

Working Group on the Legal Development of the Hague System for the International Registration of Industrial Designs

Fifteenth Session
Geneva, October 26 to 28, 2026

REPORT ON THE TECHNICAL CONSULTATION ON THE ENHANCEMENT OF 2D IMAGE REPRESENTATION

Document prepared by the International Bureau

BACKGROUND

1. At its fourteenth session, held from October 6 to 8, 2025, the Working Group on the Legal Development of the Hague System for the International Registration of Industrial Designs (hereinafter referred to as the “Working Group”), discussed documents [H/LD/WG/14/4](#) and [H/LD/WG/14/4 Corr.](#), containing an analysis of the replies to the *Questionnaire on Formats of Representation of Designs* distributed to all Hague System Contracting Parties in that year (hereinafter referred to as the “Survey”)¹.

2. The Working Group agreed to:

(i) the enhancement of 2D image representations as described in paragraph 85 of document H/LD/WG/14/4, and requested that the International Bureau create a forum in which its implementation plan as well as technical details should be consulted and determined with interested Contracting Parties; and

(ii) continue discussions at a future session regarding the possible introduction of 3D and video files as new formats of design representation².

¹ The Survey also included an additional user survey to gauge the users’ interest in the potential adoption of new reproduction formats for design representation within the Hague System. See document H/LD/WG/14/4, paragraph 5.

² See document [H/LD/WG/14/10 Rev.](#) “Summary by the Chair”, paragraph 13.

3. This document reports on the technical consultations held on the enhancement of 2D image representation in response to the above request.

CONSULTATIONS

ESTABLISHMENT OF TECHNICAL FORUM

4. For the purposes of the technical consultations with interested Contracting Parties, a dedicated forum, entitled the “Hague Technical Forum for Higher Resolution of 2D Images” (hereinafter referred to as the “Technical Forum”), was established pursuant to the request of the Working Group referred to in paragraph 2(i), above.

5. The aim of the Technical Forum is to assess the implications for Offices that proceed to ST. 96 packages³ and download the *International Designs Bulletin* (hereinafter referred to as the “Bulletin”) data⁴ via FTP, SFTP or web services of handling higher-resolution 2D images. Considerations on the enhancement of 2D image representation include not only increasing the maximum resolution of JPEG reproductions, but also the possible adoption of new formats, such as Portable Network Graphics (PNG) and Scalable Vector Graphics (SVG)⁵.

6. By Circular C. H 159 of December 5, 2025, the Offices of all Contracting Parties were invited to participate in the Technical Forum. The invitation was also extended to the Eurasian Patent Organization (EAPO) and the Offices of Uzbekistan and Lao People’s Democratic Republic, whose accession processes were well advanced on that date. The Technical Forum held its first meeting on February 4, 2026, and its second meeting on September 24, 2026, both in an online format. Experts from 22 Offices participated in the first meeting and from 18 in the second (24 Offices in total)⁶. Between the two Technical Forum meetings, several Offices and the International Bureau held additional meetings and exchanged emails, including to share sample data.

7. The Technical Forum remains open to all Offices of Contracting Parties.

MATTERS DISCUSSED

8. At those two Technical Forum meetings, the International Bureau presented a basic proposal to introduce additional 2D image formats, detailing their specifications, data flow, and the rationale for maintaining compatibility with existing standards.

9. The following 2D image formats were considered:

- JPEG at 600 dots per inch (DPI) (3,780 x 3,780 pixels, max. 8MB);
- PNG at 600 DPI (3,780 x 3,780 pixels, max. 8MB); and
- SVG as a vector format without fixed resolution⁷.

³ WIPO Standard ST. 96 is the recommendation for the processing of intellectual property information using XML (Extensible Markup Language). Its latest (April 1, 2026) version is available at: <https://www.wipo.int/documents/d/standards/docs-en-03-96-01.pdf>

⁴ This includes a confidential copy of the corresponding data that may be received in accordance with Article 10(5) of the Geneva Act (1999) of the Hague Agreement Concerning the International Registration of Industrial Designs (hereinafter referred to as the “Geneva Act”).

⁵ See document H/LD/WG/14/4, paragraphs 14 to 35.

⁶ The Offices of the following Contracting Parties: Brazil, Canada, China, France, Georgia, Germany, Hungary, Israel, Japan, Mexico, Mongolia, Namibia, North Macedonia, Norway, Republic of Korea, Russian Federation, Singapore, Switzerland, Tunisia, Türkiye, United Kingdom and United States of America; and one intergovernmental organization (IGO): the European Union Intellectual Property Office (EUIPO). Additionally, EAPO, which deposited its instrument of accession to the Geneva Act on July 10, 2026, participated.

⁷ These three formats, including JPEG at a higher resolution, were included in the Survey and discussed in document H/LD/WG/14/4. Furthermore, WIPO Standard ST. 88 recommends JPEG and PNG as preferred electronic 2D image formats for industrial designs.

10. The International Bureau explained that the enhancement of 2D image representation would be implemented on a backward-compatible basis. In terms of standards, the enhancement would not require a structural change to WIPO Standard ST. 96, since the new 2D formats can be referenced in the existing XML structure. An optional element indicating the image resolution, designed in consultation with the CWS XML4IP Task Force, will be submitted for adoption in the April 2027 release of ST. 96. Existing versions of ST. 96 remain unchanged, and only packages in the new version would contain higher-resolution images. Sample packages in ST. 96 format, built from an actual published international registration, were prepared and shared with Offices. Two Offices confirmed the successful validation of those packages in June 2026, and test packages with a simpler ST.96 implementation and including images of varying sizes, will be distributed to all Offices that exchange data electronically with the International Bureau in October 2026.

11. The main practical implications identified for Offices concern, first, the readiness of using higher resolution 2D images, linked to the availability of examination and publication tools to receive, store and render the new formats; second, the increase in the size of ST. 96 packages and of the Bulletin data, which may affect transmission, storage and performance; and third, the presence of more than one file for a given view, which requires the receiving system to select the file format it supports and to disregard the others. The International Bureau is also carrying out an analysis of the quality of the conversion to the standard JPEG version, in coordination with interested Offices, and will share its findings, together with sample images in the fourth quarter of 2026. The International Bureau will also come back to Offices with a proposal for partitioning ST. 96 packages in view of their increasing size.

Conversion to JPEG Format

12. Although there was general support for the adoption of new file formats and increased resolutions for the filing of international applications, several Offices requested that, where design reproductions were submitted in a format other than JPEG, the International Bureau convert them to JPEG format so that those Offices could continue to receive design reproductions in JPEG format through the Bulletin data.

13. In addition, some Offices requested that, where the resolution of the original file exceeds the currently supported resolution of 300 DPI, the International Bureau reduces the resolution of the JPEG files to that level, until the Office concerned becomes capable of processing higher-resolution JPEG files.

14. The International Bureau explained that a higher-resolution JPEG file could be converted to a standard JPEG version at the currently supported resolution⁸. Such conversions, including any reduction in resolution, may alter image dimensions and affect image quality. It was therefore noted that the conversion and verification process should take place at the time of filing through the e-Filing interface, to avoid any subsequent negative consequences resulting from file conversions carried out outside the applicant's control (this mechanism is already used in the e-Filing system for images larger than 300 DPI, which is the current standard).

Recording and Publication of Design Reproductions in Multiple File Formats

15. As described in the previous section, some Offices that download the Bulletin data would continue to consider and process design reproductions only in JPEG format for the purposes of substantive examination and, where applicable, republication of international registrations at the domestic level. Some of those Offices would consider and process only reduced-resolution versions of JPEG files for those purposes.

⁸ Also note that submitted higher-resolution images that exceed 600 DPI or exceed 3780 x 3780 pixels will be converted down to 600 DPI in line with the standard mentioned in paragraph 9 above.

16. In view of the above, the International Bureau explained that each reproduction could be recorded and published both in the format in which it was filed, such as a higher-resolution JPEG file⁹, and in a standard JPEG version at the currently supported resolution, both versions sharing the same view identifier. Offices that are ready to process the new formats would benefit from them immediately, whereas Offices that are not would continue to download and process the current JPEG version without any change to their systems until they would be ready to accept the new formats.

17. For the purpose of Article 10(3)(b) of the Geneva Act, this would enable the Office of each designated Contracting Party to consider and use the highest-quality format that it is able to accept. Information concerning the file formats acceptable to Offices should be made available to users of the Hague System for the sake of clarity.

Concerns over SVG Format

18. As regards SVG, two distinct concerns were raised. The first concerns information security. Unlike raster formats, SVG is an XML-based format which may embed scripts, external references and other active content, and it therefore presents a considerably broader attack surface than JPEG or PNG. One Office indicated that it would exclude SVG until appropriate mitigation mechanisms were in place. While the International Bureau applies comprehensive antivirus scanning to all incoming files, it is consulting its information security services with a view to determining the measures required for the safe processing of SVG files. Those measures may include accepting only a restricted and sanitized subset of SVG, or converting SVG files into an acceptable format, such as JPEG, upon receipt.

19. The second concern relates to the scope of protection. Since SVG is a vector format that is independent of resolution and may be enlarged without limit, a reproduction filed in that format has no fixed rendering state, and its appearance may vary according to the rendering software used, the fonts available and any external references. While that flexibility is convenient for examiners and for the consultation of the publication, it does not provide stable reproduction that several Offices consider necessary for legal certainty as to the subject matter of protection. Raster formats, such as JPEG and PNG, do not present that difficulty.

20. In the light of those concerns, and noting that only a limited number of Offices currently accept, or plan to accept, SVG, the International Bureau is of the view that the introduction of that format should be deferred and reconsidered once the security assessment has been completed and further experience has been gained with the formats introduced in the first phase.

Indirect Filings

21. A question arose as to whether Offices accepting indirect applications containing electronic image files would be obliged to accept new 2D image file formats and JPEG files with increased resolution. It was noted, however, that Offices should not be obliged to do so, since every applicant may file an international application directly with the International Bureau, and Article 4(1)(b) of the Geneva Act allows any Contracting Party to even prohibit indirect filings¹⁰.

⁹ As regards PNG and SVG file formats, the consideration of their recording and publication should take into account the outcomes of further consultations within the Technical Forum concerning the readiness of Offices to accept such formats at the domestic level.

¹⁰ In line with this principle, some Offices accept only paper applications while some others accept applications only in one or two of the languages provided for in Rule 6(1) of the Regulations Under the Geneva Act (1999) of the Hague Agreement Concerning the International Registration of Industrial Designs.

Phased approach

22. Taking all these considerations into account, and in order to limit complexity for applicants and for Offices, the International Bureau intends to proceed in phases, beginning with an increase in the maximum resolution of JPEG reproductions. Under that approach, an international application would proceed with the reproduction as filed together with a standard JPEG version generated by the International Bureau, so that the number of files handled for each view remains limited. The inclusion of PNG format in the first phase remains under consultation with Offices through the Technical Forum, while the possible introduction of SVG would be considered at a later stage as mentioned in paragraph 20, above.

IMPLEMENTATION PLAN

23. A detailed implementation plan will be determined in the light of the second meeting of the Technical Forum and through further consultations within that forum. Subject to those outcomes, the International Bureau intends to deliver the enhancement of 2D image representation by the end of 2027.

24. The plan would follow the phased approach referred to in paragraph 22, above. A first phase would cover the increase in the maximum resolution of JPEG reproductions, and possibly the introduction of PNG, together with the corresponding amendment to WIPO Standard ST. 96, the adaptation of the e-Filing interface, of the Bulletin and of the data transmitted to Offices, and the publication of each reproduction in its original format and in the converted JPEG versions. In a second phase, the introduction of SVG could be reconsidered in the light of the security assessment and of further consultations with Offices.

25. Throughout the implementation, Offices would continue to be consulted, in particular through the Technical Forum, and would be provided with sample data and with the final technical specifications sufficiently in advance of entry into production, so as to allow them to adapt their systems, should they wish to do so. In any event, the International Bureau would continue to maintain the existing versions of WIPO Standard ST. 96 in order to ensure backward compatibility and would give at least three months' notice before the new version is used in production; a staggered introduction could be arranged if required.

NEXT STEPS

Enhancement of 2D Image Representation

26. The International Bureau will complete its assessment of the security implications of SVG and its analysis of the quality of the conversion to JPEG format, and will pursue the necessary amendments to WIPO Standard ST. 96. The International Bureau will also continue consultations within the Technical Forum, including on the readiness of Offices to accept PNG and/or SVG formats. The International Bureau will report on further progress, including the development of an implementation plan, at the next session of the Working Group.

3D and Video Files

27. As recalled in paragraph 2, above, the Working Group agreed to continue discussions at a future session regarding the possible introduction of 3D and video files as new formats of design representation. At present, however, consultations in the technical forum are confined to technical details on the enhancement of 2D images. It would therefore be useful to broaden those consultations to the technical details of any possible introduction of 3D and video files, as the findings would enable the Working Group to hold informed discussions on the introduction of those formats.

28. *The Working Group is invited to:*

(i) take note of the contents of this document; and,

(ii) indicate whether the Technical Forum should expand its consultations to include the technical details of the possible introduction of 3D and video files.

[End of document]