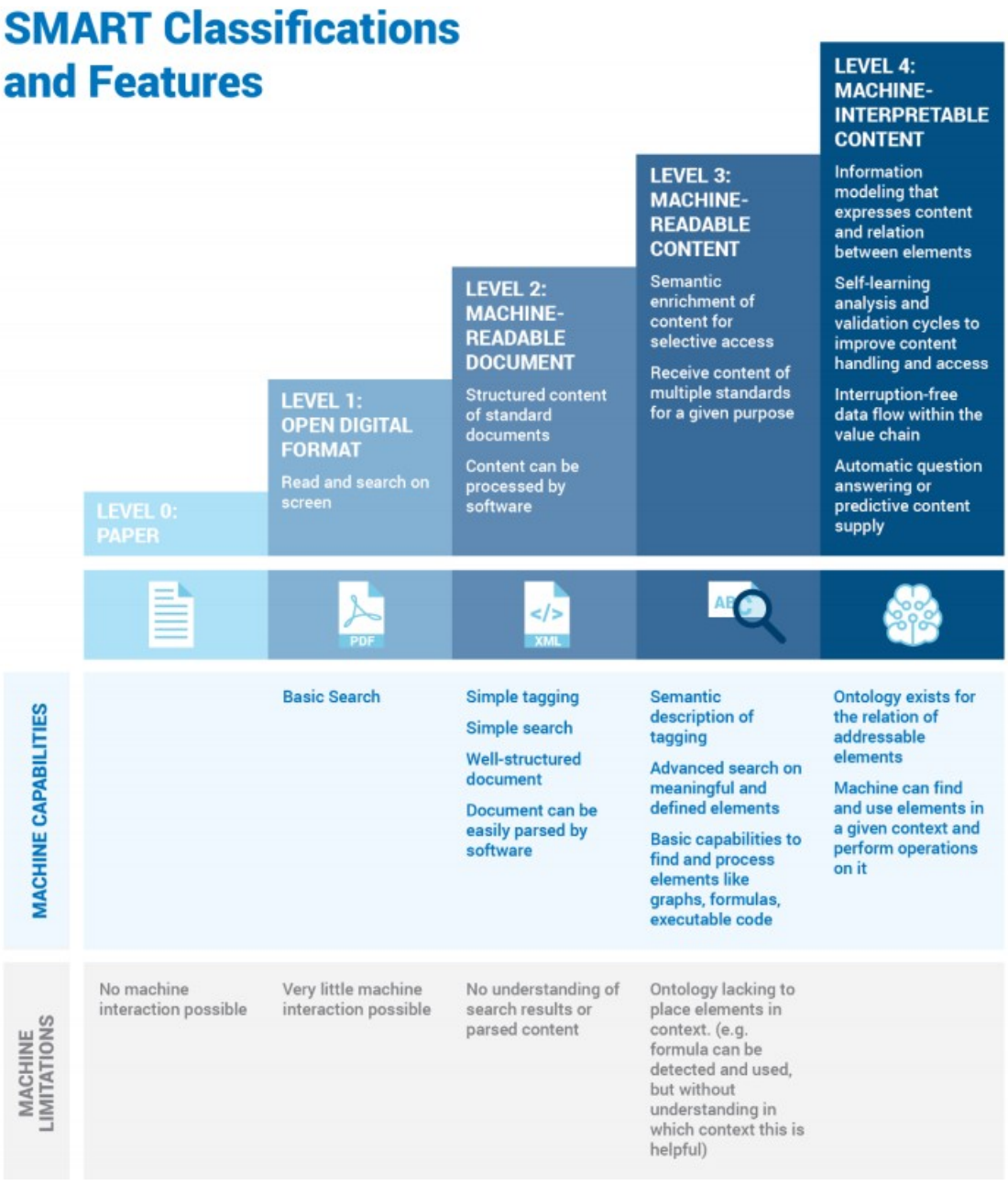


Figure 1 JTC 1/SC7 Membership

Traditionally, JTC1 /SC7 has effective liaison with IEEE Computer Society (IEEE-CS) and the International Council of Systems Engineers (INCOSE). Some new liaisons have been established with JTC1/ WG11 –Smart Cities, TC 307 (Block chain), TC 279 (Innovation Management) and JTC1/SC42 (Artificial Intelligence). New external liaisons are being created with ITAM.Org, ITAMORG, TagVault and Object Management Group (OMG) to facilitate the programs of working groups.

5 Objectives & Strategies

5.1 Smart Standards



SMART standards is a new product and an investment for ISO, not only an economic one, but a requirement to stay relevant in the future. SMART standards is an opportunity to reach new customers and new industries - not just to provide better services to existing ones

5.2 Green Software

SC 7 has the experience of looking through SDLC (Software/System Development Life Cycles) and include sustainability requirements from design stage itself. SC 7 has the understanding and can lead in the area of decarbonizing software. Work has been started on this by Linux Foundation affiliated programs – like green software foundation.

5.3 Communication & Outreach

The requirement to engage continuously with different stakeholder groups and national bodies is important so that SC7 Work is widely known and used, Increase Participation & More collaboration. For this, Advisory Group on Communications & Outreach (AG3) has been created to Enable NBs with their NMCs, Communicate internally & externally & Increase Participation of New Experts and Motivation for existing Experts. The group will reach out to other SDOs, Other JTC1 Committees, manage all public facing materials like, brochures, Wikipedia, Twitter, LinkedIn etc.

6 Factors Affecting Completion & Adoption of Work Program

6.1 Structural Discussions

The high number of existing Working Groups with limited work program and less volunteers is creating logistical challenge in terms organizing face to face meetings. This challenge will present itself in a magnified form in the coming years. The current Working Group structure needs to be reviewed holistically and rejig it to maximize the utilization of the volunteer effort by consolidating the work programs of various working groups together. The Advisory Group 4 of SC 7 has been given the task to study and recommend to SC 7 plenary. The recommendations will be actioned in the business cycle period.

6.2 Succession plans

It was noted that succession plan of Working Group convenors can present itself in many working groups and requires a systematic approach to ensure continuity of the Working Group Programs, to ensure Working Group Knowledge is not lost that may never be recovered and the secretariat time and effort to find a new successor is minimum. It was discussed that all WG convenors are in the best position to identify their successors and the same can be recommended by the WG Convenors.

6.3 Sponsorship Challenges & Structure of Plenary

It was noted during last few years that the willingness of the sponsors to provide sponsorship for SC7 plenary meetings has been on a declining trend and if the same continues or there will be do sponsor for SC7 meetings. in such an eventuality the business planning group as well as the C7 community will have to work together to find a solution for continued interest of sponsors in the SC 7 work program

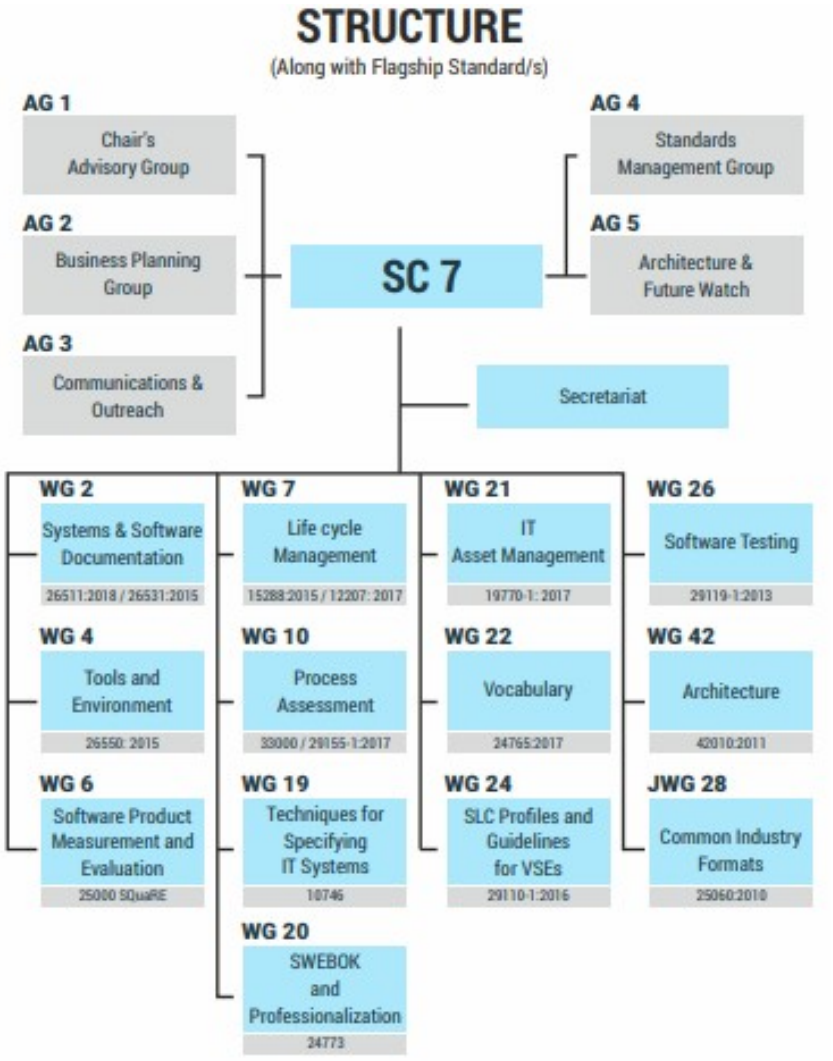
in case there are no sufficient sponsorship by either the national bodies for hosting of SC 7 meetings then this business cycle will also have to plan for a change in the structure of SC 7 meetings to enable physical hosting offices seven planning meetings in some form

6.4 Spirit of Directives

It will be the endeavor of SC 7 to keep the spirit of ISO directives alive where in the rule of national bodies and the rule of working groups sufficiently clear and followed the SC 7 community will work towards inclusivity of all the stakeholders and ensure that all the new work programs are taking into account the available supporting documents provided with the proposals.

7 Structure, Current Projects & Publications

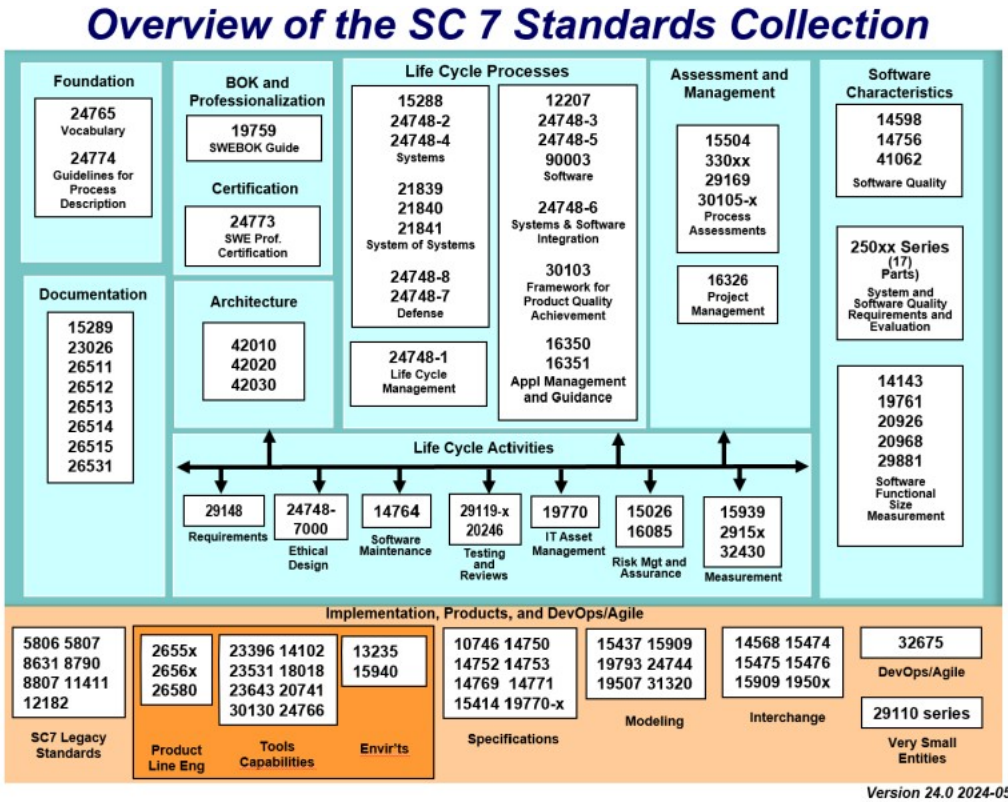
7.1 Structure



7.2 Projects – Please refer to the SC 7 Brochure available on SC 7 website.

https://www.iso.org/files/live/sites/isoorg/files/developing_standards/who_develops_standards/docs/ISO_IEC_JTC%201_SC%207%20Brochure.pdf

7.3 Publications



******* End of Document*******