

WIPO



PCT/A/29/2 Add.

ORIGINAL: English

DATE: September 25, 2000

WORLD INTELLECTUAL PROPERTY ORGANIZATION

GENEVA

**INTERNATIONAL PATENT COOPERATION UNION
(PCT UNION)**

ASSEMBLY

**Twenty-Ninth (17th Extraordinary) Session
Geneva, September 25 to October 3, 2000**

ADDENDUM TO
PROGRESS REPORT ON THE PCT AUTOMATION ("IMPACT") PROJECT

Document prepared by the International Bureau

1. In accordance with its undertaking to present a summary of the project plans for the IMPACT project to the PCT Assembly (see document PCT/A/29/2, paragraph 8), the International Bureau has prepared this addendum to that document.
2. The overall plan for the IMPACT project is shown in the IMPACT Global Plan diagram contained in Annex I to this document. The project is organized into four overlapping stages, which are named after the subcomponents of the system they will deliver:

IMPACT Communication System (commonly referred to as "COR" for "Communication on Request");

IMPACT International Bureau ("IB");

IMPACT Receiving Office/International Bureau ("RO/IB"); and

IMPACT Electronic Filing ("E-filing").

Each stage is in turn subdivided into planning, prototyping and development phases. Key milestones currently projected or already achieved are shown by small vertical arrows in the planning diagram. Project deliverables of particular interest are shown by large vertical

arrows. The work plans for each stage are supported by individual plans for each of the activity streams making up the total work effort for the stage.

3. As work on each stage begins, the broad planning assumptions made with respect to the stage in the overall project plan will be verified from the bottom up through the preparation of a detailed plan, taking into account development plans to be produced by third party developers, among other considerations. In this process, the overall plan will be refined and adjusted as required and specific milestones and deliverables for a given stage will be established.

4. The overall objective is to complete the project in three years, that is, by the end of 2002, with the exception of the E-filing stage which is scheduled for closing in August 2003. Progress towards the achievement of this objective is monitored in weekly review meetings. In accordance with the structure of the project plan, these reviews are organized by stage and, within each stage, by activity stream.

5. *IMPACT Communication System (COR) stage.* The objective of the COR stage is to establish a new system for the communication of certain PCT-related documents (such as PCT pamphlets, copies of priority documents, various PCT forms and, under Chapter II of the PCT, international preliminary examination reports and English translations thereof) to designated/elected Offices, International Searching Authorities, International Preliminary Examining Authorities and/or national Offices of PCT Contracting States, as outlined in document PCT/A/29/2, paragraphs 9 to 17. Planning for the COR stage has been completed. The scope of this first stage of the project has been defined, a business model prepared and an implementation scenario established. The Implementation Plan for the COR stage diagram contained in Annex II to this document gives a view of the COR stage by activity streams, showing the particular activity streams into which the stage is organized. Design work is currently under way; in order to enable the progressive refinement of the project requirements, an iterative approach to the design has been adopted. In the course of the COR stage substantially the entire hardware infrastructure for the IMPACT system will be deployed.

6. *IMPACT International Bureau (IB) stage.* The objective of the IB stage is to establish a new system for the processing of international applications within the International Bureau (apart from the International Bureau as receiving Office), including the automated publication of international applications. This stage is in the planning phase. A draft definition of the scope of this stage is currently under review, with the aim of finalizing it during the last quarter of 2000. Detailed planning for the IB stage is scheduled to start during the first quarter of 2001.

7. *IMPACT Receiving Office/International Bureau (RO/IB) stage.* The objective of the RO/IB stage is to establish a new system for the processing of international applications filed with the International Bureau as receiving Office. As is the case for the IB stage, this stage is currently in the planning phase, with a draft definition of the scope of this stage expected to be finalized during the last quarter of 2000. Detailed planning for the RO/IB stage is scheduled to start during the first quarter of 2001, in parallel with the planning for the IB stage.

8. *IMPACT Electronic Filing (E-filing) stage.* The E-filing stage has two distinct objectives, namely, the adoption of a standard for the electronic filing and processing of international applications and the development of a system for the electronic filing of

international applications based on the present PCT-EASY software. The International Bureau has accordingly developed a high-level project plan, further details of which are set out in Annex III to this document. Subject to the views of the Assembly and taking into account any subsequent comments on this plan, the International Bureau's IMPACT Project team will prepare a detailed and validated plan for the E-filing stage of the IMPACT project.

9. The Assembly agreed at its 28th session in March 2000 that, due to the necessity for extensive redrafting and further consultations concerning proposed new Part 7 and Annex F of the Administrative Instructions, which will establish the legal framework and technical standards necessary for the implementation of electronic filing of PCT applications, the target dates in the Action Plan for PCT On-Line Filing adopted by the SCIT Plenary in December 1999¹ needed to be reviewed (see document PCT/A/28/5, paragraph 24). Additionally, the Assembly noted that the component of the IMPACT Project plan relating to PCT electronic filing would be submitted to the present session and would supersede the SCIT Action Plan (see document PCT/A/28/5, paragraph 22). The high-level project plan set out in the present document thus supersedes the SCIT Action Plan.

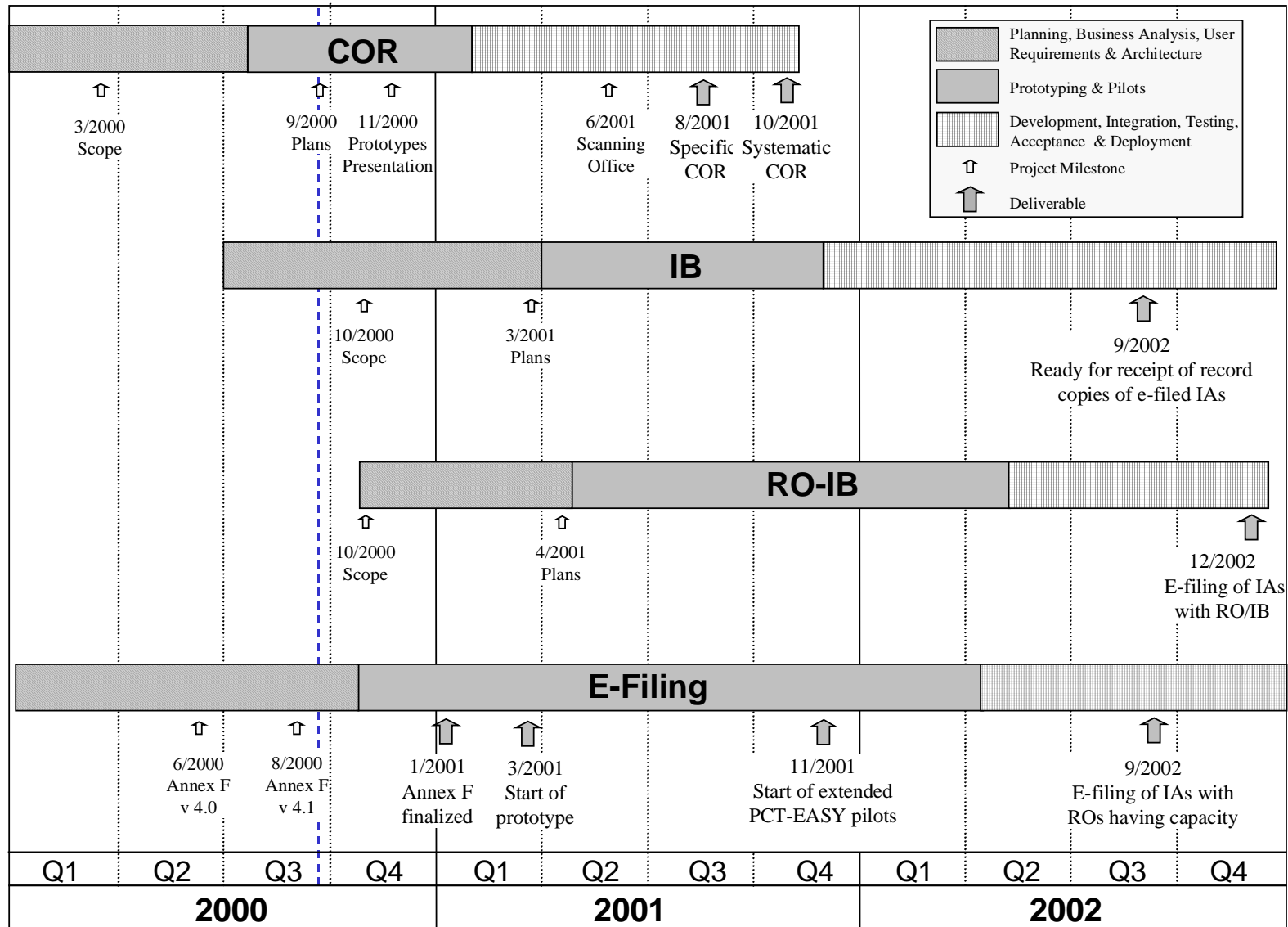
10. As outlined in more detail in Annex III, the E-filing stage of the IMPACT Project is divided into step 1 (PCT E-filing Pilot) and step 2 (PCT E-filing Implementation). Step 1 includes provision for: the finalization of the contents of Part 7 and Annex F in January 2001; the commencement of the construction of a prototype in March 2001; the construction of a pilot system that will enable the receipt from November 2001 by the RO/IB of international applications in paper form, with parallel electronic submission, prepared using extended PCT-EASY software; and the review and entry into force of Part 7 and Annex F in September 2002, enabling receiving Offices with the necessary technical capacity to receive international applications in electronic form. Step 2 includes provision for: the RO/IB to commence receipt of applications in electronic form in December 2002; the availability of RO server software to receiving Offices other than the RO/IB in April 2003; and the release of the enterprise version of PCT-EASY in July 2003.

11. The Assembly of the PCT Union is invited to take note of and express its views on the contents of this document.

[Annex I follows]

¹ See document SCIT/4/3, paragraph 32 and Annex III; the Action Plan was also included as an attachment to document PCT/A/28/3 Add.1.

IMPACT Global Plan

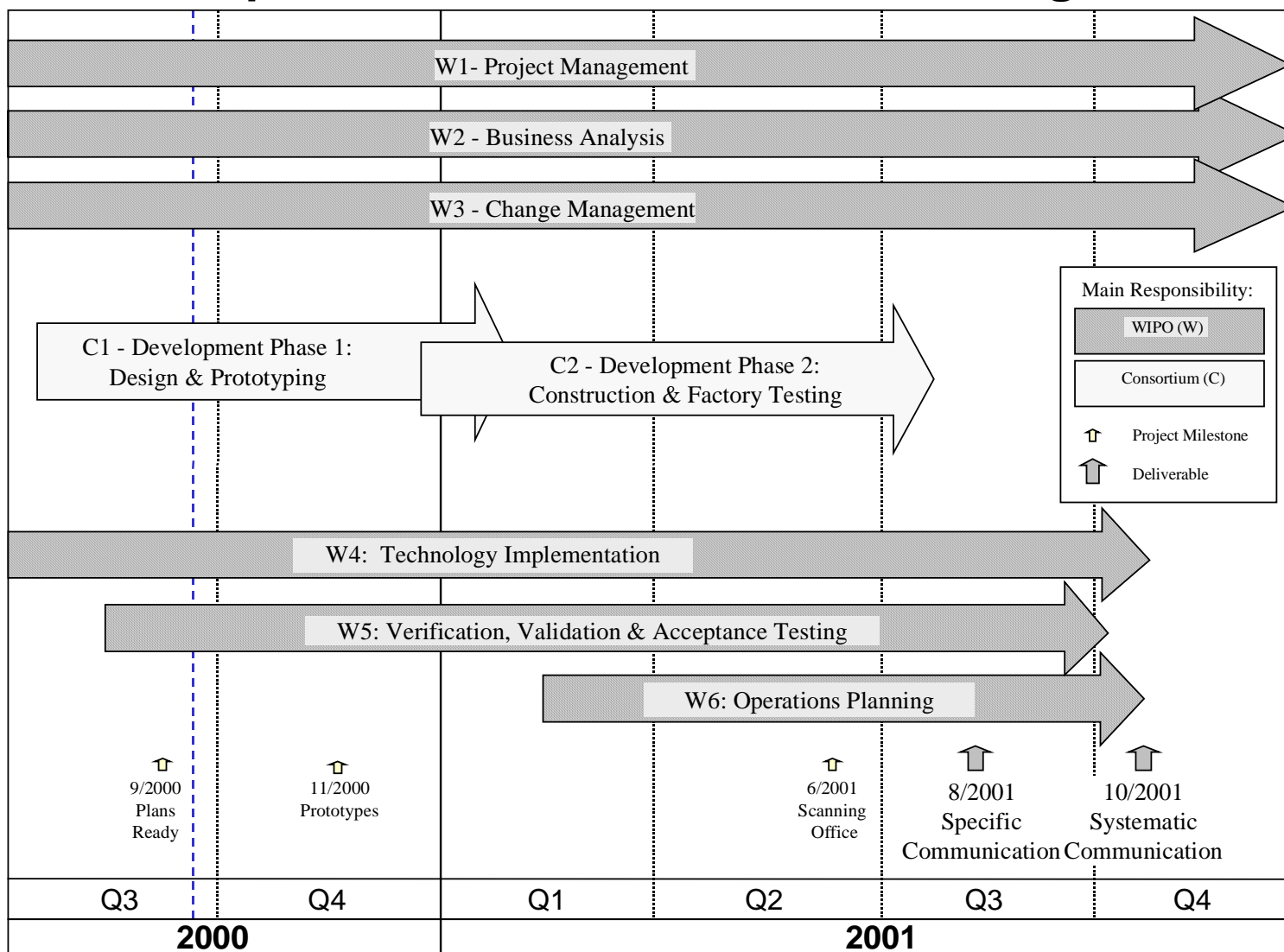


[Annex II follows]

ANNEX I

PCT/A/29/2 Add.

Implementation Plan for the COR Stage



[Annex III follows]

ANNEX III

HIGH LEVEL PROJECT PLAN FOR IMPACT PROJECT E-FILING STAGE

1. The high level project plan for the E-filing stage of the IMPACT project comprises the outline set out in paragraphs 8 to 10 of this document as further described in this Annex.
2. The objective of step 1 (PCT E-filing Pilot) is to take proposed Part 7 and Annex F of the Administrative Instructions and associated computer developments through a proof-of-concept process as an extension of the present system for preparing international applications using the PCT-EASY software made available by the International Bureau. Applicants participating in the pilot will have the opportunity to prepare full international applications using an extended version of the PCT-EASY software. That extended version would be capable of preparing application documents for the entire international application, conforming to the standard set out in Annex F (the present version of the PCT-EASY software provides only for the preparation of the request and inclusion of the abstract). During step 1, international applications will continue to be filed on paper with a parallel submission of the application documents in electronic form. Step 1 will, at least initially, be restricted to international applications filed with the RO/IB and to applicants specifically registered for participation in the pilot. Participating applicants will, as is presently the case for applicants filing applications prepared using PCT-EASY, benefit from a reduced filing fee. The pilot will enable the development of software and operational procedures in preparation for the implementation of electronic filing under step 2.
3. When the necessary legal framework and technical standards and associated computer developments have been proved, electronic filing functionality will be expanded to enable applications to be filed in electronic form, that electronic form being the legally determinative version of the application, although a printed version of the application may be used for some purposes.
4. Step 2 (PCT E-filing Implementation) will more fully implement electronic filing by making the necessary server software available to the RO/IB and other receiving Offices,
5. Steps 1 and 2 provide for the integration of electronic filing software with the IB and RO/IB stages of the IMPACT Project which, as shown in Annex I, will be delivered in late 2002. Milestones within steps 1 and 2 are listed in Tables 1 and 2, below.
6. In parallel with the development of PCT electronic filing, the International Bureau intends to proceed in the coming months with two related initiatives requiring the introduction of special provisions in the Administrative Instructions. Those provisions will:
 - (a) provide for the filing and processing in electronic form (at least partially) of PCT applications containing very large nucleotide and/or amino acid sequence listings; and
 - (b) make it possible, in the case of PCT applications filed on paper, for the receiving Office to prepare scanned images which will constitute the record copies and will be transmitted as such to the International Bureau.
7. While the filing of international applications in electronic form is not provided for until the end of step 1, it will, however, be necessary for the content of the legal framework and technical standards to have been finalized, although not brought into force, in order for step 1 to proceed. Thus, work is continuing with a view to finalizing Part 7 and Annex F of the

Administrative Instructions, as outlined in document PCT/A/29/2, paragraphs 18 to 22, early in step 1, while recognizing that further changes to the Instructions may be needed in the light of the experience gained in step 1. The consideration by SCIT of the adoption of a more generally applicable WIPO standard for electronic filing and processing of patent applications (see document PCT/A/29/2, paragraph 22) will also need to take into account the possibility of such further changes.

8. *Step 1 (PCT E-filing Pilot)* will progress through three build cycles – prototype, beta and pilot – for each of the following four components:

- (a) *Extended PCT-EASY software* capable of preparing and submitting wrapped application documents (this and all subsequent components will conform with Annex F, including the principles of electronic records management contained in that Annex).
- (b) *RO/IB server software* that can receive electronically filed international applications.
- (c) *A Public Key Infrastructure (PKI)* for the IB that can administer Low-Level digital certificates. The IB will also prototype and test High-Level digital certificates in step 1.
- (d) *A secure database* within the IMPACT system that allows for the storage, retrieval and printing of the electronic version of international applications received by the RO/IB during the pilot.

9. In addition, step 1 will include:

- (a) The finalization of a *system requirements document* and a *scope definition document*; a survey will be used to assist in determining user requirements for the extended PCT-EASY software and for the development and implementation of PCT electronic filing in general.
- (b) *A Document Type Definition (DTD)* in eXtensible Mark-up Language (XML) for the international application, which will form the basis of an inventory of tags. The inventory will be used to develop other DTDs, and resulting new tags will be added to the inventory. During step 1, the tag inventory will be maintained and used to develop DTDs for the documents other than the international application itself, such as priority documents, the international search report, the PCT pamphlet, the demand form and the international preliminary examination report.

10. Step 1 will enable the preparation of international applications conforming to the *PCT Common Electronic Filing Requirements* set out in Part 7 of the Administrative Instructions, that is, using Low-Level digital certificates, basic electronic signatures and submission on-line and on physical media (3.5 inch diskettes or CD-Recordable disks).

11. *Step 2 (PCT E-filing Implementation)* will similarly progress through three build cycles – prototype, beta and pilot – for the following two components, based on the components previously developed in step 1:

- (a) The RO/IB server software will be further developed to make it available, as *RO server software*, to other receiving Offices for deployment in their IT environments. The IB will invite receiving Offices to participate in the beta and pilot testing of this product.

- (b) *PCT-EASY for enterprises*: the PCT-EASY software will be developed into a product which can be deployed and integrated into an enterprise's IT environment (taking advantage of the results of the survey mentioned in paragraph 9(a) of this Annex).
12. Step 2 will also include the implementation of additional functionality into the pilot versions of the components produced in step 1, namely:
- (a) The PKI will be expanded to permit limited *interoperability of digital certificates*, depending on the results of further consultations with Contracting States and PCT users.
 - (b) The software will be extended to enable the electronic preparation and submission of certain *other PCT documents* (including the demand form).
 - (c) The software will be extended to enable filing using *other physical media*, including DVD-R, Iomega Zip disk and Imation Superdisk diskette.
13. *DTDs in XML for other documents* than those covered by step 1 will be developed, depending on the requirements of other stages in the IMPACT Project, and the requirements of Contracting States and PCT users. The PCT electronic filing tag inventory (see paragraph 9(b) of this Annex) will continue to be maintained and used in this exercise.
14. The need for *possible revision of Part 7 and Annex F* will be assessed towards the end of step 1, in the light of experience already gained.

TABLE 1
STEP 1 (PCT E-FILING PILOT) MILESTONES

	Milestone	Estimated date
1.	Scope definition document made available for comment.	Nov 2000
2.	System requirements document made available for comment.	Nov 2000
3.	Contracts in place for third party developers.	Dec 2000
4.	Inputs delivered to third party developers (conforming with IMPACT quality procedures e.g. specification of requirements, use case scenarios, implementation plan).	Dec 2000
5.	<i>Contents of Part 7 and Annex F finalized.</i>¹	<i>Jan 2001</i>
6.	Third party developers start.	Jan 2001
7.	Scope definition document finalized.	Jan 2001
8.	System requirements document finalized.	Jan 2001
9.	Core team for E-filing finalized.	Feb 2001
10.	Development plans submitted by third party developers.	Feb 2001
11.	<i>Third party developers begin construction of prototypes.</i>	<i>Mar 2001</i>
12.	IMPACT E-filing prototype database for RO/IB available.	May 2001
13.	Extended PCT-EASY prototype software ready.	May 2001
14.	RO/IB ready to issue prototype Low-Level digital certificates.	May 2001
15.	RO/IB prototype server ready to receive electronically filed international applications.	May 2001
16.	Participation of pilot applicants finalized.	Jul 2001
17.	<i>Prototype system verified, validated and signed-off.</i>	<i>Jul 2001</i>
18.	Detailed plan for PCT electronic filing finalized.	Aug 2001
19.	IMPACT E-filing database for RO/IB available for beta testing by formalities examiners.	Aug 2001
20.	Extended PCT-EASY software ready for beta testing by applicants.	Aug 2001
21.	RO/IB ready to issue Low-Level digital certificates for beta testing by applicants.	Aug 2001
22.	RO/IB server ready to receive electronically filed international applications by beta test applicants.	Aug 2001
23.	<i>Beta system verified, validated and signed-off.</i>	<i>Oct 2001</i>
24.	DTD for international application published.	Nov 2001
25.	IMPACT E-filing database for RO/IB available for pilot testing by formalities examiners.	Nov 2001

¹ The exact date will depend on the progress of consultations with Contracting States and PCT users on the draft texts of Part 7 and Annex F.

	Milestone	Estimated date
26.	IMPACT electronic filing training to formalities examiners completed.	Nov 2001
27.	Extended PCT-EASY software ready for pilot testing by applicants.	Nov 2001
28.	RO/IB ready to issue Low-Level digital certificates for pilot testing by applicants.	Nov 2001
29.	RO/IB server ready to receive electronically filed international applications by pilot test applicants.	Nov 2001
30.	<i>RO/IB commences receipt of international applications in paper form with parallel electronic submission, prepared using extended PCT-EASY software.</i>	<i>Nov 2001</i>
31.	DTD for priority documents published.	Dec 2001
32.	DTD for international preliminary examining report published.	Dec 2001
33.	DTD for translations of international preliminary examining report published.	Dec 2001
34.	DTD for power of attorney published.	Dec 2001
35.	DTD for demand form published.	Dec 2001
36.	DTD for international search report published.	Dec 2001
37.	DTD for PCT pamphlet published.	Dec 2001
38.	PCT-EASY enterprise inputs delivered to third party developers.	Feb 2002
39.	<i>Pilot system verified, validated and signed-off.</i>	<i>Apr 2002</i>
40.	Part 7 and Annex F reviewed (in view of step 1 experience) and revised if necessary.	Jul 2002
41.	<i>Part 7 and Annex F in force (receiving Offices with technical capacity can accept applications in electronic form).</i>	<i>Sep 2002²</i>
42.	<i>Step 1 closed.</i>	<i>Sep 2002²</i>

² The exact date will depend on the successful integration of the pilot software into the IB stage as part of the IMPACT Project so that the International Bureau will be in a position to receive, store and process record copies of international applications filed in electronic form with a receiving Office which is prepared to receive international applications in such form.

TABLE 2

STEP 2 (PCT E-FILING IMPLEMENTATION) MILESTONES

	Milestone	Estimated date
1.	Prototype of enterprise version of PCT-EASY available.	Sep 2002
2.	<i>Beta version of RO server software available to other receiving Offices for deployment into their own environments.</i>	<i>Sep 2002</i>
3.	Annex F referred to SCIT for development into a WIPO Standard.	Sep 2002
4.	DTDs for other PCT documents published.	Oct 2002
5.	RO/IB server ready to receive electronically filed IAs on other physical media including DVD-R, Iomega Zip disk and Imation Superdisk diskette.	Nov 2002
6.	Extended PCT-EASY ready to electronically file the demand form.	Nov 2002
7.	Enterprise version of PCT-EASY available for beta testing by applicants.	Nov 2002
8.	IMPACT E-filing database for RO/IB integrated with IMPACT RO/IB stage delivery.	Dec 2002 ³
9.	RO/IB server integrated with IMPACT RO/IB stage delivery.	Dec 2002 ³
10.	<i>RO/IB prepared to receive international applications in electronic form.</i>	<i>Dec 2002³</i>
11.	RO/IB ready to pilot test interoperability of digital certificates.	Dec 2002
12.	Pilot version of RO server software available to other receiving Offices for deployment into their own environments.	Dec 2002
13.	Enterprise version of PCT-EASY available for pilot testing by applicants.	Feb 2003
14.	Pilot version of RO server software verified, validated and signed-off.	Mar 2003
15.	<i>RO server software available to other receiving Offices for deployment into their own environments.</i>	<i>Apr 2003</i>
16.	Enterprise version of PCT-EASY verified, validated and signed-off.	Jun 2003
17.	<i>Enterprise version of PCT-EASY released.</i>	<i>Jul 2003</i>
18.	<i>Step 2 closed.</i>	<i>Aug 2003</i>

[End of Annex and of document]

³ The exact date will depend on the successful integration of the pilot software into the RO/IB stage as part of the IMPACT Project so that the International Bureau as receiving Office will be in a position to receive, store and process international applications filed in electronic form.