JTC 1/SC 28 Business Plan

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Description

This document is circulated for review and consideration at the November 2022 JTC 1 Plenary.
1.0 Executive Summary

SC 28 was established in 1989 based on a Japanese proposal. SC 28 is one of the few products or hardware-oriented subcommittees in the JTC 1 community. As such fundamental output of this group has been standards on product specification descriptors, methods for measurement of productivity of hardcopy devices, quality of hardcopy output and yield of consumables (ink and toner cartridges). SC 28 has continued the expansion of measurement methods for consumables, productivity, and extended the image quality assessment to support print permanence and durability.

In 2015, due to the changing nature of market needs for office equipment and related technologies with increasing usage of 3D technology in the office environments, SC 28 enlarged its scope with including 3D Printers/Scanners. At 2020 JTC 1 Zoom Plenary meeting, SC 28 reported its position on 3D standardization as follows.

Since 3D printing has not yet moved from manufacturing and niche consumer to the more general office or consumer market and is still progression there, it would be very difficult to build the types of standards that SC 28 excels at to address this market yet. Therefore,

(1) SC 28 needs quite a few years more at least to initiate the work of 3D standardization (Measurement methods of yield, productivity, and others)

(2) SC 28 keeps the present scope as it is, because there are no overlaps of work area between SC 28 targets and other SCs or WGs.

(3) When other SC or WG wants to initiate the work that SC 28 plans now in 3D area, SC 28 will gladly cooperate and work together with establishing a Joint WG.

(4) SC 28 keeps monitoring 3D printers/scanners developments in the office/home space as we did these years.

SC 28 started to align its work program for IoT and accessibility with JTC 1 strategic directions where applicable. SC 28 established SG 1 to assess “New opportunities for Office Equipment” in 2017, and SG 2 to develop PWIs according to the output from SG 1 in 2018. In 2019, PWI titled “the common security guideline” was proposed by SG 2 for simple usage in the areas of security for mid to low end office equipment under harmonization with the existing security standards. At 2021 plenary meeting, SC 28 resolved to establish a new WG (WG 6) to work on some demands in a society and set the scope of WG 6 “Sustainability requirement”. WG 6 covers a new project for the above mentioned “Common security guideline”. SG 2 was resolved to be disbanded accordingly. Also, SC 28 concluded to have a liaison relation with JTC 1/SC 27 and SC 27 / WG 3, whose scope is “Security evaluation, testing and specification”.

2.0 CHAIRMAN’S REMARKS

2.1 Market Requirements, Innovation

Major types of equipment in the current market subject to SC 28 undertaking are classified as follows.

- Copying machines
- Printers Inkjet printers – monochrome and colour
  Electrophotographic (Laser) printers – monochrome and colour
- Image scanners
- Facsimiles
- Data projectors
- MFD (Multi-function Devices: machines which perform two or more of the functions of printing, copying or facsimile transmission)
- 3D printers/scanners in the office and home level environments

General trend of the market for the equipment learned from various free and paid reports is observed as follows.
- Office Equipment industry is one of the industries which are deeply impacted by Corona-19 pandemic. Some amount of office workers have disappeared from their offices and remote work has spread over in the world. The number of copying and printing declines dramatically and the tendency of “paperless” at offices grows up more and more.
- Worldwide economic stagnation with a harmful effect of the war clog up the demands of commercial and industrial printers and projectors. While at the same time, the increase of home working and home study demands temporarily the small printer (mainly home ink jet printer). But it can't compensate for the decline of commercial and industrial printers.
- Each manufacturer in this industry keeps maintaining “Office printing division” but also tries to expand “Digital service division for office” with utilizing the existing IT technology, which will support a new work style after Corona-19 pandemic.

Standards required by the market are those to facilitate or enable:
- Comparison of functional specifications (descriptors) in product catalogues (Continuously being updated)
- Measurement of yield of ink and toner cartridges of printers (Major work done.)
- Evaluation and comparison of printed output image quality and resolutions - Measurement of productivity and performance of copying machines, printers, and image scanners (Major work done on copying machines, printers, and scanners. Existing standards are under consideration for revision. Photo printing productivity standard is under discussion.)
- Studying user needs for global device colour profile sharing platform - Accessibility for disabled and aged persons in office equipment.
- Clarification of Specifications for data projectors
- Requirements for sustainability, such as security and environmental matters.

Additional comments to the above-mentioned conventional standards.
- Three years long Covid-19 Pandemic and the stagnation of Office equipment industry makes the speed of SC 28 standardization and development slower than ever.
- SC 28 will be expected to seek a new standard for a new business model based on IT solutions rather than the conventional office equipment or their consumables under the present slowdown situation for sales and maintenance service of office equipment.

### 2.2 Accomplishments
The detailed progress of SC 28 and the Working Groups can be reviewed in individual Work Group sections within this report. The status of all standards published by SC 28, together with those under development, can be viewed in the [SC 28 Standards Catalogue](#).

### 2.3 Resources
SC 28 consists of 13 P-members and 18 O-members in 2022. It is an inherent and chronic problem with SC 28 that national bodies which can afford to provide experts in SC28 technical work are generally limited to few countries with office equipment industries. Even though the office equipment industries are thought to be matured, the market and technology of office equipment is changing in association with the printing industry. Therefore, development of standards in SC 28
is required constantly.

2.4 Competition and Cooperation
SC 28 continues collaboration with ISO/TC 130 and TC 42, in the frame of JWG 14 on image quality assessment for commercial printing (with TC 130/WG 3) and in the frame of JWG 27 on print permanence and durability (with TC 42/WG 5 and TC 130/JWG 14). SC 28/WG 4 also extended the liaison relationship with ISO/TC 42/WG 3.

SC 28 continues to monitor the work in ISO/TC 261. (SC 28 has already established a liaison with JTC 1/SC 41.)

3.0 Working Groups

3.1 WG 2 - Consumables

3.1.1 WG 2 Accomplishments
ISO/IEC DIS 22505 “Method for the Determination of Ink Cartridge Yield for Monochrome Inkjet Printers and Multifunction Devices that Contain Printer Components” was published.

3.1.2 WG 2 Deliverables (in near future)
WG 2 resolved to abandon the work of TR22950 due to the lack of current market interest, and it was resolved at the plenary meeting as well. WG 2 has completed the revision of ISO/IEC 24711 and developed the revision of ISO/IEC 29142-1 to Committee stage. Also, the revision of ISO/IEC 29102 has just started and reached to the Committee stage.

3.1.3 WG 2 Strategies/Risks/Opportunities/lessons learned (if any)
None

3.2 WG 3 - Productivity

3.2.1 WG 3 Accomplishments
WG 3 has investigated and started the revisions for most of the productivity standards so far.

3.2.2 WG 3 Deliverables
WG 3 has completed the revision and received the excellent award on the following standard.
  - ISO/IEC 11160-2 (Minimum information to be included in specification sheets — Part 2: Class 3 and Class 4 printers)
WG 3 resolved to start its revision of the following standard, and it was also resolved at the plenary meeting.
  - ISO/IEC 17629 (Method for measuring first print out time for digital printing devices).

WG 3 has completed the revision of the following standard.
  - ISO/IEC DIS 23385 (Method for measuring digital photo print out time).

3.2.3 WG 3 Strategies/Risks/Opportunities/lessons learned
None.
3.3  **WG 4 - Image quality assessment**

3.3.1  **WG 4 Achievements**

None.

3.3.2  **WG 4 Deliverables**

22592-1: CD was approved and about to move on to DIS.
22592-2: CD was approved and about to move on to DIS.
22592-3: WD was completed and about to move on to CD.
24790 Amendment 1: DIS ballot was approved and it is at PRF.

3.3.3  **WG 4 Strategies/Risks/Opportunities/lessons learned**

WG 4 continues to collaborate with ISO/TC 130 in the frame or JWG 14 on image quality assessment for commercial printing on ISO/TS 18621 series. WG 4 is also participating in collaboration on the development of standards on print permanence and durability with TC 42 and TC 130 in the frame of JWG 27.

3.4  **WG 5 - Office colour**

3.4.1  **WG 5 Achievements**

None.

3.4.2  **WG 5 Deliverables**

WG 5 has completed its development on the following standard.
- ISO/IEC DIS 22954: Information technology — Office equipment — Automated colour profile distribution

WG 5 makes revision on the following drafts.
- ISO/IEC 15775 Information technology — Office equipment — Method of specifying image reproduction of colour copying machines and multifunction devices with copying modes by printed test charts
- ISO/IEC 17823 Information technology — Office equipment — Colour terminology for office colour equipment

WG 5 will soon start PWI on the following item.

PWI 18733 – Method of specifying test charts for testing reproduction of multifunction imaging devices.

3.4.3  **WG 5 Strategies/Risks/Opportunities/lessons learned**

None.

3.5  **WG 6**

3.5.1  **Achievements**

As concluded last year, WG 6 was launched and started the development titled “Office equipment — Guidelines and minimum requirements for security of hard copy devices (HCD) — Part 1: Definition of the high — level minimum requirements”, and now it is at WDS. The scope of WG 6 is “Sustainability requirement” and so it is expected to have wider scope to support some of social
3.5.2 Deliverables
The above-mentioned NP was approved and WG 6, and now they completed the 2nd WDS, and plan to go to CD stage soon.

3.5.3 Strategies/Risks/Opportunities/lessons learned
None