



PCT/A/28/3 Prov.

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IMPLEMENTATION OF ELECTRONIC FILING AND PROCESSING OF INTERNATIONAL APPLICATIONS

Document prepared by the International Bureau of WIPO

This provisional version of document PCT/A/28/3 is available in English only. It may be accessed via WIPO's Internet site; 1 copies on paper will be sent only upon request. The final version of the document for consideration by the PCT Assembly will be available in English and French. Early comments on the provisional version would be welcomed by the International Bureau and will, where possible, be taken into account in the preparation of the final version (expected to be during the second half of January 2000).

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See http://www.wipo.int under "PCT system," then "PTC Meetings: PCT Assembly."

CURRENT STATUS

Legal framework

- 1. The PCT Assembly at its twenty-fourth session in September-October 1997 adopted amendments of the PCT Regulations² providing for the future introduction of a system permitting international applications to be filed, processed and stored electronically (new Rules 89bis and 89ter and amendments to Rule 93.4, which are reproduced for convenient reference in Annex I). In adopting those amendments, the Assembly decided that "the amendments to Rules 89bis and 89ter would enter into force at the same time as the modifications of Administrative Instructions implementing those new Rules, the effective date to be included in the promulgation of those modifications by the Director General" (document PCT/A/XXIV/10, paragraph 16(iii)).³
- 2. The report of the twenty-fourth session of the Assembly further states (document PCT/A/XXIV/10, paragraph 26): "It was clearly understood that all matters necessary for electronic filing and processing of applications may be governed by the Administrative Instructions even if not mentioned in the list of examples under Rule 89bis.1(c). The Assembly noted that it would be appropriate, in the future, to incorporate into the Regulations certain matters which would, in the first stages of implementation of the electronic filing procedures, need to be dealt with in the Administrative Instructions." That understanding takes into account the fact that flexibility will be needed during the initial stages in the operation of the legal framework for electronic filing and processing, but recognizes that many of the most important requirements to be contained in the Administrative Instructions may eventually be moved into the PCT Regulations in the interests of greater clarity and certainty.
- 3. The legal framework for electronic filing and processing has been discussed on several occasions by Ad Hoc Advisory Groups convened by the Director General. It has been recognized, however, the development of the legal framework for the implementation of electronic filing and processing, on the one hand, and of the necessary technical standards, on the other hand, needs to proceed in a coordinated way. The current status of the development of both the legal framework and the technical standard is outlined below.
- 4. It is important also to note that the draft PLT and draft PLT Regulations which will be considered by the PLT Diplomatic Conference contain a number of provisions which deal

References in this document to "Articles," "Rules" and "Sections" are, respectively, to those of the Patent Cooperation Treaty (PCT), of the Regulations under the PCT ("the Regulations") and of the Administrative Instructions under the PCT ("the Administrative Instructions"), or to such provisions as proposed to be amended or added, as the case may be.

Rule 89*bis* has not yet entered into force. Rule 89*ter* entered into force on January 1, 1999, when Sections 102*bis* and 335 (dealing with the use of the PCT-EASY software) took effect.

References in this document to "draft PLT Articles," "draft PLT Rules" and "draft PLT Notes" are, respectively, to those of the draft Patent Law Treaty (PLT) contained in the basic proposal for submission to the Diplomatic Conference for the Adoption of the Patent Law Treaty to be held in Geneva from May 11 to June 2, 2000 ("PLT Diplomatic Conference") (document PT/DC/3), of the draft Regulations under the Patent Law Treaty ("draft PLT Regulations") contained in the basic proposal (document PT/DC/4), and of the Explanatory Notes on the basic proposal (document PT/DC/5 Prov.2). See WIPO's Internet site at http://www.wipo.int under "Meetings," then "Forthcoming events: Diplomatic Conference for the Adoption of the Patent Law Treaty."

with the electronic filing of patent applications (in particular, the format for filing and the effect of electronic signatures). Those provisions refer expressly to PCT requirements relating to international applications in electronic form. There is currently a high degree of consistency between the draft PLT provisions and those of the PCT, and it is of great importance that compatibility is maintained between them. To a large extent, the requirements to be introduced under the PCT in relation to the electronic filing and processing of international applications would be applicable to national⁵ applications filed in countries which adhere to the future PLT.

5. The legal and technical requirements for PCT electronic filing and processing must establish an interoperable international system based on uniform standards so that the electronic records created by the system will be usable by all Offices of PCT Contracting States whose operations are sufficiently automated, noting that the WIPONET system currently being developed will provide assistance with automation to such Offices; see document SCIT/WG/2/2, paragraph 18, and document SCIT/4/2 (Information Technology Strategic Implementation Plan, Project 1 – Automated Intellectual Property Offices). Moreover, those electronic records must be acceptable in all designated States in the sense that they will be admissible before, and satisfactory to, their national Offices and courts (and not only Offices and courts in the country in which the records are created and kept). Only in this way can applicants' and patentees' rights be properly safeguarded. Those criteria must also be met, upon the adoption of a WIPO standard based on the PCT standard, and more particularly, upon the coming into force of the PLT, in relation to all national filings, including filings which serve as the basis for the creation of priority rights.

Technical standard

- 6. The development of the necessary technical standard to enable implementation of electronic filing and processing of international applications was referred to a task force by the WIPO Standing Committee on Information Technologies (SCIT) at its second session held in Geneva from February 8 to 12, 1999 (document SCIT/2/8, paragraphs 33 and 34). The Trilateral Offices (the European Patent Office, the Japanese Patent Office and the United States Patent and Trademark Office) offered at that meeting to provide a first draft of the standard to the task force for further work and finalization. That draft was sent by the Trilateral Offices on November 5, 1999, to the SCIT task force, which is currently evaluating the draft. The International Bureau has begun receiving comments from task force members which contain suggestions for improvements to the draft standard. It is envisaged that the results of the work of the SCIT task force, in addition to being adopted in the context of the PCT, will ultimately be adapted to establish a WIPO standard for the electronic filing and processing of national patent applications and of industrial property documents.
- 7. Some discussion of the draft standard and more particularly of the timetable for its implementation took place at the meetings of the SCIT Standards and Documentation Working Group and the SCIT Plenary in early December 1999. Those meetings considered an Action Plan proposed by the Trilateral Offices for the implementation of electronic filing for PCT applications. The SCIT Working Group agreed to recommend to the SCIT Plenary

References in this document to "national law," "national applications," "national Offices," etc., include reference to regional law, regional applications, regional Offices, etc.

⁶ See footnote 7.

the approval of the proposed plan of future action, taking into account several amendments suggested by the International Bureau, and the SCIT Plenary adopted the Action Plan appearing as Annex III to its report, document SCIT/4/8; the Action Plan is reproduced in Annex II to this document.

IMPLEMENTING MODIFICATIONS OF THE ADMINISTRATIVE INSTRUCTIONS

General considerations

- 8. The proposed modifications of the Administrative Instructions set out in Annex III are designed to establish and implement the necessary procedures to enable electronic filing and processing of international applications in accordance with Rule 89bis, and to do so in a manner which will meet the needs of Offices while safeguarding the rights of applicants. It is proposed to add a new Part 7 (Instructions Relating to the Electronic Filing, Processing, Storage and Records Management of International Applications) to the Administrative Instructions (see Annex III to this document). The provisions in proposed new Part 7 refer to "Annex F," it being envisaged that the final version of the standard under development by the SCIT will be promulgated by the Director General, after consultation, as a new Annex F to the Administrative Instructions (Standard for Electronic Filing, Processing, Storage and Records Management of International Applications).⁷
- 9. For applicants filing international applications, the electronic filing system (comprising the legal framework in conjunction with the PCT standard) should operate at three levels:
- (i) *minimum level* on the basis of which a receiving Office can accord a filing date to an electronically submitted application with a reasonable probability that no fatal and incurable flaw will emerge when the application later comes to be dealt with under national law;
- (ii) recommended basic level which must be accepted by all PCT Contracting States (including both Offices and courts), in both the international and national phases, and protects applicants under all national laws against loss of rights arising from the use of electronic procedures;
- (iii) advanced level allowing those applicants who can, and wish to, use sophisticated but widely used and accepted electronic commerce techniques to do so in the filing and processing of patent applications before receiving Offices and designated Offices.
- 10. For the receiving Offices and PCT Authorities which are prepared to accept the filing of, and process, international applications (and related documents) in electronic form, compliance by those Office and Authorities with the applicable portions of the standard contained in Annex F will be mandatory.

The current version of the draft standard under development by the SCIT task force appears as "Annex F (version 3.1)" (referred to in this document as "draft Annex F") in a SCIT Program Project File, document SCIT/P 8/99 Rev.1, Annex 5, which may be accessed via WIPO's Internet site at http://www.wipo.int under "Information Technologies (SCIT)," then "SCIT Documentation" and "SCIT Projects."

11. Another guiding principle in the elaboration of the electronic filing system is that all measures and solutions adopted should, to the extent possible, be in line with accepted standards and practices relating to electronic commerce and to avoid, unless absolutely necessary, the creation of custom solutions.

Proposed new Part 7 of the Administrative Instructions

- 12. Certain of the proposed new Sections of Part 7 of the Administrative Instructions contain provisions which have been derived from the <u>UNCITRAL Model Law on Electronic Commerce</u>. Those provisions establish certain presumptions necessary to provide applicants with legal certainty and predictability in relation to the electronic filing of international applications. They have been drafted with the intention that the presumptions would apply both in the international phase and in the national phase, including in proceedings before designated Offices and in any court proceedings. It is envisaged that at least those provisions would eventually be included in the Regulations themselves. The presumptions would not, however, be binding for the purposes of national phase proceedings in the sense that they could be rebutted or overcome by evidence to the contrary, for example, in national phase validity or enforcement proceedings.
- 13. The proposed modifications of the Administrative Instructions (new Part 7) are included in this document (as Annex III) for the purposes of consultation under Rule 89.2(b). Those modifications are intended to reflect the current version of draft Annex F to the Administrative Instructions. When further changes are made in the process of the elaboration of the standard, additional modifications are likely to be needed to the provisions of Part 7. Part 7 and Annex F will need to be promulgated simultaneously in order to implement electronic filing and processing of international applications. Rule 89bis would enter into force on the same date as those modifications.

Questions of principle

- 14. While considerable progress has already been made towards the development of the necessary legal framework and technical standard for electronic filing and processing of international applications, a number of questions of principle relating to technical, legal and policy issues remain to be addressed, including those mentioned in the following list:
- Ease of use of standard in all Contracting States
- (a) Will applicants from developing, as well as industrialized, countries have access to the necessary infrastructure and facilities to enable them to file applications complying with the recommended basic level?
- (b) Are there any barriers to any class of applicant raised by the standard which could be avoided by taking a different approach?

References in this document to "UNCITRAL Model Law Articles" are to those of the Model Law on Electronic Commerce adopted by the United Nations Commission on International Trade Law (UNCITRAL) in 1996. The UNCITRAL Model Law is available on the Internet site of UNCITRAL at http://www.uncitral.org/english/texts/electcom/ml-ec.htm.

⁹ See footnote 7.

- (c) Is there any unjustified requirement for particular hardware or software, or for hardware or software meeting unnecessarily high standards?
- Compliance by Offices with the standard (see proposed Section 702(f))
- (d) Should compliance by Offices with the standard be verified? If so, then how would compliance checking operate? (Self-certification by each Office concerned? Monitoring or audits by a third party; see draft Annex F, Part 3.6, fourth paragraph; document SCIT P8/99 Rev.1, Annex 5, page 7? How would an auditing party report non-compliance and what obligations would an auditing party have, for example, to applicants who file electronically with or through the Office in question? How uniform would compliance with the standard have to be; for example, should all Offices have the same method of acknowledgment of receipt, etc.?)
- Certificates and Public Key Infrastructure (PKI) (see draft Annex F, Appendix I, Part 3;
 document SCIT/P 8/99 Rev.1, Annex 5, page 14))
 - (e) Are the requirements for authentication of identity clear and justified?
- (f) Are X.509 v.3 certificates (the type prescribed in draft Annex F, Appendix I, Part 3.2; see document SCIT/P 8/99 Rev.1, Annex 5, page 15) accessible to applicants in all PCT Contracting States?
- (g) Where certificates are used when filing, what degree of authentication of identity is (and should be) required?
- (h) Will applicants be allowed to use biometric means (fingerprint, signature dynamics, etc.) or other means of authentication instead of certificates? (Note that while the standard does not currently provide for such technology neutrality, other provisions relating to electronic commerce, such as the European Commission Directive on a Community Framework for Electronic Signatures, the UNCITRAL Draft Uniform Rules on Electronic Signatures, and various national and states laws are technology-neutral, providing for the use of either option).
- (i) What role, if any, should WIPO play in an eventual PKI for industrial property; see draft Annex F, Appendix I, Parts 3.3 and 3.5; document SCIT/P 8/99 Rev.1, Annex 5, pages 16 and 19, respectively?
- Admissibility (see draft Annex F, Part 2.2; document SCIT/P 8/99 Rev. 1, Annex 5, page 4)
- (j) Can it be guaranteed that electronic records kept in accordance with the standard will be admissible as evidence and acceptable under the national law of all PCT Contracting States (including in their national courts)?
- (k) Will the national law of all countries, including general patent laws as well as in connection with the PCT, accept and give legal effect to a filing date accorded on the basis of the "ticket system" as proposed in the draft standard?

- 15. The Assembly of the PCT Union is invited:
- (i) to note the outline, appearing in paragraphs 1 to 7 above, of the current status of the implementation of the legal framework and technical standard for electronic filing and processing of international applications;
- (ii) to note that the Director General intends to promulgate modifications of the Administrative Instructions implementing Rule 89bis, based on Annex III to this document and on the draft standard being elaborated by SCIT (see document SCIT/P 8/99, Annex 5), and taking into account consultations pursuant to Rule 89.2(b) during the Assembly's session and subsequently.

[Annex I follows]

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ANNEX I

EXISTING TEXTS OF RULES 89bis, 89ter AND 93.4

Rule 89*bis* ¹⁰

Filing, Processing and Transmission of International Applications and Other Documents in Electronic Form or by Electronic Means

89bis.1 International Applications

- (a) International applications may, subject to paragraphs (b) to (e), be filed and processed in electronic form or by electronic means, in accordance with the Administrative Instructions, provided that any receiving Office shall permit the filing of international applications on paper.
- (b) These Regulations shall apply *mutatis mutandis* to international applications filed in electronic form or by electronic means, subject to any special provisions of the Administrative Instructions.
- (c) The Administrative Instructions shall set out the provisions and requirements in relation to the filing and processing of international applications filed, in whole or in part, in electronic form or by electronic means, including but not limited to, provisions and requirements in relation to acknowledgment of receipt, procedures relating to the according of an international filing date, physical requirements and the consequences of non-compliance with those requirements, signature of documents, means of authentication of documents and of the identity of parties communicating with Offices and authorities, and the operation of Article 12 in relation to the home copy, the record copy and the search copy, and may contain different provisions and requirements in relation to international applications filed in different languages.
- (d) No national Office or intergovernmental organization shall be obliged to receive or process international applications filed in electronic form or by electronic means unless it has notified the International Bureau that it is prepared to do so in compliance with the applicable provisions of the Administrative Instructions. The International Bureau shall publish the information so notified in the Gazette.
- (e) No receiving Office which has given the International Bureau a notification under paragraph (d) may refuse to process an international application filed in electronic form or by electronic means which complies with the applicable requirements under the Administrative Instructions.

89bis.2 Other Documents

Rule 89bis.1 shall apply mutatis mutandis to other documents and correspondence relating to international applications.

Rule 89*bis* will enter into force at the same time as the modifications of the Administrative Instructions implementing that Rule, the effective date to be included in the promulgation of those modifications by the Director General.

89bis.3 Transmittal Between Offices

Where the Treaty, these Regulations or the Administrative Instructions provide for documents, notifications, communications or correspondence to be transmitted by one national Office or intergovernmental organization to another, such transmittal may, where so agreed by both the sender and the receiver, be effected in electronic form or by electronic means.

Rule 89*ter*Copies in Electronic Form of Documents Filed on Paper

89ter.1 Copies in Electronic Form of Documents Filed on Paper

Any national Office or intergovernmental organization may provide that, where an international application or other document relating to an international application is filed on paper, a copy thereof in electronic form, in accordance with the Administrative Instructions, may be furnished by the applicant.

Rule 93 Keeping of Records and Files

93.1 The Receiving Office

Each receiving Office shall keep the records relating to each international application or purported international application, including the home copy, for at least 10 years from the international filing date or, where no international filing date is accorded, from the date of receipt.

93.2 The International Bureau

- (a) The International Bureau shall keep the file, including the record copy, of any international application for at least 30 years from the date of receipt of the record copy.
 - (b) The basic records of the International Bureau shall be kept indefinitely.

93.3 The International Searching and Preliminary Examining Authorities

Each International Searching Authority and each International Preliminary Examining Authority shall keep the file of each international application it receives for at least 10 years from the international filing date.

93.4 Reproductions

For the purposes of this Rule, records, copies and files may be kept as photographic, electronic or other reproductions, provided that the reproductions are such that the obligations to keep records, copies and files under Rules 93.1 to 93.3 are met.

[Annex II follows]

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ANNEX II

ACTION PLAN FOR PCT ON-LINE FILING¹¹

adopted by the Standing Committee on Information Technologies at its fourth Plenary session on December 10, 1999¹²

This document presents the actions required to progress from the current draft standard through pilots to an operational PCT On-line Filing environment.

When	What	Who	
Dec 8 1999	Adoption by SCIT of this Action Plan.	SCIT Plenary	
(end) Dec 1999	Issue draft Administrative Instructions for review	IB	
(end) Jan 2000	Finalization of the DTD for the PCT Application	EPO, USPTO, JPO and IB	
Jan – Jun 2000	Build IB Server to accept On-line Filings	IB	
Jan – Jun 2000	Review and update draft standard	SCIT Task Force/IB	
Jan – Mar 2000	Comments on draft Administrative Instructions	PCT Offices and Authorities	
Mar 2000	Submission during the PCT Assembly of revised draft of Administrative Instructions for purposes of discussion and beginning consultation process	PCT Offices and Authorities	
Apr 2000	Promulgation/Publication of the Administrative Instructions	WIPO DG (after consultation)	
May 2000	PLT incorporates by reference PCT standard (Annex F and Appendices I and II) for National and Regional Filings	PLT Diplomatic Conference	
July 2000	Adoption by SCIT of Appendices I/II as WIPO STxx after approval by the SCIT Task Force	SCIT	
July – Dec 2000	PCT On-line Filing Pilots	IB with EPO, USPTO and JPO	
July 2000 – Mar 2001	Preparation of DTDs for other PCT documents	IB with EPO, USPTO and JPO	
Jan – Mar 2001	Provide standard application test suites to encourage third-party software developments	IB with EPO, USPTO and JPO	
Mar 2001	PCT On-line Filing operational	IB	

[Annex III follows]

¹¹ Subject to review in the first quarter of 2000.

¹² The Action Plan is reproduced from the report of the Plenary, document SCIT/4/8, Annex III.

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ANNEX III

PROPOSED MODIFICATIONS OF THE ADMINISTRATIVE INSTRUCTIONS UNDER THE ${\rm PCT}^{13}$

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PART 7 INSTRUCTIONS RELATING TO THE ELECTRONIC FILING, PROCESSING, STORAGE AND RECORDS MANAGEMENT OF INTERNATIONAL APPLICATIONS

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In relation to proposed new Annex F to the Administrative Instructions, which would need to be promulgated together with new Part 7, see the draft which is being elaborated by the SCIT (document SCIT P8/99 Rev.1, Annex 5; see footnote 7 to this document).

Section 701

Authenticity of Electronic Applications;

Effects of Compliance with Standard

(a) An international application which is submitted in electronic form shall be considered to be the original for the purposes of the Treaty.

[COMMENT: Rule 95(a)(3) of the Regulations under the European Patent Convention states: "Documents incorporated in an electronic file shall be considered to be originals." This provision is intended to codify for PCT purposes the general principle stated in UNCITRAL Model Law Article 5 that data messages (in this case, international applications) "shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message." Section 712 would make this provision (and the other provisions in proposed Part 7) applicable to other documents submitted in relation to international applications.]

(b) No designated Office shall, subject to Rule 51*bis*, require compliance with requirements relating to international applications submitted in electronic form other than those contained in Annex F.

[COMMENT: The goal of paragraph (b) is to make clear that, while compliance with the standard in Annex F is not mandatory for applicants, such compliance is very attractive for applicants since compliance means that very little if any adjustment would need to be made for national phase entry. The making of this paragraph subject to Rule 51bis is to provide that PCT Contracting States can require certain categories of further evidence in relation to information which the applicant provided in his application when filed in electronic form in accordance with the standard in Annex F. Rule 51bis would likely need to be amended to provide a basis for requesting more evidence on certain specific matters, for example, signature. Draft Annex F provides for the use of a "basic electronic signature" (which can be a simple string of characters such as "/georgesdupont/") on a document in electronic form. For some designated States, such a signature may be viewed as providing less reliability than current "wet" signatures on paper, and thus those States may wish to require further evidence in the form of an additional signature of higher reliability. Note also that draft PLT Article 8(4)(c) provides that "a Contracting Party may require that evidence be filed with the Office where the Office may reasonably doubt the authenticity of any signature, and that Rule 9(6) provides for the possibility for a Contracting Party to require that signatures filed in electronic form not resulting in a graphic representation of the signature be certified."]

Section 702

Acceptance of International Applications

Filed in Electronic Form

(a) An international application may be filed in electronic form by any means accepted by the receiving Office but shall be in one of the formats set out in Annex F. Where the international application is not in one of those prescribed formats, the receiving Office shall invite the applicant to comply with the format requirements within one month from the date of the invitation.

[COMMENT: (1) For the purposes of better understanding the terminology used in Part 7 and particularly paragraph (a) of this Section, refer to draft PLT Note 8.02 which distinguishes between "form", "means" and "format":

The 'form' of communication refers to the physical form of the medium which contains the information, for example, paper sheets, a floppy disk or an electronic file. The 'format' refers to the presentation or arrangement of the information or data in a communication, for example, the International Standard Application Format, initiated by the United States Patent and Trademark Office, which uses standard data identifier tags to facilitate automatic data capture. The 'means' refer to the manner in which the form was delivered or transmitted to the Office. For example, a paper communication mailed to the Office would represent paper form and physical means, while a floppy disk mailed to the Office would represent electronic form and physical means. A telefacsimile transmission resulting in a paper copy would represent a paper form transmitted by electronic means, and an electronic transmission from computer to computer would represent an electronic form transmitted by electronic means."

- (2) Concerning the reference to "formats", the draft standard (see draft Annex F, Appendix I, Attachment 1 (Document Format Requirements); document SCIT/P 8/99 Rev.1, Annex 5, page 27). currently provides for the use of only three document formats for files in electronic form:
- (a) Extensible Markup Language (XML), a subset of Standard Generalized Markup Language (SGML) which is the preferred format because it is based on international standards and character coded;
 - (b) standard image format (TIFF or JPEG); and
 - (c) PDF (industry de facto standard).

"Format" requirements include those relating to the acceptable character set. Draft Annex F, Appendix I, Attachment 1 (see document SCIT/P 8/99 Rev.1, Annex 5, page 40) contains details concerning which character sets are acceptable for XML documents submitted in XML format.]

[Section 702, continued]

(b) Each receiving Office which accepts the filing of international applications in electronic form and by electronic means shall notify the International Bureau of:

[COMMENT: Rule 89bis.1(d) provides for receiving Offices to notify the International Bureau if they accept international applications filed in electronic form. Similar to the requirements concerning languages, fees and filing by facsimile, applicants need to be on notice as to which electronic forms are acceptable to which receiving Offices. Paragraph (b) thus requires receiving Offices to inform the International Bureau of the electronic form or forms which the receiving Office will accept. Details are set out in items (i) to (iv), under which the notification must include the specification of the requirements of the receiving Office and the electronic methods of communication accepted by the receiving Office, such as electronic mail, etc.]

- (i) the electronic forms, electronic means and electronic methods of communication acceptable for filing international applications with that receiving Office, including any conditions or limitations in relation to each accepted form and means, and any other relevant requirements;
- (ii) the conditions, rules and procedures relating to electronic receipt, including hours of operation, choices for acknowledgment of receipt and electronic acknowledgment processes, choices for electronic receipt of invitations and notifications, details concerning any help desks, electronic and software requirements and other administrative matters related to the electronic filing of international applications and related documents;

[Section 702, continued]

(iii) procedures which applicants should follow for alternatives to electronic filing when electronic systems of the Office are not available by reason of malfunction or scheduled maintenance; in such cases of system unavailability, the receiving Office shall take all reasonable steps to notify applicants of such conditions;

[COMMENT: An example of the "reasonable steps" would be a notification on the Internet site of the Office in question notifying applicants of system unavailability.]

- (iv) any change to the accepted electronic forms or means indicated under subparagraphs (i), (ii) or (iii); the effective date of a change of electronic form, means or method of communication accepted by a receiving Office under item (i) or any other modification which restricts filing options shall be two months after the date of publication of the notification of such change in the *Gazette*.
- (c) The International Bureau shall promptly publish in the Gazette any notifications furnished to it under paragraph (b).
- (d) Nothing in this Section shall prevent any receiving Office from accepting, in a particular case, the filing of an international application in an electronic form, by a means or in a format other than that which the receiving Office has notified the International Bureau that it is prepared to accept.

[Section 702, continued]

(f) All national Offices and intergovernmental organizations which have notified acceptance of international applications in electronic form shall process such international applications, to the extent applicable, in accordance with Annex F.

[COMMENT: Refers to requirements covered by draft Annex F, Part 3 (see document SCIT/P 8/99 Rev.1, Annex 5, page 5) which provides how Offices and Authorities shall act in relation to the record copy (Part 3.1), exchange of records (Part 3.2), integrity of transmission (Part 3.3), acknowledgment of communication (Part 3.4), integrity of storage (Part 3.5), and electronic records management (Part 3.6) (see also draft Annex F, Appendix I, Attachment 5; document SCIT/P 8/99 Rev.1, Annex 5, page 40). These requirements oblige PCT Offices and Authorities to protect the security, integrity and confidentiality of electronic documents, control access and otherwise carefully manage all electronic records in order to construct a verifiable chain of evidence.]

Section 703

Acknowledgment of Receipt of International Applications Filed in Electronic Form and by Electronic Means

(a) Each receiving Office which accepts the filing in electronic form of international applications by electronic means shall, where possible and in accordance with Annex F, acknowledge by electronic means receipt of any international application so filed.

[COMMENT: (1) Rule 89bis provides that the Administrative Instructions should set out the provisions for acknowledgment of receipt of international applications filed in electronic form. This draft Section would put applicants on notice of the means by which they may expect to receive the acknowledgment. It would make the default acknowledgment by electronic means for electronic filings, where it is possible for the receiving Office to do so; that is, where the receiving Office has the ability to do so and where the applicant has provided the necessary data (for example, an email address) so that an electronic acknowledgment can be sent. The applicant would, thus, be on notice of and bear the risks of having such an acknowledgment sent electronically. This default is qualified in paragraph (b), below, which allows the applicant to request that his acknowledgment be sent by some other means where he does not desire to receive it by electronic means, or cannot do so.

- (2) It appears that draft Annex F, Part 3.4 and Appendix I (see document SCIT/P 8/99 Rev.1, Annex 5, pages 6 and 13, respectively) should be amended to incorporate a standard electronic acknowledgement process which all Offices, in the normal course of their business, would be required to apply to all received electronic documents, along the lines of the following:
 - (a) identify the application;
 - (b) maintain confidentiality of the information in the acknowledgement;
- (c) identify the receiving Office in a reliable manner as by application of a digital signature or the like;
- (d) be in accordance with a known strategy for acknowledgement which will include time stamping;
- (e) require the receiving Office to send an acknowledgement within a set time from receipt of the purported international application;
 - (f) specification of an alternate address for electronic filing;
 - (g) fallback to alternate filing means, e.g., fax or paper, etc.]

[Section 703, continued]

(b) Notwithstanding paragraph (a), any applicant filing an international application by electronic means may indicate other means acceptable to the receiving Office by which the applicant desires to receive acknowledgment of receipt of the international application from among those offered by the receiving Office and shall provide the necessary indications so that receipt can be acknowledged by the means indicated. Where the applicant makes such indications, the receiving Office shall acknowledge receipt by the means indicated.

[COMMENT: All Offices and Authorities must have a default practice (indicated in paragraph (a)) in case the applicant does not make any indication about the type of acknowledgment he desires. Paragraph (b) allows the applicant to choose from the available means the one by which he wishes to have the receipt of his international application acknowledged. Applicants desiring to select such an alternative means of acknowledgment of receipt should select from those means indicated by the receiving Office in accordance with draft Section 702(b)(ii).]

(c) Where the receiving Office sends an electronic acknowledgment of receipt in accordance with paragraph (a) and it becomes apparent to that Office that the acknowledgment was not successfully transmitted, the Office shall promptly transmit such acknowledgment by facsimile transmission where the necessary indications furnished to that Office so permit.

[COMMENT: Where the receiving Office sees a problem with the electronic acknowledgment (for example, an e-mail is found to be undeliverable), the receiving Office should default to paper medium, preferably by fax, assuming the necessary indications have been furnished by the applicant. This does put a burden on the Offices to track what happens to their electronic acknowledgments and to make such fax capability available. As a practical matter, where the applicant files by electronic means and has not made an indication under paragraph (b) but does not receive an electronic acknowledgment of receipt from the receiving Office in accordance with paragraph (a), within a reasonable period after the filing which would have to be decided, the applicant should treat the application as not having been received by the receiving Office and resubmit it. Where no acknowledgment of an electronic filing has been received within the prescribed period, applicants would be on notice that they have the burden to re-send.]

Section 704

Processing of International Applications

Filed in Electronic Form and by Electronic Means

- (a) Where an international application is received in electronic form and by electronic means, subject to Section 706, the date of receipt of such international application shall be the date on which the international application [enters the system established by] [is fully and successfully received by] the receiving Office.
- [COMMENT: (1) Paragraph (a) is based in part on the relevant provisions of UNCITRAL Model Law Article 15(2) and apportions responsibility in relation to the electronic filing of international applications by setting forth the presumption that an international application will be considered to have been received by the receiving Office when it enters the receiving Office's system which has been set up for receipt of such international applications filed in electronic form. For international applications filed by the applicant using the "Ticket Mechanism," see draft Section 706, to which paragraph (a) is subject. The language in square brackets reflects alternative proposals.
- (2) Technical input will be necessary in order to better understand whether evidence could later be produced as to when an application is fully and successfully received and what type of evidence that might be.
- (3) A possible order of procedures subsequent to receipt of an international application in electronic form (and assuming an online transmission) would be:
- (i) acknowledgment of receipt from the receiving Office (hopefully automated) with a date stamp (draft Section 703);
- (ii) receiving Office checks for viruses and other malicious logic (draft Section 705(b));
 - (iii) receiving Office checks for legibility of the submission (draft Section 705(a));
- (iv) assuming no virus/malicious logic problem), receiving Office makes an archive copy and stores it for record keeping purposes (draft Section 704(c));
 - (v) receiving Office checks international filing date requirements (PCT Article 11);
- (vi) where an international filing date is accorded, the receiving Office makes home and search copies, forwards record copy to the International Bureau and search copy to International Searching Authority;
 - (vii) receiving Office checks formal defects (PCT Article 14), etc.]

[Section 704, continued]

- (b) Each receiving Office shall establish procedures for the proper re-routing of documents received by electronic means and in electronic form which are misdirected to an improper address within that Office.
- (c) Each national Office and intergovernmental organization which receives international applications in electronic form shall establish and archive electronic records associated with such applications in accordance with Rule 93 and as provided in Annex F, including the making of archive copies of all electronic submissions in connection with such applications.

[COMMENT: The purpose of paragraph (c) is to preserve, until the expiration of the time limits indicated in Rule 93, a chain of evidence containing the state of the application from the time it was filed until it was communicated to the designated Offices. When an international application is filed electronically, as indicated in Annex F, the receiving Office makes an archive copy of that electronic document for record keeping purposes and will ultimately forward the electronic application to the International Bureau, after having made copies for itself and for the International Searching Authority. (Note that any receiving Office which accepts electronic filings should be considered to de facto waive its "number of copies" requirement in relation to such filings, since copies can be made so easily.) The electronic application which is forwarded to the International Bureau will be the record copy under Article 12 and this would leave in place the concept set out in Article 12(2), of the record copy being considered to be, for any purpose where such is necessary, the "true copy."]

(d) Where the Treaty, the Regulations or these Administrative Instructions provide for the issuance of an invitation or notification and the international application has been filed by electronic means, such invitation or notification shall be transmitted to the applicant by electronic means in accordance with Annex F. However, the applicant may indicate other means acceptable to the national Office or intergovernmental organization, if any, by which he desires to receive invitations and/or notifications from among those offered by the Office or organization and shall provide the necessary indications so that such invitations and/or notifications can be communicated by the means indicated. Section 703(c) shall apply *mutatis mutandis* to such electronic notifications and invitations.

[COMMENT: (1) This proposal enables an Office to communicate invitations and notifications to the applicant by electronic means (for example by electronic mail) where the international application was received by electronic means. Paragraph (d) would allow applicants to indicate the means by which they wish to have their invitations and notifications sent in relation to international applications filed by electronic means, but Offices and Authorities must have a default practice in case the applicant does not make any indication. Receiving Offices are required under draft Section 702(b)(ii) to furnish these details.

(2) The "mutatis mutandis" in this provision means that Offices and Authorities which send electronic invitations/notifications should default to paper, preferably fax, where it is clear that that invitation/notification has not been successfully transmitted. This does put a burden on the Offices to track what happens to their electronic notifications and invitations.]

[Section 704, continued]

(e) Where the Treaty, the Regulations or these Administrative Instructions provide for the amendment or correction of an international application by a national Office or intergovernmental organization, the amendment or correction of an international application filed in electronic form shall be undertaken in accordance with Annex F without impairing the integrity of the information contained in the international application.

[COMMENT: Aside from following the Regulations and Administrative Instructions already in place, how an Office performs the amendment or correction on international applications in electronic form is a technical issue. This proposal merely recognizes that such a procedure should not impair the integrity of the application.]

Section 705

Legibility of International Applications filed in Electronic Form; Infected files

(a) Upon receipt of an international application filed in electronic form in accordance with Section 702, the receiving Office shall check whether such international application is legible. Where all or part of the received purported international application is illegible or part of the international application appears not to have been received, the international application shall be treated as not having been received to the extent that the document is illegible or that the attempted transmission failed, and the receiving Office shall, if possible, promptly notify the applicant accordingly.

[COMMENT: (1) Paragraph (a) is based on current Rule 92.4(c) and paragraph 16 of the Receiving Office Guidelines concerning transmission by facsimile or other like means. Paragraph (a) also reflects the practice currently in place for the filing of diskettes containing electronic data in connection with PCT-EASY filings (as set out in Circular PCT 697, paragraphs 37 and 38, December 22, 1998).

- (2) The "if possible" language was included specifically because if the submission is an initial filing and the electronic file cannot be opened, it may not be possible to contact the applicant. The Offices should attempt to do so, however, by sending a message to the originating electronic address. In such situations, draft Section 703(d) may apply and as a result the applicant who does not receive an acknowledgment of receipt will be on notice to re-file that submission.]
- (b) Where the receiving Office which accepts international applications filed in electronic form in accordance with Section 702 finds that an electronic submission is infected with a virus or [other] malicious logic, it shall consider the submission as illegible under paragraph (a), shall not open or further process the submission, shall inform the applicant and invite the applicant to re-file the electronic submission.

[Section 705, continued]

(c) Where the International Bureau finds that an electronic submission is illegible or is infected with a virus or [other] malicious logic, it shall draw the situation to the attention of the receiving Office which shall proceed in accordance with paragraph (b).

Section 706

Legal Effect of Use of the "Ticket Mechanism"

Where the applicant uses the "ticket mechanism," as provided for in Annex F, and the message digest of the application documents is successfully transmitted in the "ticket request" to the receiving Office but the transmission of the full application documents is either interrupted during transmission or the date changes between the receipt of the message digest and the receipt of the full application documents, the receiving Office shall compare the message digest contained in the "ticket request" to the message digest which it creates from the full application documents once they are ultimately received. If the message digests are identical, the application shall be considered to have been received on the date of receipt of the message digest in the ticket request.

- [COMMENT: (1) The "ticket mechanism" provides that, once an electronic session has been established between the applicant and the receiving Office for the purposes of filing an international application, a message digest (commonly referred to as a "hash" which is generated by the application of a one-way algorithm) of the full application documents would be one of the first pieces of data transmitted to the receiving Office and its receipt would be acknowledged with a notice indicating its date of receipt. The balance of the application documents would then be transmitted. This system would provide for the according of an international filing date based on the date of receipt of the message digest, as indicated above, provided that the message digests are identical.
- (2) The "ticket mechanism" was originally included in the draft standard at the suggestion of the Japanese Patent Office. Note that draft Annex F, Part 2.1, states (see document SCIT/P 8/99 Rev.1, Annex 5, page 2): "This submission mechanism is particularly appropriate for the on-line filing of normal sized files. For this type of submissions, the transmission of the full set of application files is expected to be completed in the single session. However, this submission mechanism should not be used for on-line filing of exceptionally large files. Appendix I contains details concerning acceptable file sizes for online submissions."
- (3) For more information on the functioning of the "ticket system," see draft Annex F, Part 2.1 and Appendix I, Part 6 and Attachment 4 (document SCIT/P 8/99 Rev.1, Annex 5, pages 2, 24 and 35, respectively).]

Section 707

Storage of International Applications Filed in

Electronic Form

All national Offices and intergovernmental organizations which are prepared to receive international applications in electronic form shall keep and store records, copies and files in relation to such applications in accordance with Rule 93 and as provided in Annex F.

[COMMENT: The details of how that storage and record keeping is to be accomplished are dealt with in the PCT standard (see draft Annex F, Part 3.6 and Appendix I, Attachment 5; document SCIT/P 8/99 Rev.1, Annex 5, pages 7 and 40, respectively). As stated in this Section, the records management practices of all Offices and Authorities which accept electronic filings will have to comply with these electronic records management (ERM) standards. It is important to note that draft Annex F, Part 3.6 (see document SCIT/P 8/99 Rev.1, Annex 5, page 7), states that "in order to ensure compliance with these [ERM] requirements, it could be foreseen that regular external audits of an Office's ERM implementation will be undertaken with the results being published by the IB." The mechanism for such audits will have to be discussed and agreed upon.]

Section 708

Access to Electronic Form of Documents

Where the Treaty, the Regulations or these Administrative Instructions permit access to the international application, and the international application was filed in or is stored in electronic form, such access may be provided by use of electronic means, in accordance with Annex F.

[COMMENT: This proposal provides for access to be given to international applications and related documents, in accordance with the existing provisions of the Treaty (Articles 30 and 38) and Regulations (Rule 94), by giving access to electronic copies of the application or related document. The PCT standard should contain recommendations on how such access could be provided (for example, by furnishing electronic copies of documents or by secure online access once entitlement has been verified). Such access to electronic documents, particularly when requested by applicants desiring access to their own application or file, also raises the issue of the authentication of identity of the applicants (for example, via electronic certificates). This provision should also provide the basis for access to information about the status of the filing as the USPTO is doing with its PAIR system and the EPO is doing with its online register of European patent application data via EPOline. Under future automated systems, all PCT applications will be held in electronic form, either by the applicant submitting an electronic version or by scanning/OCR, etc. Thus, there will always be an electronic version which can be given for access.]

Section 709

Signature of International Applications

Filed in Electronic Form

International applications which contain electronic signatures which comply with

Annex F shall be considered to have been signed as required by the Treaty and Regulations.

- [COMMENT: (1) The intention of this provision is to establish that where the applicant has complied with the requirements of the standard in relation to signature of international applications and related documents, his documents will have been signed in accordance with the applicable PCT requirements. UNCITRAL is considering a set of Draft Uniform Rules on Electronic Signatures which contain more specific definitions of terms relating to electronic signatures and contain a set of specific presumptions relating to electronic signatures. Further analysis will be needed at a later date to see whether the presumptions and effects set out in the Draft Uniform Rules should be incorporated into the Administrative Instructions or into the standard. For further information in the standard on electronic signatures, see draft Annex F, Part 2.2.1 and Appendix I, Parts 3.6 and 4 (document SCIT/P 8/99 Rev.1, Annex 5, pages 4, 20 and 21, respectively).
- (2) Draft PLT Article 8(4)(a) states: "Where a Contracting Party requires a signature for the purposes of any communication, that Contracting Party shall accept any signature that complies with the requirements prescribed in the Regulations." Draft PLT Rule 9 contains the details concerning signature corresponding to draft Article 8(4). Draft PLT Rule 9(4) states that where a Contracting Party permits the filing of communications in electronic form or by electronic means, the document shall be considered signed if a "graphic representation of a signature" which is accepted by that Contracting Party appears on the communication as received. Draft PLT Rule 9(5) provides that for cases not covered by draft PLT Rule 9(4) (no graphic representation of a signature), the Contracting Party may require that the communication be signed using a signature in electronic form as prescribed by that Contracting Party, although the Contracting Party must accept the PCT standard in relation to national applications where it accepts the filing in electronic form of international applications under the PCT.]

Section 710

Presumption of Attribution of International Applications Filed in Electronic Form

- (a) Any international application filed in electronic form which complies with Annex F and the other relevant provisions of the Treaty, the Regulations and these Administrative Instructions shall be presumed to be attributable to the applicant.
- (b) Notwithstanding paragraph (a), any national Office or intergovernmental organization may decide not to regard the documents as attributable to the applicant when that Office or organization has received notice from the applicant that the application was not filed by the applicant.

[COMMENT: Rule 89bis provides that the Administrative Instructions should set forth provisions regarding the authentication of the identity of parties communicating with Offices. One such aspect of such authentication is the attribution of international applications to specific applicants. This proposal derives from UNCITRAL Model Law Article 13(1) to (4) and sets forth the circumstances when Offices may attribute documents to specific applicants.]

Section 711

Presumption of Integrity of International Applications

Filed in Electronic Form

The integrity of any international application filed in electronic form which complies with Annex F shall be presumed.

[COMMENT: One aspect of information security is the integrity of international applications and related documents, which entails the ensuring of consistency of information, particularly preventing unauthorized creation, alteration or destruction of information. In accordance with this Section, if applications meet the requirements of the standard, they will be presumed to comply with the integrity requirement in all designated States for the purposes of national phase processing and in national courts.

Section 712

Applicability to Related Documents

The provisions of this Part shall apply *mutatis mutandis*, to the extent applicable, to any later document or correspondence relating to the international application which is received in electronic form.

Section 713

Admissibility of Electronic Records

Electronic records created and kept in accordance with Annex F shall be admissible in any proceeding under the Treaty and in legal proceedings in any designated State.

[COMMENT: This provision appears to be necessary to ensure that the rights arising from an international application filed in electronic form are adequately protected and enforceable in all designated States. Admissibility is not automatic under this Section but is linked to the electronic records being "created and kept in accordance with Annex F." Before ruling on their admissibility, evidence may have to be provided that throughout the life of the electronic documents, the Offices through which the documents have passed have complied with the requirements of Annex F.]

[End of Annex and of document]