WIPO OMPI



PCT/EF/PFC 08/009

STATUS AT: February 19, 2009 SITUATION AU: 19 février 2009

WORLD INTELLECTUAL PROPERTY ORGANIZATION ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE

GENEVA/GENÈVE

ADMINISTRATIVE INSTRUCTIONS UNDER THE PATENT COOPERATION TREATY (PCT)

STANDARD FOR THE ELECTRONIC FILING AND PROCESSING OF INTERNATIONAL APPLICATIONS

INSTRUCTIONS ADMINISTRATIVES DU TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS (PCT)

NORME CONCERNANT LE DÉPÔT ET LE TRAITEMENT ÉLECTRONIQUES DES DEMANDES INTERNATIONALES

PROPOSAL FOR CHANGE FILE DOSSIER RELATIF À LA PROPOSITION DE MODIFICATION

SUBJECT: SUJET:	Changes to Annex F(transm formatting requirements) Modifications de l'annexe F formatting requirements)	1	PROPOSÉE PAR :	US
HANDLING: TRAITEMEN	1	ROPOSED DATE OF ENT ATE PROPOSÉE D'ENTE		01.01.2009
ANNEX/ ANNEXE	CONTENT/CO	ONTENU	ORIGIN/ ORIGINE	DATE
1	Updates to Annex F relating to the relaxation of the requirements for the utilization of the transmission protocol and formats		US	2.4.2008
2	Comment from ROSPATENT		RU	27.05.2008
3	Comment from the Japan Patent Office (JPO)		JP	30.05.2008
4	Comment from the German Patent and Trade Mark Office		DE	03.06.2008
5	Comment from the International Bureau		IB	09.06.2008
6	Annex to comment from the International Bureau - Relevant current stated principles which require modification		IB	09.06.2008
7	Comment from the USPTO		US	01.09.2008

[Annex follows/ L'annexe suit]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX I/ANNEXE I

UPDATES TO ANNEX F RELATING TO THE RELAXATION OF THE REQUIREMENTS FOR THE UTILIZATION OF THE TRANSMISSION PROTOCOL AND FORMATS

1-1)	Change:
Relax the requirement to use the PCT E- filing protocol	Alternative means of online transmission may be used, in agreement with the International Bureau, by Offices which do not use the E-filing interoperability protocol, provided that: (a) interoperability between the existing PCT E-filing client and server software is maintained without needing further technical intervention; and (b) the outcome of the transmission is equivalent to the outcome of the E-filing interoperability protocol (in particular in terms of receipt and level of security provided).
	To: Alternative means of online transmission may be used, in agreement with the International Bureau, by Offices which do not use the Efiling interoperability protocol, provided that: (a) interoperability between the existing PCT E-filing client and server software is maintained without needing further technical intervention or filing is performed using a web application interface that doesn't use a PCT E-filing client; and (b) the outcome of the transmission is equivalent to the outcome of the E-filing interoperability protocol (in particular in terms of receipt and level of security provided).
Items impacted	Annex F part 5.1bis
Reason	The communication of electronically filed applications to the IB and International Searching Authority (ISA) must be in accordance with Annex F. Thus, communication of the record copy to the IB and the search copy to the ISA must follow the transmission protocol set forth in Annex F. The USPTO would prefer an image based system, which may or may not be in accordance with Annex F protocols. This amendment will enable the RO/US to propose to the IB an alternative means of online transmission of the record copy to the IB and the search copy to the ISA.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-2) Change: Delete certain [the last sentence of Annex F section 3.1.2]: ... For documents originally submitted in PDF format, Offices may references to XML since the request transmission of the original documents in PDF format in addition to the converted documents in XML and TIFF formats. requirement for an RO to convert a PDF [middle row of the second table in section 3.4 of Annex F (page 22) document to (and alter diagram accordingly)]: XML was previously PDF A receiving Office shall notify the [revise deleted IB whether it will accept documents See sketch as section in this format. In order to well] 3.1.2 accommodate Offices that do not accept PDF documents, any Office that chooses to accept documents in this format must also convert the document text to XML and drawings to TIFF images and transmit those documents in both formats to the IB. To: [the last sentence of Annex F section 3.1.2]: ... For documents originally submitted in PDF format, Offices may request transmission of the original documents in PDF format in addition to the converted documents in TIFF format. [middle row of the second table in section 3.4 of Annex F (page 22) (and alter diagram accordingly)]: PDF A receiving Office shall notify the [revise See IB whether it will accept documents sketch as section in this format. In order to welll 3.1.2 accommodate Offices that do not accept PDF documents, any Office that chooses to accept documents in this format must also convert the document text and drawings to TIFF images and transmit those documents to the IB. Items impacted the last sentence of Annex F section 3.1.2 middle row of the second table in section 3.4 of Annex F (page 22) Reason It was previously agreed to not require conversion to XML. These items escaped editing at that time. See Annex VI, page 14 of Circular C.PCT 1014/C.SCIT 2609.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-3)	Change:
Relax the	
requirement to	Adobe Portable Document Format version 1.4 compatible;
accept only	
v1.4 of PDF	To:
	Adobe Portable Document Format version 1.1 through 1.6 compatible;
Items impacted	Annex F section 3.1.2, subparagraph (a)
Reason	EFS-Web guidelines permit submissions conforming to Adobe PDF
	Specification versions 1.1 through 1.6. This was done in order to
	reduce any unnecessary technical barriers to electronic filing.
	Most applicants are unaware of what version of PDF is generated by
	the software they use to create their submissions. Requiring
	submitters to understand and manipulate PDF software to this
	technical degree was found to prevent some applicants from filing
	electronically.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-4)	Change:
Amend the	(${ t c}$) any drawings are in TIFF format, as specified by the
Basic Common	receiving Office (see Annex F, section 3.1.3.1);
Standard to	
include PDF as	To:
an alternative	(c) any drawings are in TIFF or PDF format, as specified by the
to TIFF	receiving Office (see Annex F, section 3.1.3.1);
Items impacted	Annex F Appendix III paragraph 2(c)
Reason	EFS Web customers have readily available and robust means for
	producing PDF versions of whatever they intend to submit, including
	drawings, figures, equations, etc. Past experience suggests that
	few applicants are inclined to expend the resources necessary to
	create and manage TIFF image files as part of a submission.
	Consequently, EFS Web does not accept TIFF files.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

Permit PDF as an alternative to TIFF in Applicant-Office (international phase) communication sector, receiving Offices must accept this format per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	1-5)	Change:
an alternative to TIFF in Applicant— office sector, receiving Offices must accept this format per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the olaims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	- ,	
to TIFF in Applicant- Office sector and Office- Office sector communications To: For the Applicant- Office sector, receiving Offices must between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must between offices in the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	an alternative	
Applicant- Office sector and Office- Office sector communications Office sector communications Office sector communications To: For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	to TIFF in	
office sector and Office- Office sector communications For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	Applicant-	
and Office Office sector communications For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		
Office sector communications For the Office-Office communication, sector, Offices must be able to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		_
to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. To: For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		
For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	communications	to transmit and receive this format. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page
claims. This format is not intended to be used as a replacement for character-coded document formats. For the Office-Office communication, sector, Offices must be able to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the
to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images. Items impacted the last two paragraphs of Annex F section 3.1.3.1 Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		claims. This format is not intended to be used as a replacement
Reason EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to		to transmit and receive this format or PDF. Images may be used for drawings, figures, equations or other illustrations, and for the description and the claims. This format may also be used to transmit scanned documents between offices in the form of page images.
producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	Items impacted	
drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to	Reason	<u>-</u>
few applicants are inclined to expend the resources necessary to		
I create and manage TIFF image files as part of a submission		
		create and manage TIFF image files as part of a submission.
Consequently, EFS Web does not accept TIFF files.		Consequently, EFS Web does not accept TIFF files.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-6)	Change:
Relax the requirement that any PDF submission	Any file in this format, if present, must be included as a referenced document.
must be accompanied by XML package data	Any file in this format, if present, may be required by the
Items impacted	Receiving Office to be included as a referenced document. Annex F section 3.1.2
Reason	In EFS Web, PDF submissions are explicitly referenced as part of the filing process using the Web interface.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-7)	Change:
1-7) Permit Applicant- Office sector communication using a means other than WAD to package a submission	Any document in electronic form that is prepared or exchanged in accordance with this standard shall be packaged as prescribed in sections 4.1 and 4.2. However, in the Office-Office communication sector, the sending Office and the recipient Office may agree not to package IA documents filed on paper and converted into electronic form, or to package such documents in a different manner. In such case, the recipient Office should inform the International Bureau accordingly. To: Any document in electronic form that is prepared or exchanged in accordance with this standard shall be packaged as prescribed in sections 4.1 and 4.2. However, in the Office-Office communication sector, the sending Office and the recipient Office may agree not to package IA documents filed on paper and converted into electronic form, or to package such documents in a different manner. Further, where an Office provides applicants an alternative but equivalent means for preparing a submission, that means may be substituted for those described below. In such cases, the recipient Office should inform the International Bureau accordingly.
Items impacted	Annex F section 4 second paragraph
Reason	EFS Web implements an alternative technology that organizes the components of an applicant's submission and secures them during transmission, without the use of a WAD or WASP.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-8) Change: Permit file names in a The present file naming convention is established in order to submission enhance server automation, as well as to establish a client side other than software workflow and a good work practice for user understanding. those It shall be applied in respect of any document in electronic form specified in that is prepared or exchanged in accordance with this standard. Section 4.3 However, in the Office-Office communication sector, the sending Office and the recipient Office may agree to apply other file naming rules for the purposes of their transactions. In such case, the recipient Office should inform the International Bureau accordingly. The following set of tables constitutes the file naming convention and the client side software should automatically produce the suffixes and extensions accordingly. Each of these tables addresses a level of the standard, followed with tables of examples. To: The present file naming convention is established in order to enhance server automation, as well as to establish a client side software workflow and a good work practice for user understanding. It may be applied in respect of any document in electronic form that is prepared or exchanged in accordance with this standard. In the Office-Office communication sector, the sending Office and the recipient Office may agree to apply other file naming rules for the purposes of their transactions. In such case, the recipient Office should inform the International Bureau accordingly. The following set of tables constitutes the file naming convention and the client side software should automatically produce the suffixes and extensions accordingly. Each of these tables addresses a level of the standard, followed with tables of examples. Items impacted Annex F Section 4.3 Reason EFS Web permits applicants to submit documents named as the applicant wishes. Imposing file name conventions at the time of filing does not appear to add value for the Office and may have the effect of discouraging electronic filing.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-9)
Generalize
references to
security
measures to
accommodate
SSL, TLS, and
their
successors.

Change:

4.2 Encryption within the PCT trust model

Encryption of packages made under this standard will be provided by SSL (see the E-filing interoperability protocol, Annex F, section 5.1) For packages sent using, clientside authentication will include the use of the client's digital certificate. The certificate will be validated using the same method described in section 4.1.

The Offices will work with the International Bureau to establish a coordinated set of guidelines by which these PKI policy statements can be assessed. In the longer term, it is intended that these guidelines will be used to arrive at a list of certification authorities acceptable to all receiving Offices. The International Bureau would then publish this list along with the trusted CA root certificates which would be available for download via SSL.

. . .

4.4.5.1 Low-level certificate

. . .

7. The applicant retrieves the new certificate (via secure channel, e.g. SSL) after the authorization code and challenge phrase is validated.

. .

4.4.6.2 Encryption

Subscribers **encrypt** international application packages using the SSL protocol (see Protocol, Annex F, section 5.1) **or optionally,** the destination party's public encryption key. See section 4.2 for additional information on **encrypting** securing international application packages.

. . .

4.5 Cryptographic algorithms

Both symmetric (secret key) and asymmetric (public key) algorithms may be used as necessary. Algorithms that are prohibited under national law of a country must not be used for international application document exchange from that country. Algorithms implemented in hardware or software must not be used in any manner that is contrary to export restrictions of the country of origin for the hardware or software. Any algorithm used between intellectual property Offices must be disclosed to both parties. Where possible, the rsa Encryption algorithm is to be used for asymmetric encryption and the dES-EDE3-CBC algorithm is to be used for symmetric encryption. The same asymmetric encryption algorithm should be used to create digital certificates, digital signatures and envelopes. Other encryption algorithms (e.g. Advanced Encryption Standard) will be included in this section as they become available and gain mutual agreement by Offices.

4.6 Message digest algorithms

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

The message stream must be input to the strong one-way message digest algorithm SHA-1 to create a message digest. Other encryption algorithms (e.g. MD5) will be included in this section after consultation and agreed upon by Offices.

4.7 Data enveloping

Electronic document data that is encrypted to ensure confidentiality for international application document exchange must conform to the format and practice specified in RSA Laboratories, PKCS #7 - Cryptographic Message Syntax Standard Version 1.5 definition of SignedAndEnvelopedData content type.

To:

4.2 Security within the PCT trust model

Security for packages made under this standard will be provided by, for example, SSL (see the E-filing interoperability protocol, Annex F, section 5.1) or TLS. For packages sent using, for example, SSL or TLS, clientside authentication will include the use of the client's digital certificate. The certificate will be validated using the same method described in section 4.1.

The Offices will work with the International Bureau to establish a coordinated set of guidelines by which these PKI policy statements can be assessed. In the longer term, it is intended that these guidelines will be used to arrive at a list of certification authorities acceptable to all receiving Offices. The International Bureau would then publish this list along with the trusted CA root certificates which would be available for download.

. .

4.4.5.1 Low-level certificate

. . .

7. The applicant retrieves the new certificate (via secure channel, e.g. SSL **or TLS**) after the authorization code and challenge phrase is validated.

. . .

4.4.6.2 **Security**

Subscribers secure international application packages using, for example, the SSL protocol (see Protocol, Annex F, section 5.1) or TLS, either of which may include the use of the destination party's public encryption key. See section 4.2 for additional information on securing international application packages.

. .

4.5 Cryptographic algorithms

Both symmetric (secret key) and asymmetric (public key) algorithms may be used as necessary. Algorithms that are prohibited under

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

national law of a country must not be used for international application document exchange from that country. Algorithms implemented in hardware or software must not be used in any manner that is contrary to export restrictions of the country of origin for the hardware or software.

Where possible, the rsaEncryption algorithm is to be used for asymmetric encryption i.e., signature and the Data Encryption Standard des-ede3-cbc and Aes algorithms may be used for symmetric encryption. The same asymmetric encryption algorithm should be used to create digital certificates, digital signatures and envelopes.

The symmetric encryption algorithms include:

- a. des-ede3, Triple des, FIPS 46-3
- b. Advanced Encryption Standard (AES) FIPS 197

The asymmetric algorithms include:

- c. Digital Signature Algorithm (DSA), FIPS 186-2
- d. RSA (as specified in ANSI X9.31)
- e. Elliptic Curve DSA (ECDSA; ANSI X9.62)

Other encryption algorithms will be included in this section as they become available in commercial software and toolkits and gain mutual agreement by Offices.

4.6 Message digest algorithms

The message stream must be input to the one-way message digest algorithm SHA-1 to create a message digest. Other hash algorithms (e.g. SHA-2 family) will be included in this section after consultation and agreed upon by Offices.

4.7 Data enveloping

Electronic document data that is encrypted to ensure confidentiality for international application document exchange must conform to the format and practice specified in RSA Laboratories, PKCS #7 - Cryptographic Message Syntax Standard Version 1.5 definition of SignedAndEnvelopedData content type.

4.8 Secure Sockets Layer and Transport Layer Security Protocols

Secure, authenticated communication is necessary for the transfer of patent documents and related information between intellectual property Offices or between applicants and Offices. Offices should support (where not prohibited by law) SSL 3.0 and TLS and it is recognized that improvements to security technology will always be on the horizon.

The SSL and TLS protocols are directed to negotiating and

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.6.2009

	establishing a secure authenticated encrypted session between two endpoints. The TLS protocol (TLS 1.0) is a voluntary industry standard (RFC 2246) that was developed by the Internet Engineering Task Force. TSL 1.0 is based on the Secure Sockets Layer Version 3.0 (SSL 3.0), which had been developed originally by Netscape Corporation to address the security weaknesses of SSL 2.0. TLS 1.0 addresses security and interoperability problems found in SSL 3.0. The current version TLS 1.1 (RFC 4346) provides increased security and the ability to drop back to an SSL connection where one of the parties cannot support TLS.
Items impacted	Annex F Appendix 2
Reason	ref http://csrc.nist.gov/CryptoToolkit/tkhash.html for the history of the problem with SHA-1. There are problems with SHA-1 that permit 2 or more different messages to hash to the same value which suggests that a forged message could be created that will be found valid and unchanged when the digital signature is validated. (ref NIST SP 800-52 http://csrc.nist.gov/publications/nistpubs/800-52/SP800-52.pdf ref TLS RFC 3546 http://www.ietf.org/rfc/rfc4346.txt The TLS working group archive is at http://www.ietf.org/html.charters/tls-charter.html)

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-10)	Change:
Permit	
alternative	5. TRANSMISSION
technologies	3. IKANSHISSIUN
for	
transmission	The IA package can be transmitted over secure or non-secure channels depending on the package type. This section includes the protocol to be followed as well as the package/transmission combinations that are permitted in the Applicant-Office (international phase), Office-Office, and designated Office communication sectors. While additional sectors are referred to in this standard (see section 2.3), permissible transmission/package combinations can be categorized in the three sectors listed above.
	5. TRANSMISSION
	The IA package can be transmitted over secure or non-secure channels depending on the package type. This section describes in detail a protocol based on SSL. Other protocols based on other technologies, such as TLS, are also possible. This section also includes the package/transmission combinations that are permitted in the Applicant-Office (international phase), Office-Office, and designated Office communication sectors. While additional sectors are referred to in this standard (see section 2.3), permissible transmission/package combinations can be categorized in the three sectors listed above.
Items impacted	Annex F Section 5, Transmission, first paragraph
Reason	In the near future, the USPTO will all but certainly be required to migrate from SSL to TLS by Federal regulation.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-11)	Change:
Permit PDF as	
an alternative to XML	For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format per the basic common standard. For the Office-Office communication sector, Offices must be able to transmit and receive this format.
	To:
	For the Applicant-Office (international phase) communication sector, receiving Offices must accept this format or PDF per the basic common standard. For the Office-Office communication sector, Offices must be able to transmit and receive this format or PDF.
Items impacted	Annex F, paragraph 3.1.1.1 (last paragraph)
Reason	EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to create and manage TIFF image files as part of a submission. Consequently, EFS Web does not accept TIFF files.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-12) Permit PDF as an alternative to XML

Change:

[table entitled "Applicant-Office (international phase) sector, middle column indicating "Options allowable" for XML Format - first sentence]

A receiving Office must accept this format per the basic common standard.

[table entitled "Applicant-Office (international phase) sector,
middle column indicating "Options allowable" for TIFF Format first sentence]

A receiving Office must accept this format per the basic common standard.

[table entitled "Office-Office sector, middle column indicating
"Options allowable" for XML Format - first sentence]

Offices must be able to transmit and receive this format.

[table entitled "Office-Office sector, middle column indicating
"Options allowable" for TIFF Format - first sentence]

Offices must be able to transmit and receive this format.

To:

[table entitled "Applicant-Office (international phase) sector, middle column indicating "Options allowable" for XML Format - first sentence]

A receiving Office must accept this format ${\bf or}\ {\bf PDF}$ per the basic common standard.

[table entitled "Applicant-Office (international phase) sector, middle column indicating "Options allowable" for TIFF Format - first sentence]

A receiving Office must accept this format ${\bf or}\ {\bf PDF}$ per the basic common standard.

[table entitled "Office-Office sector, middle column indicating
"Options allowable" for XML Format - first sentence]

NEXT ACTION: Consultative group review

PROCHAINE ACTION: Consultative group review

POUR LE:

	Offices must be able to transmit and receive this format or PDF.
	[table entitled "Office-Office sector, middle column indicating "Options allowable" for TIFF Format - first sentence]
	Offices must be able to transmit and receive this format or PDF.
Items impacted	Annex F, several tables in paragraph 3.4
Reason	EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to create and manage TIFF image files as part of a submission. Consequently, EFS Web does not accept TIFF files.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

1-13)	Change:
Modify the	
basic common	
standard to	(a) the international application documents are encoded in:
permit PDF	(i) XML format (see Annex F, section 3.1.1.1), using either of the following, as specified by the receiving Office:
	(i1) the Unicode 3.0 (International Standard ISO/IEC 10646:2000) coded character set with UTF-8 character encoding scheme; or (ii2) a coded character set confined within the repertoire of Unicode 3.0 with encoding scheme specified by the receiving Office as described in Internet Engineering Task Force documents IETF RFC 2277 and 2130 (see Annex F, section 3.1.1.1), provided that the character encoding scheme is registered in the Internet Assigned Numbers Authority (IANA) Charset registry and that the use of that scheme is supported by the electronic filing software mentioned in paragraph (g): or
	To: (a) the international application documents are encoded as specified by the receiving Office in:
	(i) XML format (see Annex F, section 3.1.1.1), using either of the following:
	(i1) the Unicode 3.0 (International Standard ISO/IEC 10646:2000) coded character set with UTF-8 character encoding scheme; or
	(ii2) a coded character set confined within the repertoire of Unicode 3.0 with encoding scheme specified by the receiving Office as described in Internet Engineering Task Force documents IETF RFC 2277 and 2130 (see Annex F, section 3.1.1.1), provided that the character encoding scheme is registered in the Internet Assigned Numbers Authority (IANA) Charset registry and that the use of that scheme is supported by the electronic filing software mentioned in paragraph (g): or (ii) in PDF format (see Annex F, section 3.1.2);
Items impacted	Annex F Appendix III Part 2(a)
Reason	EFS Web customers have readily available and robust means for producing PDF versions of whatever they intend to submit, including drawings, figures, equations, etc. Past experience suggests that few applicants are inclined to expend the resources necessary to create and manage TIFF image files as part of a submission.
	Consequently, EFS Web does not accept TIFF files.

[Annex II follows / L'annexe II suit]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX II/ANNEXE II

<u>Comment by The Federal Service for Intellectual Proprty, Patents and Trademarks (ROSPATENT)</u>

ROSPATENT has carefully considered the proposed modifications of the Standard for the Electronic Filing and Processing of International Applications under the Patent Cooperation Treaty (PCT) and has no objections to them.

ROSPATENT would like to state that it is interested in speeding up the integration process between Annex F DTDs and ST.36 DTDs. In order to put the development of ROSPATENT internal system s in line with WIPO recommendations, ROSPATENT would highly appreciate if the WIPO plans on harmonization and future integration of abovementioned XML resources for patent information could be communicated.

[Annex III follows / L'annexe III suit]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX IV/ANNEXE IV

Comments to Circular C.PCT 1140 by the Japan Patent Office (JPO)

1-3)

The JPO can accept the proposal of the USPTO. However, we think that the following should be added to 3.1.2(a): "Each office can choose the PDF version which is acceptable to the office." Not all PDF documents can be read by each office, as offices use different versions of Acrobat Reader. For example, the JPO can only handle PDF version 1.5 or lower, as the JPO uses Acrobat Reader 6.0.

1-5), 1-9), 1-11), and 1-12)

The JPO agrees to prepare several methods of communication between Applicants and Offices. However, the JPO considers the interoperability of systems very important to ensure communication between Offices. If Annex F is changed to require Offices to accept PDF files for Office to Office communication, it will have a negative impact on interoperability. Therefore, the JPO would prefer not to change the current provision on Office to Office communication. This is because upgrading the PDF version will cause the additional burden of coping with many PDF versions to read files made in the past.

As for the HASH algorithm, the JPO is planning to submit a proposal for change (PFC) to allow SHA-2 family.

[Annex IV follows / L'annexe IV suit]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX IV/ANNEXE IV

Comment by the German Patent and Trade Mark Office

Regarding item 1-3) we recommend to restrict the Adobe Portable Document Format to the PDF standard PDF/A-1b. This would ensure the visual appearance of the files to be preserved over a long time - an essential property for long time archiving of documents.

[Annex V follows / L'annexe V suit]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX V/ANNEXE V

Comment by the International Bureau

GENERAL COMMENTS

- 1) The International Bureau understands the essential elements of the proposals to be the following:
- a) an Office may decide to only accept PDF format documents in an electronic application, rather than being required to accept applications in XML format;
- b) an Office may decide to accept PDF documents from the applicant which are not packaged and referenced by an XML index file;
- c) an Office may decide to offer only a Web-based service for accepting electronic applications and not accept filings using the interoperability protocol.
- 2) The International Bureau recognizes that, in practice, at least one Office already permits only the PDF format for the purpose of electronic filing and that PDF is the format which is preferred by applicants at most Offices which offer a choice of either PDF or full XML filing, as well as the fact that some Offices are seeking to promote the use of Web-based filing systems. Thus, the proposed changes appear, to a large extent, consistent with the wishes of applicants and Offices of some Contracting States. Moreover, the International Bureau believes that the essential elements of the proposal could be implemented, as outlined in paragraphs 7) and 8), below, without significant issues for operation of the PCT.
- 3) However, in the International Bureau's opinion, these proposals would, if implemented, represent a fundamental break with the principles which are stated as the purpose and vision of the Standard in Sections I and II of Annex F (some particularly relevant extracts are reproduced in the Appendix to this comment). In effect, this would mean that there no longer existed a "Basic Common Standard" which allowed an applicant to prepare an application in a single format which would be accepted by all States accepting electronic filings and to file it using common means and software. The effects of the changes would be relevant not only to the PCT but also, and even to a greater extent, to direct national applications in Offices of States party to the Patent Law Treaty.
- 4) Thus, despite the fact that the essential elements of the proposal could be implemented without significant issues for the operation of the PCT, the International Bureau is of the opinion that it is necessary for these changes to be made on the basis of a fully informed decision by all interested parties. Before a decision is taken, the results of such a change should be more clearly stated in terms appropriate to both those formulating policy (noting the effects on national and Paris Convention systems in addition to the PCT international phase) and those implementing the relevant technical standards.
- 5) In addition, if there is informed agreement on the general principles, appropriate revisions should be made to the purpose, scope and vision set out in the introductory sections

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX V/ANNEXE V

of the Standard, and a number of further consequential modifications would seem necessary or at least highly desirable throughout the text. The Annex to these Comments sets out the most relevant parts of the introductory passages which will require attention either:

- a) to ensure that they are updated to properly reflect the new aims of the Standard; or
- b) to ensure that the details of the Standard clearly set out what is required in order to meet the aims.
- 6) Consequently, the International Bureau recommends that this PFC be withdrawn and be replaced by a more complete and fully explained proposal, possibly in the form of a paper suitable for consideration by a group responsible for the policy implications of the issues indicated here, in addition to the more detailed technical aspects which are considered by the normal audience for PFCs. Such a paper might be either specifically drawn to the attention of readers in a Circular advertising the publication of a PFC, or else be submitted directly to an appropriate policy body.

IMPACT ON OPERATION OF THE PCT

- 7) In general, the International Bureau believes that the essential elements of the proposal could be implemented without significant issues for operation of the PCT noting, in particular, the following points:
- a) Under the PCT, the applicant only needs to file the international application once and delivery of the application to designated Offices is (in normal circumstances) done by the International Bureau. Consequently, in contrast to the situation for applications under the Paris Convention, there will rarely be any need for the applicant to be able to use a particular package prepared for submission as an international application for later submission to another Office.
- b) Most agents will file the applications which they prepare (whether international or direct national applications) through a very limited number of Offices (typically only one national Office and possibly also a regional Office and the International Bureau). Consequently, the lack of a single format which is accepted by all Offices will not usually mean that an agent will need to prepare applications using different file types (though for applications using the Paris route, there will be a need to convert documents supplied by an original agent in another country from one format to another).
- c) Given that all Offices presently have the option of allowing international applications in PDF and many such applications are received, the international phase already requires the system to be able to provide effective support for international applications filed in both PDF and XML formats.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX V/ANNEXE V

- d) The proposal would have the significant benefit of permitting currently non-compliant Offices to officially notify the requirements of their electronic filing systems, rather than receiving large numbers of international applications on a case by case basis in accordance with Section 703(d) of the PCT Administrative Instructions.
- 8) However, in order to ensure that no operational difficulties would result from the changes, the following matters would need to be properly addressed:
- a) It should be clarified that for <u>inter-Office</u> document transfers, all Offices would be prepared to create and accept packages containing XML-indexed TIFF files and, if so, the circumstances under which the original document format should be attached (in all cases; on specific request of the Office receiving the package; at the discretion of the Office sending the package; or dependent on document types such that full-text XML should always be included where available, but other document formats might be optional);
- b) In the case where the applicant files using a system where the applicant submits PDF documents directly, rather than client software creating a wrapped and signed package, it should be made clear what criteria must be met by the Office's system in order to ensure the integrity and non-reputability of the filing.
- c) While maintaining the optional possibility at a smaller fee reduction for the request to be filed in image format, receiving Offices should be required to accept at least the request in XML format (which is the part most significant to the efficient automation of the international phase processing). It would also be highly desirable to specify certain minimum requirements of bibliographic data which should be captured and transmitted in machine-readable format in the case of international applications where the applicant submits the request in a non-character-coded format.
- d) Some further drafting is required to ensure that the changes clearly result in the intended effect.

SPECIFIC COMMENTS

- 9) The International Bureau has considered each individual part (items 1-1 to 1-13) of the PFC. In the context of the general comments above, comment on most of these individual items seem inappropriate as in the main it is impossible for them to be considered in isolation; the required drafting is dependent on the agreed principles. Consequently, at this stage, only the following specific comments are made:
- a) *Item 1-3:* the relaxation of the requirement for version 1.4 of PDF appears reasonable (it is in any case difficult to get applicants to set the PDF version correctly) and it may be possible to completely remove any upper limit on the version as long as the constraints regarding the encapsulated content types are retained.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX V/ANNEXE V

- b) *Item 1-8:* this change proposal appears unnecessary as the International Bureau's understanding would be that in the act of uploading/packaging the applicant specifies the type of each document and the software can take control of the file names and use the standard naming conventions within the package which is created (which may be distinct from the filenames which are used by the applicant).
- c) *Item 1-9:* the suggestion of improvement to the security specification is welcomed, but the International Bureau requires more time to analyze the proposal.
- d) *Item 1-10:* The International Bureau has no issue with the inclusion of TLS with SSL, but would prefer that TLS was cited specifically rather than as an example, or else that the requirements that any other encryption system must meet to be explicitly stated. In addition, attention needs to be given to the <u>overall</u> e-filing protocol and not simply the underlying technical transmission protocol.

[Annex VI follows / L'annexe VI suit]

NEXT ACTION: Consultative group review BY:
PROCHAINE ACTION: Consultative group review POUR LE:

ANNEX VI/ANNEXE VI

RELEVANT CURRENT STATED PRINCIPLES WHICH REQUIRE MODIFICATION

1. The most relevant principles stated in Section I of Annex F include the following:

"The standard is intended to allow applicants to file an international application in electronic form which is acceptable to all receiving Offices, International Searching Authorities and International Preliminary Examining Authorities, for the purposes of the international phase, and to all designated Offices, for the purposes of the national phase, that accept the filing or processing of applications in electronic form.

. . .

"It is also expected that the standard will become a de facto standard applied to non-PCT applications by national and regional Offices. In addition, the standard may become the subject of wider application by virtue of its possible future adoption, mutatis mutandis, as a general WIPO Standard for patent applications filed in electronic form. Upon the future coming into force of the Patent Law Treaty (PLT), and subject to adoption by the PLT Assembly, the standard would become applicable to national and regional Offices which become bound by the provisions of the PLT."

2. Section II provides an overview of the vision of the Standard, including stated business requirements. It is important that the Standard clearly state what these business requirements mean in terms of technical requirements. The main issues here are those listed under security, interoperability and vision:

"2.2.1.1 Security

"Solutions implemented under this standard must satisfy the following four basic criteria for secure electronic data exchange:

- "(a) authentication the process of validating an identity claimed by or for an entity;
- "(b) integrity ability to verify that data is unchanged from its source and has not been accidentally or maliciously modified, altered, or destroyed;
- "(c) non-repudiation ensure that strong and substantial evidence is available to the sender of data that the data has been delivered (with the cooperation of the recipient), and to the recipient of the sender's identity, sufficient to prevent either from successfully denying having possessed the data; this includes the ability of a third party to verify the integrity and origin of the data;
 - "(d) confidentiality ensure that information can be read only by authorized entities.

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009

ANNEX VI/ANNEXE VI

"This standard supports, in particular, a solution relying on a public key infrastructure (PKI) for authentication and data security in the Internet environment. However, it also envisages that there may in the future be other solutions which satisfy the above four security criteria.

"Any Office with an operational solution that satisfies the four criteria may choose to submit the specification for inclusion in this standard, in which case the proposed modification would be the subject of consultation under PCT Rule 89.2(b).

. . .

"2.2.1.3 Interoperability

"Systems conformant to this standard must accept and produce electronic documents and data in a consistent format that permits sharing between applicants and Offices, and among Offices, with no loss of information. Systems should be able to exchange data using a common protocol that allows the reliable transfer of data without special and costly setup procedures for each type of interaction.

. . .

"2.4 E-PCT vision

The goals stated earlier in this section demand a secure, interoperable group of automated PCT systems capable of quickly and efficiently sharing electronic documents and data between PCT applicants and Offices, improving operations for all. The International Bureau envisions an environment in which any applicant can file an international application with any Office in the world which accepts electronic filing with a cost free and standardized software. The PCT environment of the future will allow faster, more reliable access to information for all PCT Offices and their customers.

...,

[Annex VII follows / L'annexe VII suit]

NEXT ACTION: Consultative group review

PROCHAINE ACTION: Consultative group review

POUR LE:

ANNEX VII/ANNEXE VII

Comment by the United States Patent and Trademark Office

"Although Annex F was drafted in the hope that filing interoperability could be achieved through the adoption of a common XML format, experience of the past several years has dashed that hope. It has become apparent that common XML structures, although perhaps necessary for the goal of filing without further modification the same application with any Office adopting the standard, are not sufficient to achieve that goal. Customer adoption has proven a much larger hurdle than the Trilateral and WIPO imagined when drafting Annex F. Consequently, modification of Annex F as suggested by the USPTO will not break interoperability, but merely acknowledge what customers have told us very clearly through their actions, that they prefer to file using PDF and page images, rather than text in XML. The US believes that well-structured text (XML) is the best format for internal processing, international exchange, and eventually for submission; but until European language customers are more accepting of it in the filing process, we must face the reality of using other formats that customers have overwhelmingly accepted."

[End of Annex and of file/ Fin de l'annexe et du dossier]

NEXT ACTION:	Consultative group review	BY:	30.6.2009
PROCHAINE ACTION:	Consultative group review	POUR LE:	30.0.2009