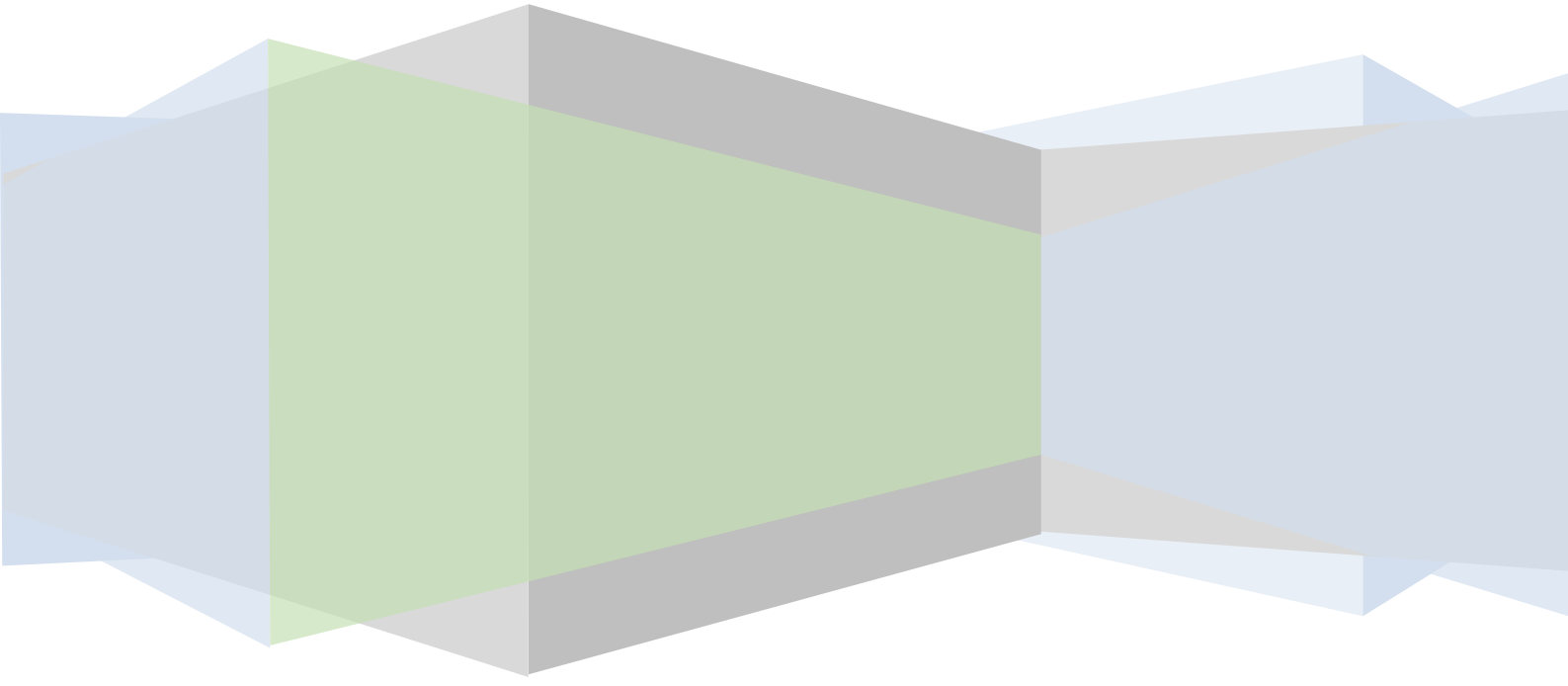
ISO /TC 130 Graphic technology

Framework for ISO/TC 130 standards

December 31, 2024



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Introduction

ISO/TC 130 develops and publishes standards that are widely used throughout the world. As the body of published standards from ISO/TC 130 continues to grow, there is a need to have these standards summarized, categorized and introduced as a whole. Based on analysis of current standards and anticipation of future standards, a framework involving the categorization of ISO/TC 130 standards with supportive information has been developed and published as this document, which may be used as a reference for the ISO/TC 130 work programme, and facilitate standards application and development.

For better understanding of ISO/TC 130 standards and the development mechanism, the framework given in this document is established in consideration of the following elements:

a) Functional areas of specific standards and stakeholders

From a print workflow viewpoint, many stakeholders are involved in various processes, which fall into different functional areas. ISO/TC 130 standards are applicable to individual processes with stakeholders as intended users. The relevance of specific standards is closely connected to the stakeholders' responsibilities and needs in each process.

b) Categorization of ISO/TC 130 standards

The ISO/TC 130 standards can be organized into two major categories according to the technical contents of each standard. These categories are:

- Multiple-process related standards, including eight sub-categories
- Single-process related standards, including six sub-categories

c) Working groups

Working groups are established for specific tasks in standards development. This document gives a list of active working groups within ISO/TC 130 as additional information for easy reference.

To summarize, this document not only gives a categorization framework for ISO/TC 130 standards, but also defines the purpose or rationale of standards development in each category.

This document is intended to address the following questions in a user's friendly way:

- What technical issues do ISO/TC 130 standards deal with?

- Who are target users of ISO/TC 130 standards?
- How to find interrelationship among ISO/TC 130 standards?
- Who are responsible for ISO/TC 130 standards development?

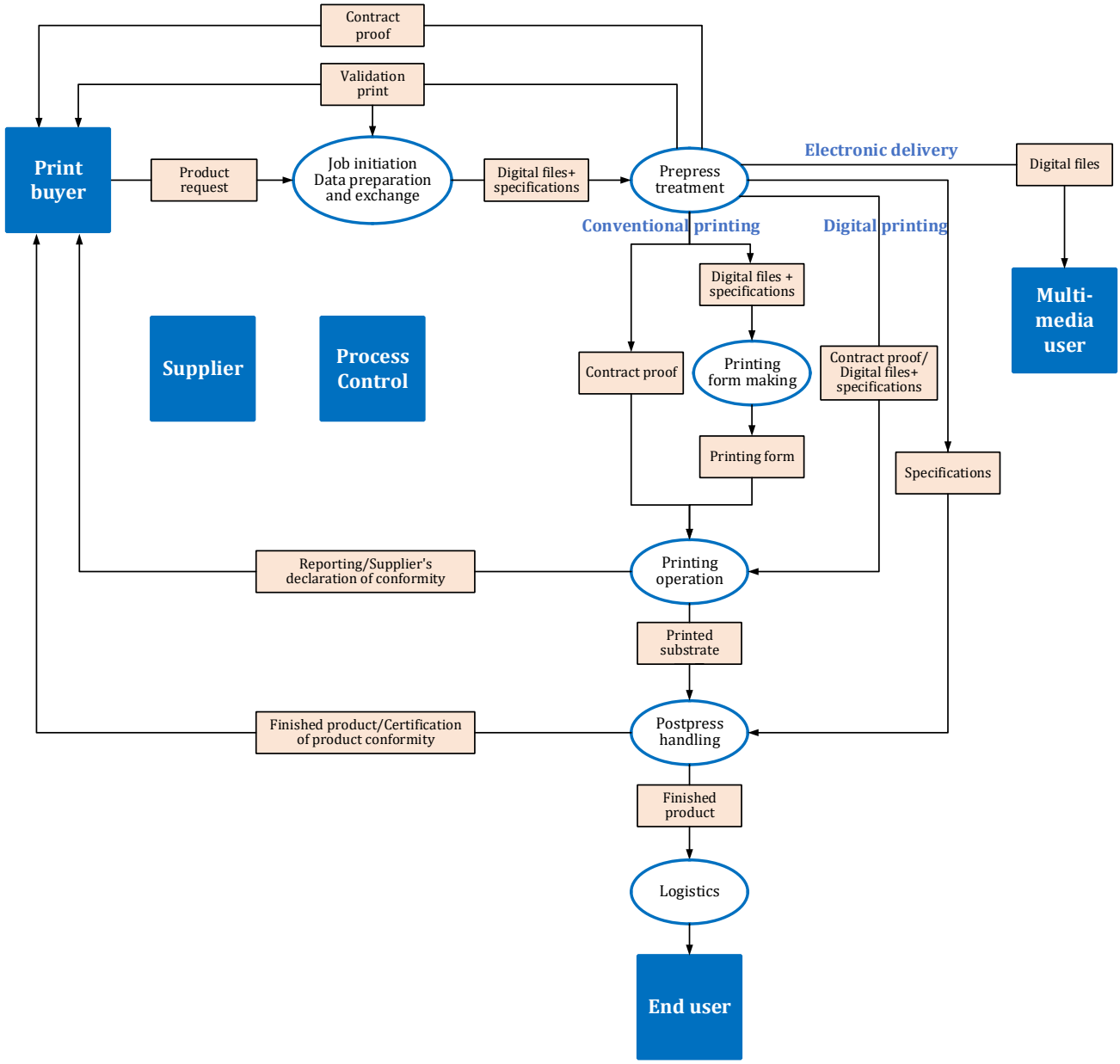
Since new standards will be developed and existing standards are revised regularly, this document will be updated accordingly.

1. The print workflow

1.1 Processes with inputs and outputs

ISO/TC 130 standards are related to processes in the print workflow as shown in Figure 1. Upon print buyers' requests, printed products can be manufactured through either a conventional printing system or a digital printing system. In addition, if digital products are required, electronic delivery is also possible for cross-media publishing. Suppliers and process control stakeholders are linked to multiple processes throughout the workflow.

Rules, guidelines or characteristics for print production activities or their results, and requirements for materials, equipment and systems involved in processes in the print workflow are provided by ISO/TC 130 standards.



NOTE 1： The ellipses represent processes.
NOTE 2: The rectangles represent inputs and outputs.
NOTE 3: The squares represent stakeholders.

Figure 1 — Processes with inputs and outputs in a typical print workflow

1.2 Stakeholders and their areas of responsibility

Stakeholders in the workflow play various roles. The contents of ISO/TC 130 standards address issues in their areas of responsibility as shown in Figure 2. Consequently, analysis of stakeholders and their areas of responsibility can help to define the purpose and applicability of relevant standards.

Stakeholders identify roles and it is possible that more than one person is required for a role and that a single person may take on multiple roles. The tasks undertaken by the Print Buyer, the

Designer and the Pre-Press Operator may be interchangeable. The multimedia user and the end user are often the most important stakeholders, but they are not included here as they are passive recipients, i.e. users without responsibilities. More information on the roles of the different stakeholders can be found in the document "Guidelines for using print production standards" (which can be found on the ISO/TC 130 website at https://committee.iso.org/home/tc130 under the tab "Resources").

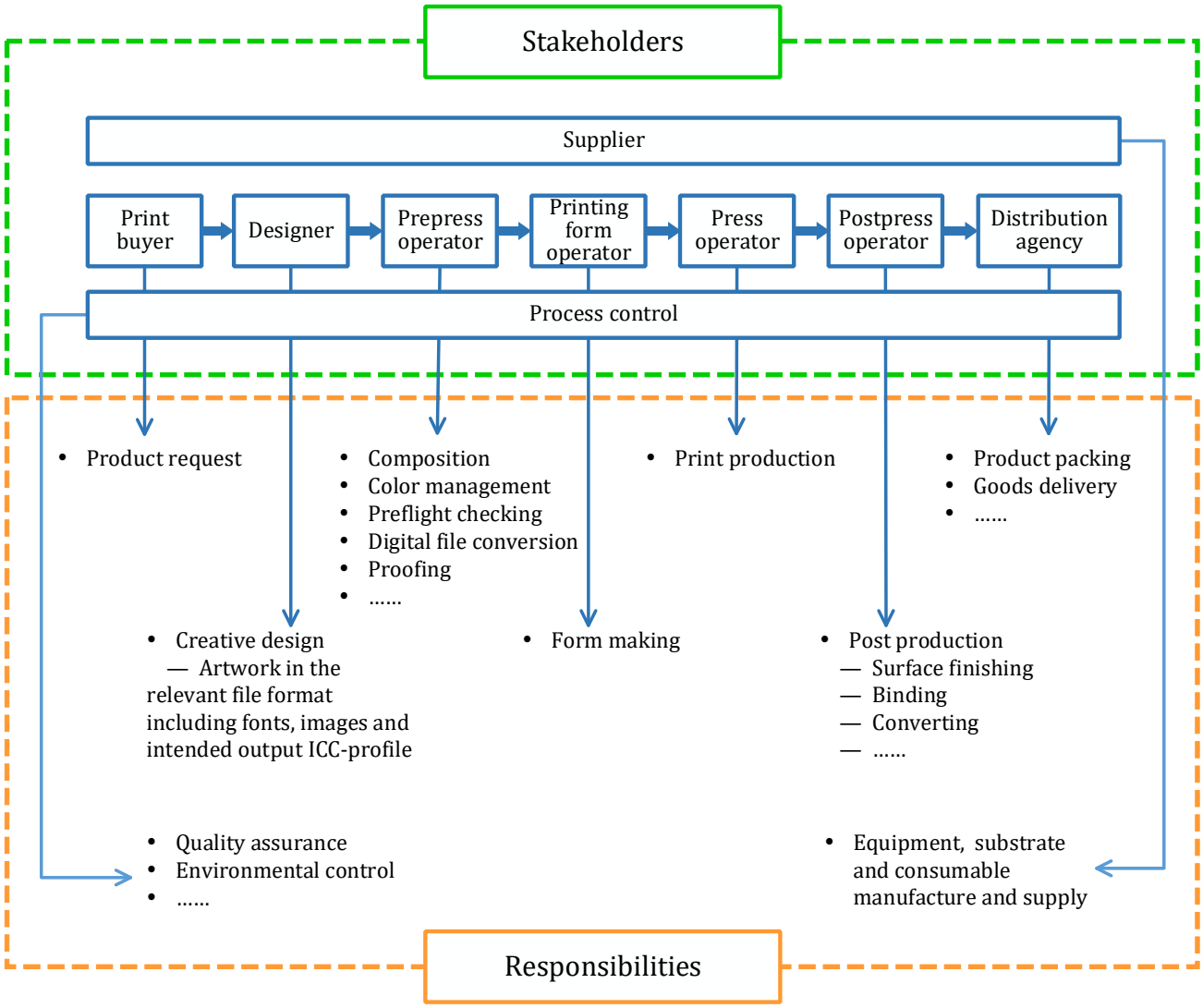


Figure 2 — Stakeholders and responsible areas

2 Categorization of ISO/TC 130 standards

In line with the technical contents, the ISO/TC 130 standards can be organized into two categories: multiple-process related (see Table 1) and single-process related (see Table 2). Each category is divided into several sub-categories.

The multiple-process related standards in Table 1 are applicable to more than one process. The single-process related standards in Table 2 are applicable to specific processes. For more details about these standards, see Table 3.

NOTE 1 ISO/TC 130 has also published other deliverables, such as technical specifications, public available specifications and technical reports, each of which falls within one of these categories.

NOTE 2 "Guidelines for using print production standards" can be referred to when use cases of these standards are needed.

Table 1 — Standards that relate to more than one process

Termino-logy	Media and materials	Measurement and testing	Quality control	Conformity assessment	Ergono-mics and safety	Environ-ment and ecology	Security printing
ISO 5776 ISO 12637-1 ISO 12637-2 ISO 12637-3 ISO 12637-4	ISO 2846-1 ISO 2846-2 ISO 11084-1 ISO 11084-2 ISO 12635 ISO 12636 ISO 15397 ISO 22934 ISO 24487	ISO 2834-1 ISO 2834-2 ISO 2834-3 ISO 2836 ISO 12040 ISO 12632 ISO 12634 ISO 12644 ISO 12645 ISO/TR 12705 ISO 13655 ISO 15341 ISO 15790 ISO/TS 18621-11: ISO/TS 18621-21 ISO/TS 18621-22 ISO/TS 18621-31 ISO 19594 ISO 20654 ISO/TS 23031 ISO/TS 23564 ISO 23498 ISO 24585-1 ISO 24585-2	ISO 12640-1 ISO 12640-2 ISO 12640-3 ISO 12640-4 ISO 12640-5 ISO 12641 ISO 12641-1 ISO 12642-1 ISO 12642-2 ISO 12642-3 ISO 15076-1 ISO/TR 16066 ISO 18619 ISO 20616-1 ISO 20616-2 ISO/TS 21830	ISO 15311-1 ISO 15311-2 ISO 19301 ISO 19302 ISO/TS 19303-1	ISO/TR 15847 ISO 12643-1 ISO 12643-2 ISO 12643-3 ISO 12643-4 ISO 12643-5	ISO 16759 ISO 20294 ISO 20690 ISO 21632 ISO 22067-1	ISO 14298

Table 2 — Standards that relate primarily to a single process

Job initiation	Data preparation and exchange	Prepress	Printing	Postpress	Product packing and logistics

ISO 16762 ISO19593-1	ISO 12639 ISO/TR 14672 ISO 15930-1 ISO 15930-3 ISO 15930-4 ISO 15930-6 ISO 15930-7 ISO 15930-8 ISO 15930-9 ISO 16612-1 ISO 16612-2 ISO 16612-3 ISO 16613-1 ISO 16684-1 ISO 16684-2 ISO 16760 ISO 17972-1 ISO 17972-2 ISO 17972-3 ISO 17972-4 ISO 19445 ISO 20677 ISO/TS 21328 ISO 21812-1 ISO 28178	ISO/TS 10128 ISO 12218 ISO 12646 ISO 12647-7 ISO 12647-8 ISO 12647-9 ISO 14861 ISO 18620	ISO 12647-1 ISO 12647-2 ISO 12647-3 ISO 12647-4 ISO 12647-5 ISO 12647-6 ISO 12647-9 ISO 15339	ISO 16763	
NOTE The empty space in columns means that there is no standard in that area. TC 130 should consider whether a standard is required.					

Table 3 — Overview of published standards of ISO/TC 130

No.	Standard no.	Who developed it	Standard name	Sub-category
1	ISO 2834-1:2020	WG4	Graphic technology — Laboratory preparation of test prints — Part 1: Paste inks	Measurement and testing
2	ISO 2834-2:2022	WG4	Graphic technology — Laboratory preparation of test prints — Part 2: Liquid printing inks	Measurement and testing
3	ISO 2834-3:2008	WG4	Graphic technology — Laboratory preparation of test prints — Part 3: Screen printing inks	Measurement and testing
4	ISO 2836:2021	WG4	Graphic technology —Prints and printing inks — Assessment of resistance of prints to various	Measurement and testing

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
5	ISO 2846-1:2017	WG4	Graphic technology — Colour and transparency of printing ink sets for four-colour printing — Part 1: Sheet-fed and heat-set web offset lithographic printing	Media and materials
6	ISO 2846-2:2007	WG4	Graphic technology — Colour and transparency of printing ink sets for four-colour printing — Part 2: Coldset offset lithographic printing	Media and materials
7	ISO 5776:2022	WG1	Graphic technology — Symbols for text proof correction	Terminology
8	ISO/TS 10128:2023	WG3	Graphic technology — Methods of adjustment of the colour reproduction of a printing system to match a set of characterization data	Prepress
9	ISO 11084-1:1993	WG4	Graphic technology — Register systems for photographic materials, foils and paper - Part 1: Three-pin systems	Media and materials
10	ISO 11084-2:2006	WG4	Graphic technology — Register systems for photographic materials, foils and paper — Part 2: Register pin systems for plate making	Media and materials
11	ISO 12040:1997	WG4	Graphic technology -- Prints and printing inks -- Assessment of light fastness using filtered xenon arc light	Measurement and testing
12	ISO 12218:1997	WG3	Graphic technology — Process control — Offset platemaking	Prepress
13	ISO 12632:2015	WG4	Graphic technology — Ink, paper and labels — Requirements on hot alkali penetration and resistance	Measurement and testing
14	ISO 12634:2017	WG4	Graphic technology — Determination of tack of paste inks and vehicles by a rotary tackmeter	Measurement and testing
15	ISO 12635:2021	WG4	Graphic technology — Plates for offset printing — Dimensions	Media and materials
16	ISO 12636:2018	WG4	Graphic technology — Blankets for offset printing	Media and materials
17	ISO 12637-1:2006	WG1	Graphic technology — Vocabulary — Part 1: Fundamental	Terminology

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
18	ISO 12637-2:2008	WG1	Graphic technology — Vocabulary — Part 2: Prepress terms	Terminology
19	ISO 12637-3:2009	WG1	Graphic technology — Vocabulary — Part 3: Printing terms	Terminology

20	ISO 12637-4: 2008	WG1	Graphic technology — Vocabulary — Part 4: Postpress terms	Terminology
21	ISO 12639:2004	WG2	Graphic technology — Prepress digital data exchange — Tag image file format for image technology (TIFF/IT)	Data preparation and exchange
22	ISO 12639:2004/ Amd 1:2007	WG2	Graphic technology — Prepress digital data exchange — Tag image file format for image technology (TIFF/IT) — Amendment 1:Use of JBIG2-Amd2 compression in TIFF/IT	Data preparation and exchange
23	ISO 12640-1:1997	WG2	Graphic technology — Prepress digital data exchange — Part 1: CMYK standard colour image data (CMYK/SCID)	Quality control
24	ISO 12640-2: 2004	WG2	Graphic technology — Prepress digital data exchange — Part 2: XYZ/sRGB encoded standard colour image data (XYZ/SCID)	Quality control
25	ISO 12640-2: 2004/ Cor 1: 2008	WG2	Graphic technology — Prepress digital data exchange — Part 2: XYZ/sRGB encoded standard colour image data (XYZ/SCID) — Technical Corrigendum 1	Quality control
26	ISO 12640-3: 2022	WG2	Graphic technology — Prepress digital data exchange — Part 3: CIELAB standard colour image data (CIELAB/SCID)	Quality control
27	ISO 12640-4: 2011	WG2	Graphic technology — Prepress digital data exchange — Part 4: Wide gamut display-referred standard colour image data [Adobe RGB (1998)/ SCID]	Quality control
28	ISO 12640-5: 2013	JWG9	Graphic technology — Prepress digital data exchange — Part 5: Scene-referred standard colour image data (RIMM/SCID)	Quality control

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
29	ISO 12640-1:1997/ CDR1:2004	WG2	Graphic technology — Prepress digital data exchange — Part 1: CMYK standard colour image data (CMYK/SCID) — Technical Corrigendum 1	Quality control
30	ISO 12641-1:2016	WG2	Graphic technology-Prepress digital data exchange — Colour targets for input scanner calibration — Part 1: Colour targets for input	Quality control
31	ISO 12641-2:2019	WG2	Graphic technology — Prepress digital data exchange — Part 2: Advanced colour targets for input scanner calibration	Quality control
32	ISO 12642-1:2011	WG2	Graphic technology — Input data for characterization of four-colour process printing — Part 1: Initial data set	Quality control
33	ISO 12642-2:2006	WG2	Graphic technology — Input data for characterization of 4-colour process printing — Part 2: Expanded data set	Quality control
34	ISO 12642-3:2021	WG2	Graphic technology — Input data for characterization of 4-colour process printing — Part 3: Extended data set including near neutral	Quality control
35	ISO 12643-1:2023	WG5	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 1: General requirements	Ergonomics - Safety
36	ISO 12643-2:2023	WG5	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 2: Prepress and press equipment and	Ergonomics - Safety
37	ISO 12643-3:2023	WG5	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 3: Binding and finishing equipment and	Ergonomics - Safety
38	ISO 12643-4:2023	WG5	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 4: Converting equipment and systems	Ergonomics - Safety

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
39	ISO 12643-5:2023	WG5	Graphic technology — Safety requirements for graphic technology equipment and systems — Part 5: Stand-alone platen presses	Ergonomics – Safety
40	ISO 12644:1996	WG4	Graphic technology — Determination of rheological properties of paste inks and vehicles by the falling rod viscometer	Measurement and testing
41	ISO 12645:1998	WG3	Graphic technology — Process control — Certified reference material for opaque area calibration of transmission densitometers	Measurement and testing
42	ISO 12646:2015	WG3	Graphic technology — Displays for colour proofing — Characteristics	Prepress
43	ISO 12647-1:2013	WG3	Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 1: Parameters and measurement methods	Printing
44	ISO 12647-2:2013	WG3	Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 2: Offset lithographic processes	Printing
45	ISO 12647-3:2013	WG3	Graphic technology — Process control for the production of half-tone colour separations, proofs and production prints — Part 3: Coldset offset lithography on newsprint	Printing
46	ISO 12647-4:2014	WG3	Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 4: Publication gravure printing	Printing
47	ISO 12647-5:2015	WG3	Graphic technology — Process control for the manufacture of half-tone colour separations, proof and production prints — Part 5: Screen	Printing

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
48	ISO 12647-6:2020	WG3	Graphic technology — Process control for the production of half-tone colour separations, proofs and production prints — Part 6: Flexographic printing	Printing
49	ISO 12647-7:2016	WG3	Graphic technology — Process control for the production of halftone colour separations, proof and production prints — Part 7: Proofing processes working directly from digital data	Prepress
50	ISO 12647-8:2021	WG3	Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 8: Validation print processes working directly from digital data	Prepress
51	ISO 12647-9:2021	WG3	Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 9: Metal decoration printing process using offset lithography	Printing
52	ISO/TR 12705:2011	WG4	Graphic technology — Laboratory test method for chemical ghosting in lithography	Measurement and testing
53	ISO 13655:2017	JWG8	Graphic technology — Spectral measurement and colourimetric computation for graphic arts images	Measurement and testing
54	ISO 14298:2021	WG10	Graphic technology — Management of security printing processes	Security printing
55	ISO 14298:2021 / Amd 1:2024	WG10	Graphic technology — Management of security printing processes— Amendment 1: Climate action changes	Security printing
56	ISO/TR 14672:2000	WG2	Graphic technology — Statistics of the natural SCID images defined in ISO 12640	Data preparation and exchange
57	ISO 14861:2015	WG3	Graphic technology — Requirements for colour soft proofing systems	Prepress
58	ISO 15076-1:2010	JWG7	Image technology colour management — Architecture, profile format and data structure — Part 1: Based on ICC.1:2010	Quality control

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
59	ISO/TS 15311-1: 2020	WG3	Graphic technology — Print quality requirements for printed matter — Part 1: Measurement methods and reporting schema	Conformity Assessment
60	ISO/TS 15311-2: 2018	WG3	Graphic technology — Print quality requirements for printed matter — Part 2: Commercial print applications utilizing digital printing technologies	Conformity Assessment
61	ISO 15339:2024	WG3	Graphic technology — Printing from digital data across multiple technologies — Part 1: Principles	Printing
62	ISO 15341:2014	WG4	Graphic technology — Method for radius determination of printing cylinders	Measurement and testing
63	ISO 15397:2014	WG4	Graphic technology — Communication of graphic paper properties	Media and materials
64	ISO 15790:2004	WG6	Graphic technology and photography - Certified reference materials for reflection and transmission metrology — Documentation and procedures for use, including determination of combined standard uncertainty	Measurement and testing
65	ISO/TR 15847:2008	WG5	Graphic technology — Graphical symbols for printing press systems and finishing systems, including related auxiliary equipment	Ergonomics - Safety
66	ISO 15930-1:2001	WG2	Graphic technology — Prepress digital data exchange — Use of PDF — Part 1: Complete exchange using CMYK data (PDF/X-1 and PDF/	Data preparation and exchange
67	ISO 15930-3:2002	WG2	Graphic technology — Prepress digital data exchange — Use of PDF — Part 3: Complete exchange suitable for colour-managed workflows (PDF/X-3)	Data preparation and exchange
68	ISO 15930-4:2003	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 4: Complete exchange of CMYK and spot colour printing data using PDF 1.4 (PDF/X-1a)	Data preparation and exchange

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
69	ISO 15930-6:2003	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 6: Complete exchange of printing data suitable for colour-managed workflows using PDF 1.4 (PDF/X-3)	Data preparation and exchange
70	ISO 15930-7:2010	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 7: Complete exchange of printing data (PDF/X-4) and partial exchange of printing data with external profile reference (PDF/X-4p) using PDF 1.6	Data preparation and exchange
71	ISO 15930-8:2010	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 8: Partial exchange of printing data using PDF 1.6 (PDF/X-5)	Data preparation and exchange
72	ISO 15930-8: 2010/ Cor 1:2011	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 8: Partial exchange of printing data using PDF 1.6 (PDF/X-5)/Cor 1:2011	Data preparation and exchange
73	ISO 15930-9:2020	WG2	Graphic technology — Prepress digital data exchange using PDF — Part 9: Complete exchange of printing data (PDF/X-6) and partial exchange of printing data with external profile reference (PDF/X-6p and PDF/X-6n) using PDF 2.0	Data preparation and exchange
74	ISO/TR 16066:2003	WG2	Graphic technology — Standard object colour spectra database for colour reproduction evaluation (SOCS)	Quality control
75	ISO 16612-1: 2005	WG2	Graphic technology — Variable printing data exchange — Part 1: Using PPML 2.1 and PDF 1.4 (PPML/VDX-2005)	Data preparation and exchange
76	ISO 16612-2: 2010	WG2	Graphic technology — Variable data exchange — Part 2: Using PDF/X-4 and PDF/X-5 (PDF/VT-1 and PDF/VT-2)	Data preparation and exchange
77	ISO 16612-3: 2020	WG2	Graphic technology — Variable data exchange — Part 3: Using PDF/X-6 (PDF/VT-3)	Data preparation and exchange

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
78	ISO 16613-1: 2017	WG2	Graphic technology — Variable content replacement — Part 1: Using PDF/X for variable content replacement (PDF/VCR-1)	Data preparation and exchange
79	ISO 16759:2013	WG11	Graphic technology — Quantification and communication for calculating the carbon footprint of print media products	Environment and ecology
80	ISO 16760:2014	WG2	Graphic technology — Prepress data exchange — Preparation and visualization of RGB images to be used in RGB-based graphics arts workflows	Data preparation and exchange
81	ISO 16762:2016	WG12	Graphic technology — Post-press — General requirements for transfer, handling and storage	Job initiation
82	ISO 16763:2016	WG12	Graphic technology — Post-press – Requirements for bound products	Postpress
83	ISO 17972-1: 2015	WG2	Graphic technology — Colour data exchange format - Part 1: Relationship to CxF3 (CxF/X)	Data preparation and exchange
84	ISO 17972-2: 2016	WG2	Graphic technology — Colour data exchange format (CxF/X) — Part 2: Scanner target data (CxF/X-2)	Data preparation and exchange
85	ISO 17972-3: 2017	WG2	Graphic technology — Colour data exchange format (CxF/X) — Part 3: Output target (CxF/X-3)	Data preparation and exchange
86	ISO 17972-4: 2018	WG2	Graphic technology — Colour data exchange format (CxF/X) — Part 4: Spot colour characterisation data (CxF/X-4)	Data preparation and exchange
87	ISO 18619:2015	JWG7	Image technology colour management — Black point compensation	Quality control
88	ISO 18620:2016	WG2	Graphic technology – Prepress data exchange — Tone adjustment curves exchange	Prepress

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
89	ISO/TS 18621-11:2022	JWG14	Graphic technology — Image quality evaluation methods for printed matter — Part 11: Colour gamut analysis	Measurement and testing
90	ISO/TS 18621-21:2023	JWG14	Graphic technology — Image quality evaluation methods for printed matter — Part 21: Measurement of 1D distortions of macroscopic uniformity utilizing scanning spectrophotometers	Measurement and testing
91	ISO/TS 18621-22:2024	JWG14	Graphic technology — Image quality evaluation methods for printed matter — Part 22: Evaluation of colour graininess	Measurement and testing
92	ISO/TS 18621-31:2024	JWG14	Graphic technology — Image quality evaluation methods for printed matter — Part 31: Evaluation of the perceived resolution of printing systems with the Contrast–Resolution chart	Measurement and testing
93	ISO 19301:2020	WG13	Graphic technology — Guidelines for schema writers — Template for colour quality	Conformity Assessment
94	ISO 19302:2018	WG13	Graphic technology — Colour conformity of printing workflows	Conformity Assessment
95	ISO/TS 19303-1:2020	WG13	Graphic technology — Guidelines for schema writers — Part 1: Packaging printing	Conformity Assessment
96	ISO 19445:2022	WG2	Graphic technology — Metadata for graphic arts workflow — XMP metadata for image and document proofing	Data preparation and exchange
97	ISO 19593-1: 2018	WG2	Graphic technology -- Use of PDF to associate processing steps and content data -- Part 1: Processing steps for packaging and labels	Job initiation
98	ISO 19594:2017	WG12	Graphic technology — Test method for the determination of the binding strength for perfect-bound products — Page-pull test working	Measurement and testing
99	ISO 20294:2018	JWG15	Graphic technology — Quantification for calculating the carbon footprint of e-media	Environment and ecology

Table 3 — Overview of published standards of ISO/TC 130 （continued）

No.	Standard no.	Who developed it	Standard name	Sub-category
100	ISO 20616-1:2021	WG2	Graphic technology — File format for quality control and metadata — Part 1: Print requirements eXchange (PRX)	Quality Control
101	ISO 20616-2:2020	WG2	Graphic technology — File format for quality control and metadata — Part 2: Print Quality eXchange (PQX)	Quality Control
102	ISO 20654:2017	WG3	Graphic technology — Measurement and calculation of spot colour tone value	Measurement and testing
103	ISO 20677:2019	JWG7	Image technology — Extensions to architecture profile format and data structure	Data preparation and exchange
104	ISO 20690:2018	WG11	Graphic technology — Determination of the operating power consumption of digital printing devices	Environment and ecology
105	ISO/TS 21328:2022	WG3	Graphic technology — Guidelines and recommendations for multicolour (CMYKOGV) print characterization	Data preparation and exchange
106	ISO 21632:2018	WG11	Graphic technology — Determination of the energy consumption of digital printing devices including transitional and related models	Environment and ecology
107	ISO 21632:2018 / AMD1:2020	WG11	Graphic technology — Determination of the energy consumption of digital printing devices including transitional and related modes —	Environment and ecology
108	ISO 21812-1: 2019	WG2	Graphic technology — Print product metadata for PDF files — Part 1: Architecture and core requirements for metadata	Data preparation and exchange
109	ISO/TS 21830：2018	JWG7	Image technology colour management -- Black point compensation for n-colour ICC profiles	Quality control
110	ISO 22067-1:2022	WG11	Graphic technology — Requirements for communication of environmental aspects of printed products — Part 1: General printing	Environment and ecology
111	ISO 22934:2021	WG4	Graphic technology —Communication of offset ink properties	Media and materials
112	ISO/TS 23031:2020	WG3	Graphic technology — Assessment and validation of the performance of spectrocolorimeters and spectrodensitometers	Measurement and testing
113	ISO 23498:2022	WG4	Graphic technology — Visual opacity of printed white ink	Measurement and testing
114	ISO/TS 23564:2020	JWG7	Image technology colour management — Evaluating colour transform accuracy in ICC	Measurement and testing

115	ISO 24487:2023	WG4	Graphic technology — Processless lithographic plates — Evaluation methods for characteristics and performance	Media and materials
116	ISO 24585-1:2023	WG3	Graphic technology — Multispectral imaging measurement and colorimetric computation for graphic arts and industrial application — Part 1: Parameters and measurement methods	Measurement and testing
117	ISO 24585-2:2023	WG3	Graphic technology — Multispectral imaging measurement and colorimetric computation for graphic arts and industrial application — Part 2: Requirements for decorative surfaces	Measurement and testing
118	ISO 28178:2022	WG2	Graphic technology — Exchange format for colour and process control data using XML or ASCII text	Data preparation and exchange

NOTE The above list was given on the ISO website Standard and/or project of ISO/TC 130 as of December 31, 2023. It is to be updated by the ISO Central Secretariat according to ISO project database.

3. Framework for ISO/TC 130 standards

Based on the above categorization, a framework for ISO/TC 130 standards, intended or existing, is established in the hierarchical model shown in Figure 3.

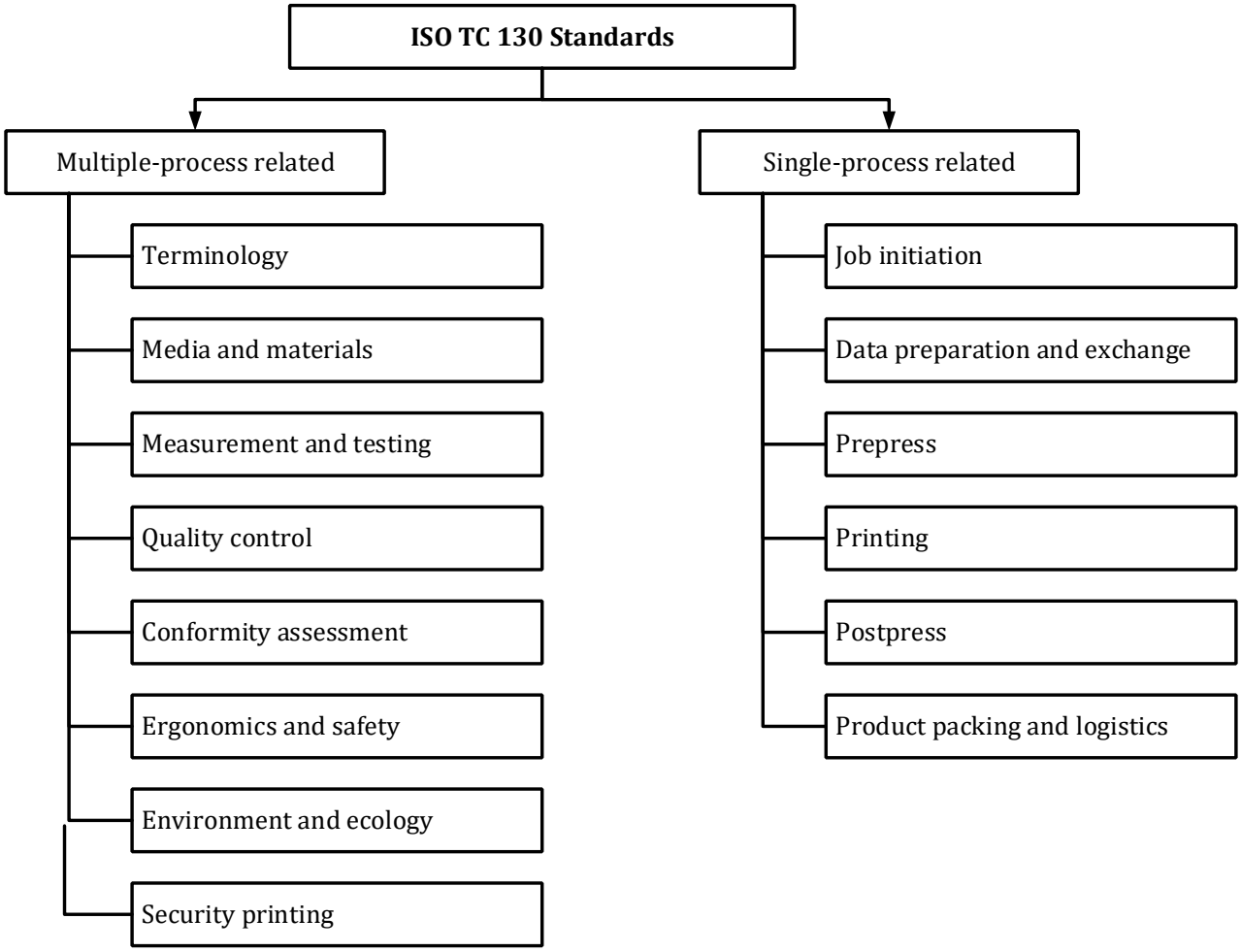


Figure 3 — Framework for ISO/TC 130 standards

There are eight sub-categories in the multiple-process related category and six sub-categories in the single-process related category. The purpose of standards development in each category is outlined in Table 4 and Table 5.

Table 4 — Purpose of standards development of the multiple-process related category

Sub-category	Purpose
Terminology	Defining the relevant concept for similar interpretation in different processes
Media and materials	Establishing printability requirements for media and materials used in the related printing process
Measurement and testing	Giving provisions concerning the methods of measurement and testing, relevant devices and materials to ensure the results are accurate and reliable

Table 4 — Purpose of standards development of the multiple-process related category

(continued)

Quality control	Establishing requirements and methods for quality control in the print workflow, such as colour management
Conformity assessment	Developing conformity assessment guidelines for printed products, processes, services, persons and systems; these are determined to meet the relevant standards or specifications
Ergonomics and safety	Establishing requirements for a healthy and safe working environment
Environment and ecology	Evaluating the impact of printing processes and printed products on the environment with the aim of the sustainable development of the industry
Security printing	Developing a solid framework for managing all security printing processes

Table 5 — Purpose of standards development of the single-process related category

Sub-category	Purpose
Job initiation	Providing guidelines for graphic designers or relevant parties to ensure that the desired items fit into the production line so that they are processed, printed and finished correctly
Data preparation and exchange	Defining file formats for data exchange, making it possible for data to be shared in the relevant reproduction processes
Prepress	Establishing requirements for data processing, printing form making, proofing and cross-media publishing Enabling the processed data to match the final output devices
Printing	Establishing requirements for process control to ensure printing on various substrates with well-defined parameters
Postpress	Establishing requirements for surface finishing, binding and converting operations to ensure reliable results
Product packing and logistics	Establishing requirements for packing and delivery of finished products to facilitate integration of logistics in an internet-based environment

4. Working groups for ISO/TC 130 standards development

Working groups (WGs), Joint working groups (JWGs) and Task Forces (TFs) are established for standards development and each WG, JWG or TF undertakes specific tasks. The active ISO/TC 130 WGs and TFs are given in Table 6, the joint working groups (JWGs) under the responsibility of ISO/TC 130 are given in Table 7, the joint working groups under the responsibility of another Technical

Committee with TC130 participation are given in Table 8. The title of each WG (JWG, TF) suggests, to some degree, the sphere of activity.

NOTE The ISO web page that shows working groups can be found under the link: Structure of ISO/TC 130

Table 6 — Active working groups and task forces of ISO/TC 130

Group no.	Group title
ISO/TC 130 TF3	Communications
ISO/TC 130 /WG 1	Terminology
ISO/TC 130 /WG 2	Prepress data exchange
ISO/TC 130 /WG 3	Process control and related metrology
ISO/TC 130 /WG 4	Media and materials
ISO/TC 130 /WG 5	Ergonomics - Safety
ISO/TC 130 /WG 10	Management of security printing processes
ISO/TC 130 /WG 11	Sustainability of Graphic Technology
ISO/TC 130 /WG 12	Postpress
ISO/TC 130 /WG 13	Printing conformity assessment requirements

Table 7 — Joint working groups under the responsibility of ISO/TC 130

Group no.	Group title
ISO/TC 130 /JWG 7	Colour management (Joint ISO/TC 130 – ICC WG)
ISO/TC 130 /JWG 14	Print quality measurement methods (Joint ISO/TC130 – TC42 – ISO/IEC JTC1/ SC28 WG

Table 8 — Joint working groups under the responsibility of another Committee

Group no.	Group title
ISO/TC6/SC2 /JWG39	Printability testing (Joint ISO/TC6/SC2 – TC130 WG)
ISO/TC42/JWG 20	Digital still cameras (Joint ISO/TC42 – IEC WG)
ISO/TC42/JWG24	Revision of ISO 3664 (Joint ISO/TC42 – TC130 WG)
ISO/TC42/JWG 27	Image permanence & durability test methods and specifications for digital prints in commercial applications (Joint ISO/TC42 - ISO/IEC /JTC1/SC28 – ISO/TC130 WG)

ISO/TC42/WG 23	Extended colour encodings for digital image storage, manipulation and interchange (Joint ISO/TC42 – TC130 – ICC WG
ISO/TC171/SC2/WG5	Document management applications – Application issues – PDF/A (Joint ISO/ TC 171/SC2 – TC42 – TC46/SC11 – TC130 WG