
ISO/IEC JTC 1 "Information technology"

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SC 28 Business Plan 2020

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Description

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BUSINESS PLAN FOR JTC 1/SC 28

Office Equipment

PERIOD COVERED: September 2020 – August 2021

SUBMITTED BY: SC 28 Chairman and Secretary

1.0 Executive Summary

SC 28 is one of the few product 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. In order to identify areas for potential development to address customer needs in the office/home space, SC 28 decided to have a Liaison-ship with JTC 1/WG 12 in 2019 and will continue to monitor developments for 3D printers/scanners.

SC 28 starts to align its work program for IoT and accessibility with JTC 1 strategic directions where applicable. SC 28 established Study Group 1 to assess “New opportunities for Office Equipment” in 2017, and Study Group 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. SG 2 is in cooperation with the Japan’s AG mirror committee (AGJ) and JBMIA information security committee to develop it.

In 2020, because of the spread of the coronavirus (COVID-19), some of SC 28 WGs activities were stagnated and two standards development in WG 5 became On-hold status.

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.

- Total sales number of Inkjet and laser printers have been decreasing in these years, although we could observe increase in shorter-term or in specific product type. The cost-effective printers such as Inkjet printers with large ink tank or continuous ink supply system are drawing attention in the office machine market.
- Many manufacturers offer Efficiency/Cost down services using MPS (Managed Print Service). Such many manufacturers try to enlarge the office machine market by developing Solution Sales and Peripheral Business such as service/consumable.
- Many manufacturers promote the digital printing area by introducing entry model (Light Production model) in the market.
- Since 3D printing has not yet moved it 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 SC28 excels at to address this market yet.

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. Project for monochrome inkjet yield standard is on-going.)
- 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

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 twelve P-members and twenty O-members in 2019. 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 TC42, 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/WG4 also extended the liaison relationship with ISO/TC 42/WG 3.

In the area of 3D printers/scanners, SC 28 is now collaborating with JTC 1/WG 12 in 3D printing/scanning area and continues to monitor the work in ISO/TC 261. (SC 28 has established new liaison with JTC 1/SC 41 and JTC 1/WG 12.)

According to the market requirements and circumstances, SC 28 plans for 3D standardization area are as follows.

- (1) SC 28 needs 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 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.

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 has initiated WD study a Technical report, ISO/IEC TR 22950, on "usage of yield standards" covering and consolidating standards for measurement methods of Toner/Ink cartridge yield on monochrome and colour printers and MFDs. WG 2 has developed the revision of ISO/IEC 24711 to Enquiry stage and ISO/IEC 29142-1 to Committee stage in order to harmonize the new definitions from ISO/IEC 22505.

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 been developing to revise each productivity standards as follows:

- ISO/IEC 17991 (Method for Measuring Scanning Productivity of Digital Multifunctional Devices),
to include stand-alone scanners in the scope and test method. This will be published soon.
- ISO/IEC 29183 (Method for measuring digital copying productivity for a single one-sided original),
to add optional sleep and Power Off FCOT tests, a Ready State definition, a job to job delay time procedure to the test method requirements, and include the previous US corrigendum proposal to clarify the use of ADF

- ISO/IEC 24734 (Method for measuring digital printing productivity),
to add a Ready State definition and a job to job delay time procedure to the test method requirements
 - ISO/IEC 24735 (Method for measuring digital copying productivity),
to add a Ready State definition and a job to job delay time procedure to the test method requirements
 - ISO/IEC 23385 (Method for measuring digital photo print out time),
to continue to develop at the preparatory stage (Working-Draft)
- The revision works of above-mentioned projects are on-going.

3.2.3 WG 3 Strategies/Risks/Opportunities/lessons learned

In 2020, SC 28 welcomes a new Convenor, who was approved at the 2020 Plenary meeting.

3.3 WG 4 - Image quality assessment

3.3.1 WG 4 Achievements

None.

3.3.2 WG 4 Deliverables

ISO/IEC22592-1 (Print quality measurement methods for duplex prints: Part 1 - Image quality measurements) is now being discussed at Preparatory Stage. 22592-2 (Print quality measurement methods for duplex prints: Part 2 - Physical quality measurements) was approved as PWI.

3.3.3 WG 4 Strategies/Risks/Opportunities/lessons learned

WG 4 continues to collaborate with ISO/TC 130 in the frame of 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

ISO/IEC NP DTR 22981 "Guidelines for the development of an ontology (vocabulary, components and relationships) for office equipment" was published.

3.4.2 WG 5 Deliverables

WG 5 has been working for WD of ISO/IEC 22954 "Automated Office Colour Management". The revision of ISO/IEC 15775 "Method of specifying image reproduction of colour copying machines by analogue test charts—Realisation and application" is under discussion as WD Those 2 WD are now under "On-Hold" Status due to COVID-19 issue.

3.4.3 WG 5 Strategies/Risks/Opportunities/lessons learned

None

3.5 AG

3.5.1 Achievements

AG organized Study Group 2 in 2018 to develop PWIs according to the output from discontinued SG 1 in 2018. AG reported and summarized all Liaison Reports from SC 28 and Collaboration works with the related standardization committees.

3.5.2 Deliverables

AG will review the SC 28 roadmap and liaison reports at the next AG meeting. SG 2 will report new relevant standardization opportunities other than “the common security guideline”.

3.5.3 Strategies/Risks/Opportunities/lessons learned

SC 28 work program should be aligned with JTC 1 strategic directions where applicable (e.g. 3D, IoT and accessibility, etc.). In effort to cover the scope area of SC 28, AG continues to prompt SC 28 National Bodies to generate new projects by making the most of the road map to which AG has devoted much of its energies.

3.6 SG 2

3.6.1 Achievements

In 2018 AG established SG 2 continued its activities to develop concrete PWIs in the areas of security for mid to low end office equipment. SG 2 has examined the relevant standardization proposals of “the common security guideline” for the office equipment as one aspect of “Ontology for office equipment”. The PWI for the common security guideline was started to be developed and discussed at Advisory Group meeting in 2020.

3.6.2 Deliverables

SG 2 is going to develop preliminary working items for the next step to proceed the items above.

3.6.3 Strategies/Risks/Opportunities/lessons learned

Terms of Reference of the SG 2 include: (1) Propose PWIs on “the common security guideline” including functional and authorization requirements. (2) Propose the collaboration strategy with the related SDOs, invitation of the experts in the security fields, and formation of consensus on the PWIs. (3) Propose change of SC 28 work-scope and/or new WG formation, if necessary

The above items were mainly discussed at the Advisory Group in 2020, and (1) and (2) were adopted to their recommendation to implement continuously.

3.7 Others 1 (Accessibility)

3.7.1 Achievements

The revision has started for ISO/IEC 10779:2008 “Office equipment accessibility guidelines for elderly persons and persons with disability”, harmonizing with US Sec.508. Therefore Ad hoc work for this project was succeeded to project editor. The work was completed and published at May 2020.

3.7.2 Deliverables

None.

3.7.3 Strategies/Risks/Opportunities/lessons learned

None.

3.8 Others 2 (Data Projector)

3.8.1 Achievements

The revision of ISO/IEC 21118 “Information to be included in specification sheets -- Data projectors” was completed and published in Feb. 2020.

3.8.2 Deliverables

None.

3.8.3 Strategies/Risks/Opportunities/lessons learned

None.

[This Business Plan was also published as SC 28 N-2452 document.]