

# XML4IP TF 2010 May Meeting

## (Final Meeting Minutes)

### **INTRODUCTION**

1. The XML4IP Task Force meeting held in Tokyo, Japan from May 10 to 14, 2010. Eight organizations participated in the XML4IP TF meeting. The following eight offices/organizations were represented at the meeting: EPO, JPO, IP Australia, IPONZ, KIPO, OHIM, USPTO, WIPO (IB, PCT, Madrid/Hague Systems). The list of participants appears as Appendix 1 to this report.
2. Mr. Yun, as Task Force Leader, chaired the meeting.

### **DISCUSSION AND AGREEMENT**

#### *Welcome to delegations*

3. The meeting was opened by Mr. Nonaka, Director of Policy Planning and Research, who welcomed the participants on behalf of the Japan Patent Office. The Chair read the welcome message from Mr. Takagi who is Assistant Director General of WIPO.
4. The Chair addressed the general statement which recalled the background and mandate of XML4IP Task Force and proposed the meeting goal and discussion principles to achieve the expected outputs to meet the set timescale of the XML4IP Task Force.

#### *Adoption of the agenda*

5. The draft agenda was adopted with the following change of item order: "Discussion on International Common Components and Schemas" will be discussed in the afternoon of 12 May and "Discussion on the XML4IP Design Rules and Conventions" will be discussed in the afternoon of 11 May.

#### *Progress Report on XML4IP Project*

6. The Chair, as Task Force Leader reported XML4IP Project since last XML4IP Task Force Meeting. Participants noted that action items established at the last meeting were completed.

#### *IPOs' Report on XML Usage*

7. WIPO (PCT, Madrid/Hague Systems), EPO, IP Australia, IPONZ, KIPO, USPTO, JPO gave presentations the current XML usage including WIPO XML Standards at IPOs and future plan. The presented documents are posted on the XML4IP TF Wiki

and the summary of presentations is attached to the minutes as Appendix 2. (The list of presentations will be added)

8. PCT, EPO, JPO, IPONZ and IP Australia gave presentations on the problematic issues using WIPO XML Standards. The presented documents are posted on the XML4IP TF Wiki and the summary of presentations is attached to the minutes as Appendix 3. (The list of presentations will be added)

#### *Business Case of XML4IP*

9. JPO, USPTO and PCT gave presentations which are posted on the Wiki. (The list of presentations will be added)
10. In accordance with the request by Trilateral Offices, the Participants reviewed the objectives and scope of XML4IP which were set up at the last XML4IP Task Force meeting held in October 2009. As to the objectives of the XML4IP project, all participants agreed on the current objectives except moving the third bullet of the second objective to the forth objective and rewording the forth objective. The revised objectives are:
  1. Facilitation of data exchange among IPOs using XML
  2. Harmonization of data structures among three IP types
    - Rules and guidelines for dealing with common data structures across multiple IP types
    - Rules and guidelines for dealing with data structures specific to one IP type
    - ~~Rules and guidelines for dealing with data structures specific to one IPO (non-normative)~~
  3. Maximization of data transformability from ST.36, ST.66 and ST.86- format to XML4IP format, including the creation of transformation rules from WIPO Standards ST.36, ST.66 and ST.86 to XML4IP,.
  4. Facilitation of XML4IP implementation within IPOs
    - Rules and guidelines for dealing with data structures specific to one IPO (non-normative)
11. The XML4IP TF leader will co-ordinate with the other TFs (ST.36, ST.66, St.86) regarding the transformations in the opposite direction to the objective No. 3 above.
12. The EPO reminded the Task Force that EPO also has various commitments through the ITG (trilateral) and WG2 (IP5). The EPO expects that the data exchange and work sharing business needs will be defined at those levels. There is an ITG meetings scheduled for June which may address these issues. The EPO also emphasized for a cost-benefit based approach. Re-use and modernisation of existing standards may be preferable under such an approach.
13. With regard to the scope of XML4IP, all participants agreed on the current scope without modification. Concerning the scope of XML4IP TF, some of the participants concern that XML4IP will supersede the existing WIPO Standards ST.36, ST.66 and ST.86 or XML4IP is merely supplement of the existing standards. Participants recognized that the transition period would be necessary, if XML4IP supersede or supplement the existing standards.

*The current scope of XML4IP is:*

“XML4IP recommends the XML (eXtensible Markup Language) resources used for filing, publication, processing, and exchange of all types of industrial property (IP) information, (i.e., patents, trademarks and industrial designs). The XML4IP aims at superseding (or supplementing) WIPO Standards ST.36, ST.66 and ST.86 which recommend the XML resources for patents, trademarks and industrial designs, respectively. However it is acknowledged that WIPO Standards ST.36, ST.66 and ST.86 will co-exist with XML4IP for some time.”

14. The PCT/IB gave a presentation on business case for XML4IP implementation at PCT/IB. The Participants noted that PCT has considered the XML4IP implementation with six different options from “do nothing” to “complete XML4IP implementation”.
15. Chair mentioned that business case of XML4IP would differ from the business case of XML4IP implementation within IPOs. However, if the Task Force prepares the XML4IP business case, it would help IPOs to prepare their business case for implementation. Thus, Chair asked all participants to provide the expected benefits/dis-benefits, major risks and timescale (when IPOs need XML4IP). The Chair proposed that the Chair would prepare a draft business case of XML4IP based on inputs of the Task Force members and circulate to the members for review.

*Methodologies for identifying International Common Components and Model Schemas*

JPO, EPO and the IB gave presentations which are posted on the Wiki.

16. The IB proposed two approaches to identify International Common Components (ICCs) and model schemas, i.e., Top-down and bottom-up approaches. The IB explained Top-down approach is inline with Approach1 of JPO and bottom-up with Approach2 of JPO. The JPO proposed to adopt the Approach1 (top-down approach), however, the IB proposed to take two approaches in parallel. The IB encouraged providing IPO’s Data Model.
17. The participants basically agreed on the two approaches. However, USPTO said the top-down approach would not be practical. Thus, the Participants agreed to take practical approach to collect common business objects by identifying work products which IP5 has been discussing and would be discussed at the IP5 Offices meeting to be held in June 2010.
18. The Chair asked the EPO, JPO, KIPO and USPTO to provide the list of work products supporting their work sharing activities to the XML4IP Task Force. With regard to the views on data exchange and work sharing for trademarks and industrial designs, WIPO (Madrid), OHIM and JPO volunteered to prepare the lists and report them during this meeting.

### *XML4IP Design Rules and Conventions*

19. The participants reviewed the XML4IP Design Rules and Conventions (DRCs) prepared by the IB - working draft 4. The DRCs was initially written for the ICCs, however the Participants agreed that the DRCs should be used for the IPO's implementation schemas as well. In order to meet the agreement, each rule should be considered for IPO's implementation, if the rule provides only recommendations for ICCs. DRCs should highlight the difference between general rules and office-specific rules, if any.
20. The review on some rules was not completed at the meeting because the Participants needed further investigation. Thus, some IPOs volunteered to provide the revised wordings or counter proposals for those rules.
21. The Participants agreed that the status of the DRCs is still a working draft. Thus, the IB will revise the DRCs to reflect all comments and agreements at this meeting and invite the Task Force members to comment via the XML4IP Wiki.
22. The list of removed, changed, or abeyant/put-aside rules is attached to the minutes as Appendix 4. The abeyant rules are not sure whether they are necessary. Thus, the rules should be put aside at this stage and will be revisited later on.

### *International Common Components and Schemas*

23. International Common Components (ICCs) are primarily defined for data exchange among IPOs. However, some ICCs are additionally defined for communications between IPOs and applicants.

	Definitions	Description
GICCs	Global International Common Components	ICCs are used across three IP modalities, i.e., patents, trademarks and designs. ICCs are also used between two IP modalities, i.e., patent-trademark, patent-design, and trademark-design.
PICCs	Patent International Common Components	ICCs are used only in patent business. Some PICCs are inherited from GICCs.
TICCs	Trademark International Common Components	ICCs are used only in trademark business. Some TICCs are inherited from GICCs.
DICCs	Design International Common Components	ICCs are used only in industrial design business. Some DICCs are inherited from GICCs.

24. EPO emphasized the importance of testing any detailed draft technical decisions taken this week with real data. The TF members agreed that many issues could be open to review once the real data based tests have been done.
25. JPO proposed the following candidates for data exchange among patent IPOs: priority document, publication gazette, search report and office action. The EPO proposed the following preliminary candidates to support the work sharing

activities: event data (when search reports, written opinions or withdrawals are delivered), search report data, written opinions, office actions, original application filed, amended application, publication gazette and letters from applicant.

26. According to the agreement on identifying International Common Components, the Participants deferred to the appropriate bodies business processes and objects across IP types and IPOs which the IB had proposed. Instead, according to the Chair's invitation, the IP Australia gave a presentation on the Vancouver Group (AU, CA and UK) work sharing and KIPO gave its data model that shows how KIPO manages its common components.
27. The Participants noted that the Vancouver group has already been exchanging search and examination documents and information related to a patent application. The Chair asked the representative of IP Australia to provide the list of work sharing among Vancouver group and XML data used for the work sharing. The representative mentioned that he would provide information after consultation with other IPOs in the group.

#### *Development of schemas for International Common Components*

28. The IB gave a presentation on the XML Integration Approach and results from the approach. It was noted that the IB found provisional ICCs and developed draft XML schemas for the ICCs. The Participants reviewed the schemas. The Participants agreed to start the review from atomic/ terminal leaves of schemas. It was noted that granularity would be the key for backward compatibility.
29. The TF members felt that the initial definition of ICC is unclear. A clear definition will be added to an Annex of the DRC.
30. The TF considered the following approaches to design ICC schemas :
  - Maximum approach: ICC schema contains as many sub-elements as possible. For specific business cases, e.g., data exchange, office's implementation, schema will specify some sub-elements according to their needs.
  - Minimum approach : ICC schema contains necessary sub-elements only. For specific business cases, schema will include further sub-elements which are needed for the specific business cases.
31. The Participants agreed that the minimum approach is better for XML4IP. The Participants also agreed that the Task Force should develop the following schemas, `Name`, `Address` and `AddressBook`.
32. The Participants discussed `AddressType` and agreed that the `AddressType` (draft version 0.1) contains `CountryCode`, `Addressline` and `PostalCode` (optional). The IB will post the draft `AddressType` on the TF Wiki.
33. The Participants agreed on the view that the following items could be possible candidates of ICCs:

### Patents

- Request form based on PLT Model Request form
- ApplicationBody based on CAF
- Search Report/ Written Opinion data
- Publication Gazette (data to be defined)
- Priority Document Data
- Office Action

### Trademarks/ Industrial Design

34. OHIM and WIPO (Madrid) will provide the views on data exchange and worksharing for trademarks and industrial designs.

### *Compatibility with WIPO Standards ST.36, ST.66 and ST.86*

35. According to the objective No. 3 above, the Participants discussed the backwards transformation-compatible. "Backwards transformation-compatible" means that the set of atomic information units (lowest level of granularity elements and attribute terminal leaves, typically an element without any child element) that can be included in an instance document that conforms to XML4IP is a superset of the atomic information units that can be included in an instance document that conforms to ST 36, 66 or 86. Enumeration lists must cater for the set of allowed values foreseen for the respective atomic information units available under ST 36, 66 and 86. All enumeration lists must include the values "Other", meaning that the value is not present in the enumerated list, and, "Undefined", meaning that the information was not present in the source data.

36. The Participants agreed on the following rules:

[SD-01] Schema Elements MUST be "backwards transformation-compatible" with ST.36, 66, 86.

[SD-02] Enumerations contained in Schema MUST include the values "Other" and "Undefined".

### *Schema implementation Guidelines*

The Participants noted that JPO posted a presentation to Wiki on "Discussion on the role of Implementation Guideline". It would be discussed via Wiki.

### *Review of the tentative working plan for the XML4IP Project*

37. EPO proposed to re-prioritize the current task list of XML4IP project, which were posted on the TF Wiki. The Task Force Leader mentioned that he would revise the task list to reflect the discussions at this meeting and invite the Task Force members to comment on the revised task list and to share the tasks.

*Others*

38. The Participants discussed whether XML4IP should consider PCT business data to develop ICCs. The Participants agreed that at the beginning stage, the XML4IP Task Force would focus on ICCs without specific PCT business data.

**ACTION PLAN**

1. The Task Force Leader to prepare a draft business case of XML4IP based on inputs of the Task Force members and circulate to the members for review.
2. The XML4IP TF Leader to co-ordinate with the other the XML Task Forces (ST.36, ST.66, ST.86) regarding the transformations in the opposite direction to the objective No. 3 above.
3. EPO, JPO, KIPO and USPTO to provide the list of work products supporting their work sharing activities to the XML4IP Task Force.
4. WIPO (Madrid) and OHIM to provide the views on data exchange and worksharing for trademarks and industrial designs,
5. Task Force Leader to revise the Design Rules and Conventions (DRCs) to reflect comments given at this meeting and to invite TF members to comment via the XML4IP Wiki.
6. The IB to post the draft schema, version 0.1, for Address which was agreed on at the meeting on the TF Wiki. The IB to develop and provide the draft version 0.1 schemas for Name and AddressBook, and TF members to be invited to comment.
7. The Task Force Leader to revise the task list to reflect the discussion at this meeting and invite the Task Force members to comment and share tasks.
8. IP Australia to provide the list of work sharing among Vancouver group after consultation with other IPOs in the group.

## Appendix 1

### *List of Participants*

#### **WIPO (World Intellectual Property Organization)**

Mr. Roger Holberton	<i>Head, Systems Support Section, Functional Support Division, Trademarks, Industrial Designs and Geographical Indications Sector</i>
Mr. Peter Waring	<i>Head, Technical Cooperation Section, PCT International Cooperation Division</i>
Mr. Young-Woo Yun	<i>Senior IP Information Officer, WIPO Standards Section, International Classifications and WIPO Standards Service</i>
Mrs. Hend Madhour	<i>WIPO Contractor</i>

#### **EPO (European Patent Office)**

Mr. Raul Suarez y Gonzalez	<i>Administrator, ePublication</i>
Mr. Keri Rowles	<i>Administrator, Electronic Publication and Dissemination</i>

#### **IP Australia**

Mr. Rob Wills	<i>International ICT Cooperation</i>
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#### **IPONZ (Intellectual Property Office of New Zealand)**

Mr. Simon Ferguson	<i>Business Systems Specialist</i>
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#### **KIPO (Korean Intellectual Property Office)**

Mr. Jaeyul AHN	<i>Deputy director, Technical Cooperation Division</i>
Mr. Seungbae PARK	<i>Deputy director, Technical Cooperation Division</i>
Ms. In-sook Kim	<i>Assistant director, Technical Cooperation Division</i>
Mr. Hee-joong Kim	<i>Director, LG-CNS (KIPO contractor)</i>

#### **OHIM (Office for the Harmonisation in the Internal Market)**

Mr. Alexandre TRAN	<i>Head of IT Architecture and Standards Sector</i>
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#### **USPTO (United States Patent and Trademark Office)**

Mr. Bruce Cox	<i>Director, Policy and Standards Division</i>
Mr. William Stryjewski	<i>Director of Patent IT Programming</i>



**JPO (Japan Patent Office)**

Mr. Matsuo Nonaka	<i>Director for International Affairs, Information Technology Planning Office</i>
Mr. Yoshihiko Yoshida	<i>Deputy Director, Automation System Research and Development Office</i>
Mr. Hideto Tanaka	<i>Director, Automation System Research and Development Office</i>
Mr. Yoshiaki Kodachi	<i>Deputy Director, Information Technology Planning Office</i>
Mr. Tomohiro Hakamata	<i>Assistant Director, Information Technology Planning Office</i>
Mr. Atsushi Kimura	<i>Information Technology Planning Office</i>

## Appendix 2

### Current XML usage including WIPO XML Standards at IPOs and future plan

<b>IP office</b>	<b>PCT</b>	<b>EPO</b>	<b>JPO</b>	<b>IPONZ</b>	<b>IP Australia</b>
<b>WIPO Standards or others</b>	ST.36 DTD + annex F	ST.36 DTD +annex F	ST.36 DTD + annex F Using "jp" prefix	- Custom DTD which will be ceased to use within the next 6 months - ST.66/86 format for trade mark and design application web services	ST.32, ST.36, ST.66 and ST.86
<b>UCC</b>	No	no	No	Yes	yes
<b>Publication</b>	XML+image with XML/OCR E-dossier	XML, PDF, ZIP  European Publication Server	XML, SGML, HTML, PDF  IPDL, Gazette	Future work: new case management system with integrated workflow and document management (2011)	SGML
<b>Application</b>	PCT-SAFE		NATL/PCT filing	Web service	PCT-safe
<b>Data Exchange</b>	PCT publication Biographic information Fee data National phase information Concern: transition manner	DocDB exchange Lack of clear structure renders the definition more complex Could be solved in the context of the current standard -Add to the existing standard, a strict data exchange annex -Provide implementation guidelines -Move to W3C Schemas, maintain actual naming conv.	600 original elements are created. Some of them could be shared between offices. Many elements need to be created in ST.36	Future work	Use of office specific elements
<b>IP office</b>	<b>USPTO</b>	<b>Madrid&amp;Hague</b>		<b>KIPO</b>	
<b>WIPO Standards or others</b>	ST.36	ST.66		No use WIPO standards. Use KIPO own standards. KIPO intends to use XML4IP. Content model with two levels	
<b>UCC</b>	Yes	No		Yes	
<b>Publication</b>	RedBook	Meca, Romarin ST.86 not implemented		KIPONet XML	
<b>Data Exchange</b>	Data Vs document exchange Exchange only the needed information	.		-	

### Appendix 3

#### Problematic issues using WIPO XML Standards

IP office	PCT	EPO	JPO	IPONZ	IP Australia
<p><b>WIPO standards issues</b></p>	<p><b>ST.36</b></p> <ul style="list-style-type: none"> <li>• Problem in generating instances because of recursive structure</li> <li>• Mandatory elements with no data</li> <li>• Some DTDs never used</li> <li>• White space support</li> <li>• Provisions for copies for the legal record- (USPTO said that legal record issue is related to XML in general not only to XML4IP)</li> <li>•</li> </ul>	<p><b>ST.36</b></p> <ul style="list-style-type: none"> <li>• Use of Document Type Definitions (DTDs, obsolete technology)</li> <li>• Inappropriate rules of upgrading</li> <li>• Unclear standard on elements to be covered</li> <li>• Too flexible in selecting elements</li> <li>• Elements or attributes with the same name and different definitions</li> <li>• Issues on image file format</li> <li>• Different standards across IP rights</li> <li>• Recursivity in elements Too complex and/or unclear structures</li> </ul>	<p><b>ST.36</b></p> <ul style="list-style-type: none"> <li>• Inappropriate Rules of Upgrading</li> <li>• Unclear Standard on Elements to be Covered</li> <li>• Too Flexible in Selecting Elements</li> <li>• Elements/ Attributes with the same name and different definitions</li> <li>• Issues on Image File Format</li> </ul>	<p><b>ST.66</b></p> <ul style="list-style-type: none"> <li>• Doesn't handle series marks : multiple word marks in same TradeMark and more than one MarkFeature</li> <li>• Unclear how best to include details for smell, 3D shapes and other mark types (OHIM commented UK use multiple Marks and FR use smell marks, so OHIM is preparing a proposal for those requests for revision of ST.66)</li> <li>•</li> </ul> <p><b>ST.36. ST.66 and ST.86</b></p> <ul style="list-style-type: none"> <li>• ST.36 DTD based</li> <li>• Dictionaries for standards include ambiguities, not always clear what elements should be used for</li> <li>• Inconsistencies between ST.66 and ST.86 with element names and hierarchy. Ex. One design application can have many designs while one trademark application has only one trademark.</li> </ul>	<p><b>ST.36. ST.66 and ST.86</b></p> <ul style="list-style-type: none"> <li>• Differences across WIPO XML standards make it difficult to harmonise across IP Australia's business lines.</li> <li>• There is considerable potential for misunderstanding the meaning and purpose of some elements due to insufficient definitions. IP Australia created a number of elements where names were ambiguous.</li> <li>• Need to create extensive number of offices specific elements to cater for data exchange.</li> <li>• Mandatory requirement for some ice elements requiring the need to extend number of office elements. Such as IP Australia's lack of country of Inventor information, requiring the creation of an AU address book, or using a blank mandatory element.</li> <li>• Limited use of the Id attribute on elements eg text.</li> </ul>

## Appendix 4

List of removed, changed, or abeyant rules

Rule	Modified	Deleted	Abeyant
[GD04]		X	
[GD05]	The normative schema documents that implement the partner document <b>[type-removed]</b> MUST conform to <i>XML Schema Part 1: Structures and XML Schema, Part 2: Datatypes</i> .		
[GD06]			At this stage, we don't know how to judge the message level.
[GD07],[GD08]			To be revised to include office-specific rules
[GD09]			To express differently
[GD10]			IETF have to be considered
[GD11]			UTF-8 is problematic
[GD12]			
[GD13]			to be studied after datetime component discussion
[GD18]	Add the delimiter – between categories. Put a reference to [SD55] in version description		
[GD21]	Datatype, element and attribute tag names SHOULD be as much as possible self-explanatory ( <b>instead of self-described</b> ) and highly structured.		
[GD22]		X	
[GD26],[GD28]			UCC and LCC is a big issue

<b>Rule</b>	<b>Modified</b>	<b>Deleted</b>	<b>Abeyant</b>
[GD29]	The values available in enumeration lists SHOULD be semantically sufficient, in English, and use as few characters as possible. The characters in enumeration lists MUST be restricted to the following set {a-z, A-Z, 0-9, period (.), comma(,), space ( ), dash(-), and underscore(_).		+
[GD32]			X
[GD34]	To move after [GD37]		
[GD41]	SHOULD instead of MUST		
[GD43]	Appendix C instead of Appendix D		
[SD01]	SHOULD instead of MUST Types instead of Datatypes		
[SD02]	Types instead of datatypes		
[SD03]		X	
[SD08],[SD09] and [SD10]			OHIM will revise it
[SD11], [SD12]	To merge		
[SD13], [SD14]		X	
[SD15]	Common components schemas instead of schemas		
[SD21]	Need more explanation about category, subcategory		
[SD21]to [SD25]	Common component schemas instead of schemas		
[SD29]		X	
[SD35], [SD36] and [SD37]	Examples need to be added		
[SD38]		X	

Rule	Modified	Deleted	Abeyant
[SD39]	Patent, trademark and industrial design international component schemas <b>MUST</b> use the “IMPORT” construct to refer to global international component schemas		
[SD40]	Office schemas <b>SHOULD</b> use the “IMPORT” construct to refer to international common components.		
[SD41], [SD42] and [SD43]		X	
[SD44]	International common component schemas <b>MUST NOT</b> use default namespaces		
[SD45]	Office schemas <b>MAY</b> use default namespaces		
[SD46], [SD47],[SD48], [SD49]		X	
[SD51]	Types instead of datatypes		
[SD52]		To move to conformance rules	
[SD53], [SD54], [SD55](pp-31-33)		X	
[SD56]	Remove all message schemas		
[SD57]	New minor versions of schemas <b>MUST</b> be able to validate <b>all</b> instance documents....		
[SD61]		X	

<b>Rule</b>	<b>Modified</b>	<b>Deleted</b>	<b>Abeyant</b>
[SD67]	Schemas <b>MUST</b> include schema header documentation containing reference to the schema name, description, software, developed by, point of contact and to revision history, and the latest version number and date of the schema <b>SHOULD</b> be only given in the XML schema.		
[SD68], [SD69]		X	
[SD72], [SD74]	Replace CCSs by Schemas		
[SD73], [SD75]		X	
[ID01]			Consider UTF-16
[ID03]	Replace Root schema by referenced schema		
[ID04]			EPO and USPTO will study which version and edition of XML should be recommended
[ID06]	XML instance documents <b>MUST</b> declare the schema that conforms to.		
[ID07],[ID08] and [ID09]		X	
[ID10]	Replace <b>MUST</b> by <b>SHOULD</b>		
[ID11], [ID12]		X	
[ID14]	External entities that are images <b>SHOULD</b> (or <b>MUST</b> will be decided later) conform to image formats listed in Appendix E		
[ID15]	Images <b>MUST</b> be referenced as external entities.		
[ID16]to [ID19]		X	