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5 # The Printer Working Group

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9 # Definition of the Standards Development Process

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22 **Version 2.0**
23 **MarchOctober 0310, 20043**

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The Printer Working Group

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PWG Policy
Definition of the Standards Development Process

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35   **Version 2.0**
36   **March~~October~~ 03~~10~~, 2004~~3~~**
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42   Abstract: This document defines the standards development process that guides and controls the work of the IEEE-
43   ISTO Printer Working Group, an organization developing open standards for the Print, Imaging, MFP and related
44   Services industries. This document organizes the flow of standards creation from Brainstorming, Requirements
45   gathering and Charter definition through Working Drafts, Candidate Standards and Standards. Herein are the
46   guidelines for conducting Last Call, assuring interoperability and establishing levels of formal approval. PWG Process
47   v2.0 builds on the original PWG Process document but has been rewritten for greater clarity. Sections relating to
48   Intellectual Property and Confidentiality are unaltered but the overall process has been streamlined, compared to the
49   original, and sound file naming and document versioning guidelines defined. This is a process defining document, not
50   an industry standard.

51

52   This version of the PWG Standards Development Process is available electronically at:
53   ftp://ftp.pwg.org/pub/pwg/standards/process/pwg-process20-20040302.pdf, .doc

54

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84   The IEEE-ISTO is a not-for-profit corporation offering industry groups an innovative and flexible operational forum
85   and support services. The IEEE-ISTO provides a forum not only to develop standards, but also to facilitate activities
86   that support the implementation and acceptance of standards in the marketplace. The organization is affiliated with
87   the IEEE (http://www.ieee.org/) and the IEEE Standards Association (http://standards.ieee.org/).

88   For additional information regarding the IEEE-ISTO and its industry programs visit http://www.ieee-isto.org.

89   **About the IEEE-ISTO PWG**

90   The Printer Working Group (or PWG) is a Program of the IEEE Industry Standards and Technology Organization
91   (ISTO) with member organizations including printer manufacturers, print server developers, operating system
92   providers, network operating systems providers, network connectivity vendors, and print management application
93   developers. The group is chartered to make printers and the applications and operating systems supporting them
94   work together better. All references to the PWG in this document implicitly mean "The Printer Working Group, a
95   Program of the IEEE ISTO." In order to meet this objective, the PWG will document the results of their work as open
96   standards that define print related protocols, interfaces, procedures and conventions. Printer manufacturers and
97   vendors of printer related software will benefit from the interoperability provided by voluntary conformance to these
98   standards.

99   In general, a PWG standard is a specification that is stable, well understood, and is technically competent, has
100   multiple, independent and interoperable implementations with substantial operational experience, and enjoys
101   significant public support.

102   For additional information regarding the Printer Working Group visit: http://www.pwg.org

103   **Contact information:**

104   PWG Web Page: http://www.pwg.org/
105   PWG Mailing List: pwg@pwg.org

106   To subscribe to the PWG mailing list, send the following email:
107   1) send it to majordomo@pwg.org
108   2) leave the subject line blank
109   3) put the following two lines in the message body:
110   subscribe pwg
111   end
112
113   Members of the PWG and interested parties are encouraged to join the PWG Mailing List in order to participate in
114   any discussions of clarifications or review of the PWG Process.

115

Contents

208

209 # Tables

213

1   Introduction

213

214 This document establishes the process that is followed as open industry standards are developed by the IEEE ISTO
215 Printer Working Group. The Printer Working Group (or PWG) is a Program of the IEEE Industry Standards and
216 Technology Organization (ISTO) and is an alliance among printer manufacturers, print server developers, operating
217 system providers, network operating systems providers, network connectivity vendors, print and print management
218 application developers chartered to make printers and the applications and operating systems supporting them work
219 together better. All references to the PWG in this document implicitly mean "The Printer Working Group, a Program
220 of the IEEE ISTO."   In order to meet this objective, the PWG will document the results of their work as open
221 standards that define print related protocols, interfaces, procedures and conventions. Printer manufacturers, vendors
222 of printer related software and the consuming public will benefit from the interoperability provided by voluntary
223 conformance to these standards.
224
225 A PWG standard is a specification that is stable, well understood, technically competent and has multiple,
226 independent implementations with substantial operational experience, demonstrated interoperability and significant
227 public support. The PWG may issue a standard as a PWG standard and/or when appropriate submit the standard to
228 other standards organizations, such as the IETF, ISO, ITU, W3C, IEEE, or ECMA. In developing a standard, a
229 working group of the PWG may define durable documents such as WSDL, Schema or common industry semantics
230 that need to have well known, persistent filenames and file paths.
231
232 This process document establishes
233   1.   The stages, or maturity levels a standard will go through from Charter and Requirements through Drafts,
234   Candidates and Standard to the final, Maintenance stage of an established standard.
235   2.   Working documents naming and versioning
236   3.   Standards naming and numbering
237   4.   File name and path conventions for durable documents such as WSDL and schema.
238
239 This document can be updated and a new version can be produced. As long as section 11~~10~~ is not modified, the
240 new version must be approved through the Formal Approval process described in section 8.3.1~~8.2.1~~. If section 11~~10~~
241 is modified, 100% of all PWG members must approve the new document (abstentions/non-votes are not allowed).

2   Organization of the PWG

242

243 The Printer Working Group is composed of representatives from printer manufacturers, print server developers,
244 operating system providers, network operating system providers, network connectivity vendors, and print and print
245 management application developers. Member organizations are those companies, individuals or other groups (i.e. a
246 university) that have agreed to participate and operate under the processes and procedures of the ISTO by-laws, the
247 ISTO-PWG Program Participation Agreement and this document and have paid the annual assessment. Multiple
248 individuals employed by the same company or other organization cannot join the PWG as individual members.
249 Associates or affiliates of member organizations which are beneficially controlled or owned by said member
250 organization with more than fifty percent (50%) of the voting stock or equity shall not be considered a separate entity
251 and are not eligible for separate membership in the PWG. The annual assessment is set each year by the PWG
252 itself.
253

2.1   PWG Officers

255 The PWG has a Chair position responsible for organizing the overall agenda of the PWG. The PWG chair is elected
256 in odd numbered years by a simple majority of the PWG members to a two-year term of office that begins on
257 September 1st. Responsibilities of the PWG chair include creating working groups, appointing working group chairs,
258 assuring that working groups maintain adequate leadership, making local arrangements for PWG meetings (this may

259 be delegated as appropriate), setting the high level PWG agenda, chairing the PWG plenary session, ensuring that
260 the PWG web and FTP site are maintained (see section 1.14.10), and assisting working group chairs to accomplish
261 their tasks. The PWG Chair must be a representative of a PWG Member Organization. The PWG Chair is an ex
262 officio member of all working groups.
263
264 The PWG Vice Chair is elected in odd numbered years by a simple majority of the PWG members to a two year term
265 of office, beginning September 1st. The Vice Chair's responsibilities are to act in the absence of the chair and
266 provide assistance to the Chair in carrying out his or her role, as required. The PWG Vice Chair must be a
267 representative of a PWG Member Organization. The PWG Vice Chair is an ex officio member of all working groups.
268
269 The PWG Secretary is elected in odd numbered years to a ~~two year~~two-year term of office by a simple majority of the
270 PWG members. It is the Secretary's responsibility to record and distribute the minutes of all PWG plenary sessions
271 and other meetings, as required, to support the PWG chair. The PWG Secretary must be a representative of a PWG
272 Member Organization. The PWG Secretary is responsible, in cooperation with the IEEE ISTO, for managing number
273 blocks for standards naming and maintaining a PWG Member Organization roster including contact information and
274 company profile information, including logo, as it pertains to representation on the PWG web site.
275
276 The PWG Steering Committee is composed of the PWG Chair, Vice Chair, Secretary, and chairs of all active working
277 groups. The Steering Committee shall meet upon the call of the PWG Chair or by a majority of its members to
278 discuss matters of concern of the PWG. Where matters come to a vote in the Steering Committee, decisions are
279 made by simple majority of the entire committee (abstentions/non-votes are counted as no votes), with one vote per
280 person.

281 **2.2 Working Group Officers**

282 Under the PWG Chair are a number of working groups (WG~~) which~~), which are chartered for the purpose of
283 developing a specific standard. Working groups are chartered as required to address specific areas of
284 standardization. A working group is considered active until it satisfies its charter or is otherwise terminated by the
285 Working Group Chair with the agreement of the Steering Committee.
286
287 The Chair of a WG is appointed by the PWG Chair, with approval (simple majority) at a PWG plenary. The WG
288 Chair's term is indefinite and would normally extend through the period of time during which there is active
289 maintenance on the standard(s) developed by the working group. The Working Group Chair must be a representative
290 of a PWG Member Organization. The working group Chair is responsible for appointing a Vice Chair and Secretary
291 for the WG, creating the WG Charter, setting the agenda for meetings of the WG, chairing WG meetings, appointing
292 editors for WG documents, driving the work of the WG to completion, and reporting status of the WG at PWG plenary
293 sessions.
294
295 The Vice Chair of a WG is appointed by the WG chair, with approval (simple majority) of the WG. The WG Vice
296 Chair's term is indefinite. The Vice Chair acts in the absence of the Chair and assists, as appropriate, in carrying out
297 the responsibilities of the Chair.
298
299 A WG Secretary is appointed by the WG Chair, with approval (simple majority) of the WG. The term of office is
300 indefinite. The responsibilities of the Secretary are to record and distribute minutes of working group meetings and to
301 record attendance for members of that working group.

302 **2.3 PWG Meetings**

303 The annual face-to-face meeting schedule for the PWG is set in October of each year. As a guideline, it is common
304 to hold face-to-face meetings every 6 to 10 weeks with phone and web based conferencing during the interim. Face-
305 to-face meetings are to be distributed geographically to try and distribute the travel burden among members. Meeting
306 schedule and locations are determined through a proposal / ~~concensus~~consensus process and no other specific
307 process or guarantees are implied. Meeting location details are to be published at least 4 weeks in advance of
308 meetings. New documents must not be introduced under any circumstances less than 1 week prior to a face-to-face
309 as this only leads to confusion and ineffective meeting results. Decisions made at PWG administrative, business, or
310 plenary meetings require a simple majority, 1 vote per member organization.

311

312 Dial-up and web conference details, agenda and reference materials are to be published at least 48 hours in
313 advance when work is being conducted via remote conferencing.
314

2.4 PWG Communications Infrastructure

316 The PWG will maintain
317   1. A PWG web site http://www.pwg.org where PWG working group information, meeting schedules and
318   document links and other ~~perteinent~~pertinent information may be found.
319   2. A PWG ftp site ftp://ftp.pwg.org where PWG working drafts, standards, procedures, schema, templates and
320   other useful and necessary documents may be accessed.
321   3. An e-mail reflector, including archive, for each active project.
322

3 PWG Standards development and maintenance

324 There are 3 main phases to standards development in the PWG – Charter, Development and Maintenance (Table
325 1~~Table 1~~). These phases are a guideline to the activities and types of documents a working group should expect to
326 encounter. There are no specific exit criteria from these phases. Exit criteria apply to PWG Standards documents
327 and are outlined in section 4.
328
329
330
331

332   **Table 1 - Three Phases to developing a PWG Standard**

Phase	Activities in this Stage	Internal Documents	PWG Standards Documents
Charter	Identify need Brainstorm Develop Charter Gather Requirements	White Papers	Charter Requirements Statement Preliminary Working Draft
Development	Develop PWG Working Drafts Prototype Promote to Candidate Standard Demonstrate Interoperability Promote to PWG Standard	White Papers Proposals Developer Guides Interop Test Plans	PWG Working Drafts Candidate Standards Supporting durables such as WSDL, Schema
Maintenance	Maintain PWG Standard	Errata Registration of new keywords, enums	Standard Supporting durables

333

4 Formal PWG standards-track p<u>rocess</u>~~ublications~~

335 Standards development is guided, largely, by the progression of documents used to define and articulate the
336 Standard. Formal documents consist of the Charter, a set of Requirements, Working Drafts, Candidate Standards

337 and, ultimately, the Standard, itself. Due to their highly influential nature, informative documentation of Best Practice
338 is also treated as a formal document. Publication of these formal PWG standards-track documents requires Last Call
339 and/or Formal Approval (vote) by the membership of the PWG as described in Section 18. The standards process
340 may be augmented by a set of informal technical briefs and proposals reading on the standard. While helpful and
341 encouraged, these are not treated as formal documents and do not require formal approval. Standards-track
342 publications and the criteria for exit are defined below. Because the synchronization of Standard version, standard
343 document maturity, document naming, support file namespace and file path names can be quite complex, provides
344 an example of how these items are orchestrated throughout the standards process.

4.1   Editing Documents

346 The Working Group Chair will appoint an editor for each standards-track document. The editor will be approved by a
347 simple majority vote of the working group. Normally an editor will work in this capacity throughout the life cycle of the
348 standard, although exceptions may occur. Editors are responsible for reflecting the decisions of the working group,
349 rather than their own personal views. Ultimately, the editor has responsibility for the quality of the document, making
350 sure that it is readable and has a coherent style, even when it has multiple authors or contributors.

4.2   Organizing and Naming Documents

352
353 Early versions of a Working Group Charter, Requirements, whitepapers and other supporting documentation may
354 circulate on the pwg@pwg.org e-mail reflector. Once a Working Group is formalizing their Charter and Requirements
355 and, certainly, by the time an initial Working Draft is in progress, the Working Group will have chosen an abbreviation
356 (usually 2 to 4 characters) which will be used to preface their document names. The Working Group can pick the
357 abbreviation which is subject to approval by the PWG Steering Committee.

4.3   Working Group Charter

359 The first order of business for any working group is to create a charter that clearly describes the scope of their work.
360 Brainstorming, fact finding, guest speakers and other enlightening activities often precede or coincide with Charter
361 development. In addition to scope, the Charter should define milestones and schedule, including an expiration date.
362 Extensions may be granted by the PWG Steering Committee, based on perception of progress and commitment of
363 the working group. In some cases the working group may choose to publish their standard in affiliation with an
364 outside standards organization such as the IETF or W3C. If this is evident, the Charter should indicate the desire for
365 formal affiliation with another standards organization and include a liaison plan with the other organization. Charter
366 definition, requirements gathering and outlining a preliminary Working Draft may occur simultaneously. In many
367 cases, this is encouraged, as new information gleaned from these activities may alter perception of the Charter.
368
369 A Working Group Charter requires Formal Approval (see Section 18).

4.4   Statement of Requirements

371 Prior to completion of the first Working Draft, a clear statement of requirements for the standard to be produced is
372 required. A requirements statement documents the best effort collection of known requirements on a particular
373 protocol, interface, procedure or convention. The requirements statement is important as it leads to a clear, common
374 understanding of the goals, provides a guide for developing the standard, and can be used as a final test to measure
375 the completeness of the resulting specification. It is not necessary that the resulting standard meet every stated
376 requirement, but the standard should be explicit about which requirements it does not meet, and why. Requirements
377 may be updated during the development of the standard, as they become clearer. As with Charter (above),
378 brainstorming, fact finding and associated activities frequently accompany the process of requirements gathering.
379 Often, at the beginning of a project, the Charter, Requirements and early versions of an initial Working Draft are all
380 undergoing simultaneous revision until a clear direction emerges and the Charter and Requirements are formally
381 approved.
382
383 A Working Group Statement of Requirements requires Formal Approval (see Section 18).
384

385 **4.5 Working Draft**

386 When rough consensus has been reached on the Charter, Requirements and general approach, and there is
387 sufficient information to begin writing a standard, the initial Working Draft will be written. Charter and Requirements
388 must be formally approved prior to completion of the first Working Draft. A PWG Working Draft facilitates reaching
389 consensus on how to approach the PWG Standard and provides a backdrop for discussion and agreement on details
390 of the specification. The initial Working Draft should be reasonably complete and drives a stake in the ground as the
391 basis for further work on the Standard.
392
393 Working Drafts correspond to a specific version of the Standard they are defining. Unless the working group is
394 engaged in an effort to revise an existing PWG Standard, the Working Drafts are always defining PWG Standard
395 Version 1.0.
396
397 A PWG Working Draft cannot progress ahead of any given normative reference that it contains.
398
399 A PWG Working Draft requires Last Call, and Formal Approval to transition to PWG Candidate Standard.
400

401 **4.5.1 Maturity Level**

402 In the interest of providing some subjective indication of the maturity of a PWG Working Draft, a Maturity Level will
403 appear on the title page as:
404   Maturity: *<keyword>*
405
406 Although the maturity level will not appear on PWG Candidate Standards or PWG Standards, if a Candidate
407 Standard needs to be revised, any resulting PWG Working Drafts will have a maturity level indicated on their title
408 page.

409   **Table 2 – Maturity Level keywords**

Maturity Level keyword	*Indicates*
Initial	Initial attempt to specify the standard.
Interim	Standard in development. Significant changes to the standard expected in the future.
Prototype	Content of the standard is functionally complete and ready for prototyping.
Stable	Standard is very close to completion. Standard is either getting ready for, is in, or has completed Last Call.

410
411 Normally, the Working Drafts of a standard would progress from "Initial" to "Stable" in stages, although stages could
412 be skipped for small standards efforts. However, it is possible for the Working Drafts to become less mature: if a
413 large problem was found in a standard that was considered "Prototype", it might have to go back to "Interim" while
414 that problem is solved. Note also that for all four maturity levels, multiple, consecutive Working Drafts might have the
415 same maturity level.
416
417 The current maturity level of a Working Draft will be decided upon by the working group.
418
419 Table 2Table 2 above should appear in the "boilerplate" of every Working Draft as a handy reference for readers to
420 understand the significance of the maturity level keyword on the title page.

421 **4.6 Candidate Standard**

422 When agreement has been reached among the participants about the details of a Standard, the current Working
423 Draft is ready to transition to a PWG Candidate Standard. A Candidate Standard should not be approved unless it is
424 supported by prototypes and thought to be ready for implementation. A PWG Candidate Standard forms the basis for
425 comments from outside of the working group and the PWG, and provides the foundation for initial product
426 development and interoperability testing. Implementations can comfortably proceed from a PWG Candidate

427 Standard, knowing that it will not undergo significant change as it matures to a PWG Standard. However, should
428 changes to a Candidate Standard be necessary, these changes will be accomplished via Working Drafts that must
429 once again go through Last Call and Formal Approval. The Working Draft will then and only then regain Candidate
430 Standard status.
431
432 Candidate Standards correspond to a specific version of the Standard they are defining. Unless the working group is
433 engaged in an effort to revise an existing PWG Standard, the Candidate Standards are always defining PWG
434 Standard Version 1.0.
435
436 When a document becomes a Candidate Standard, it is assigned an IEEE-ISTO standard number, which it keeps
437 forever. To indicate the standard is at Candidate Standard status, the prefix "CS" is attached to the standard
438 number, resulting in a number such as "PWG CS 5105.2". If the Candidate Standard goes back to Working Draft
439 status, the prefix "CS" is replaced by "WD", resulting in a number such as "PWG WD 5105.2". IEEE-ISTO standard
440 numbers are tracked and assigned by the PWG Secretary.
441
442 A PWG Candidate Standard cannot progress ahead of any given normative reference that it contains.
443
444
445 A PWG Candidate Standard requires Last Call, demonstration of Interoperability and Formal Approval to transition to
446 PWG Standard.
447

4.7 Standard

449 When a PWG Candidate Standard has passed Last Call, demonstrated interoperability and acquired Formal
450 Approval, it is promoted to the final status of a PWG Standard. At this point, the prefix "CS" is replaced by "STD" in
451 the IEEE-ISTO standard number and "PWG" is replaced by "IEEE-ISTO", resulting in a number such as "IEEE-ISTO
452 STD 5105.2".

4.8 Extensions to standards

454 When a document has reached the PWG Candidate Standard or PWG Standard status, documents can be written
455 that are extensions to that standard. Such extension documents start immediately at Working Draft status and then
456 follow all rules above for progression to Candidate Standard and Standard. Note that the extension to a Candidate
457 Standard cannot progress to Standard before the Candidate Standard it is extending has progressed to Standard.
458
459 It is also possible that the PWG will decide to formalize PWG extensions for any (IETF, IEEE, or other printing
460 industry) external standard (e.g. RFC2911). As above, such extension documents start immediately at Working Draft
461 status and then follow all rules in earlier sections above for progression to Candidate Standard and Standard.

4.9 Best Practices

463 Best Practice documents, while not normative, are often heavily referenced during implementation. Because we want
464 Best Practice to be reliable and accurate we treat these as formal Working Group documents that under go naming,
465 Last Call and Formal Approval just like a Working Draft.

4.10 FTP site procedures

467 Table 3 below illustrates both the filename and the location on the PWG FTP site to be used for every version of a
468 document. Because it is not always straightforward for a reader to find the latest version of a document, an
469 additional directory will be created on the FTP site for each working group, and the latest version of all documents
470 will be located there, with a durable URL. To go along with the example used in Table 3, the durable URL would be:
471   ftp://ftp.pwg.org/pub/pwg/xyz/xyz10-latest.doc
472 Therefore, for every row in Table 3, the new version of the document would be stored with the filename and location
473 shown in the table, *and also* would be stored with the filename and location of the durable URL.
474

2725

475 An additional procedure to be followed on the FTP site is that in both the 'ftp://ftp.pwg.org/pub/pwg/candidates' and
476 'ftp://ftp.pwg.org/pub/pwg/standards' directories, an index file (index.txt) will be added that lists all standards
477 contained in the directory. Due to the fact that the files that correspond to published Candidate Standards and
478 Standards will remain in these directories forever, the index file will list the current status of each standard, so that
479 readers can realize at least the following:
480   A Candidate Standard has been modified and is currently being worked on as a Working Draft.
481   A Candidate Standard has transitioned to Standard.
482 A new version of a Standard is currently being worked on (e.g. version 1.0 of the Standard is in the FTP directory, but
483 version 1.1 is currently being worked on).

Publication	Spec Ver	Spec Doc Revision	Status	Maturity Level	WSDL Interface File / Ver	PWG Num	Document Filename *	Document Path
In Filename	X	X	X			X		
In Path			X		(For WSDL)			
On title page	X	X		X		X	X	X
Working Draft	XYZ 1.0	2002/01/01	WD	Initial	2002/01/01	N/A	wd-xyz10-20020101.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/
Working Draft	XYZ 1.0	2002/01/15	WD	Interim	2002/01/15	N/A	wd-xyz10-20020115.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft	XYZ 1.0	2002/07/15	WD	Prototype	2002/07/15	N/A	wd-xyz10-20020715.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft - Last Call, Formal Approval	XYZ 1.0	2003/02/07	WD	Stable	2003/02/07	N/A	wd-xyz10-20030207.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Candidate Standard	XYZ 1.0	2003/02/21	CS	N/A	2003/02/07	PWG CS 510n.m	cs-xyz10-20030221-510nm.doc	ftp://ftp.pwg.org/pub/pwg/candidates/…
Working Draft, no interface changes	XYZ 1.0	2003/03/01	WD	Prototype	2003/02/07	PWG WDWD 510n.m	wd-xyz10-20030301-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft, * interface change	XYZ 1.0	2003/03/15	WD	Prototype	* 2003/03/15	PWG WDWD 510n.m	wd-xyz10-20030315-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft, no interface change - Last Call, Formal Approval	XYZ 1.0	2003/04/15	WD	Stable	2003/03/15	PWG WDWD 510n.m	wd-xyz10-20030415-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Candidate Standard – Interop Last Call, Formal Approval	XYZ 1.0	2003/06/20	CS	N/A	2003/03/15	PWG CS 510n.m	cs-xyz10-20030620-510nm.doc	ftp://ftp.pwg.org/pub/pwg/candidates/…
Standard	XYZ 1.0	2003/08/20	STD	N/A	2003/03/15	IEEE-ISTO STD 510n.m	std-xyz10-20030820-510nm.doc	ftp://ftp.pwg.org/pub/pwg/standards/…

484 Table 3 - Sample flow of documents including versions and naming

485

486 * **Note**: In the filenames above, the substring "xyz10" is: [project][spec][version]. For version 1.0 of the main spec for the "xyz" project, the string
487 could be "xyz10" (that is, the [spec] part is left out). For all other specs created in the "xyz" project, the name would include the [spec] part; for
488 example, "xyzattr10" might be used if a separate document was detailing attributes for use in the "xyz" project.

489 # 5   Informal supporting PWG documents

490 The following are considered informal, working documents that contribute to the development or clarification of a
491 PWG Standard. As such, these documents require no Formal Approval process.

492 ## 5.1   White Papers and Technical Briefs

493 During the standards process, PWG members are encouraged to document their proposals for various elements of a
494 standard in a White Paper or Technical Brief. These documents provide an informal means of communicating
495 technical proposals among PWG members. It is strongly recommended that no item be opened for discussion on the
496 agenda of a PWG meeting without first having been documented and made available for review at least one week
497 prior to the meeting where the paper is to be discussed. White Papers are particularly useful when two or more
498 approaches to a standard exist and need to be debated. White Papers may be updated to reflect group consensus or
499 individual positions on a particular topic. Since a white paper represents current thought and individual contribution,
500 they do not require any form of approval and have no formal status. White Papers and Technical Brief are subject to
501 change or withdrawal at any time. Other documents, such as Best Practices, Hints, ~~and~~ Tips, Developer's Guides
502 and FAQ fall into the same category as White Papers and Technical Briefs. These documents should be posted to
503 the PWG FTP site and announced on the working group mailing list prior to discussion at a PWG meeting.
504 Discussion will be most fruitful when people have taken adequate time to review the papers prior to the meeting.
505

506 # 6   Modifications to process

507 To handle exceptional cases, the Steering Committee may decide that some or all of the steps in the standards
508 process may be shortened or eliminated.

509 # 7   Publication of PWG documents

510 All of the PWG standards-track and supporting documents described in sections 4 and 5 must be available in either
511 PDF or HTML format (others may be provided as well) and published on the PWG FTP site. Any document identified
512 as PWG Charter, PWG Requirements, PWG Working Draft, PWG Candidate Standard or PWG Standard represents
513 a formal PWG approved document, which will be published in a durable location with ~~well known~~well-known path
514 after achieving the appropriate Last Call and/or Formal Approval. Listed are examples of the directory structure using
515 v1.0 Standards as an example. In use, "wg" would be replaced by the abbreviation for a particular working group (ex.
516 pmp, psi, ipp etc.). Note the prefix conventions established for these documents as reflected in the file name prefix in
517 the examples below.
518
519 Charter – ftp://ftp.pwg.org/pub/pwg/wg/charter/ch-wg10-yyyymmdd.pdf
520 Requirements – ftp://ftp.pwg.org/pub/pwg/wg/charter/rq-wg10-yyyymmdd.pdf
521 Working Drafts – ftp://ftp.pwg.org/pub/pwg/wg/wd/wd-wg10-yyyymmdd.pdf
522 Candidate Standards – ftp://ftp.pwg.org/pub/pwg/wg/cs-wg10-yyyymmdd-510nm.pdf
523 Standards – ftp://ftp.pwg.org/pub/pwg/standards/std-wg10-yyyymmdd-510nm.pdf
524
525 Standards are not published in the Working Group path. PWG Standards are given a unique number and are
526 published in one, flat, namespace for ease of access.
527
528 Supporting documents (see Section 5) are posted in the root Working Group path or a subdivision of that path as
529 appropriate. Filename prefixes for common supporting documents are:
530
531 White Paper – wp

532 Technical Brief – tb
533 Developer's Guide – dg
534 Best Practice – bp
535 Hints and Tips – ht
536 FAQ – faq
537 Last Call Review Comments - lcrc
538
539 Internal working versions of PWG documents should be available in an agreed upon, widely available word
540 processing format, to provide for collaboration between document editors and contributors. For example, Microsoft
541 WORD and HTML are common revisable formats in use, today.
542
543 When documents are posted to the PWG FTP site, a notice should also be posted to the Working Group mailing list.
544 It is recommended that Working Groups provide a web site where information about their activities is provided. The
545 Web site should provide links to current, relevant documents.

546 7.1   FTP site procedures

547 below illustrates both the filename and the location on the PWG FTP site to be used for every version of a
548 document. Because it is not always straightforward for a reader to find the latest version of a document, an
549 additional directory will be created on the FTP site for each working group, and the latest version of all documents
550 will be located there, with a durable URL. To go along with the example used in , the durable URL would be:
551   ftp://ftp.pwg.org/pub/pwg/xyz/xyz10-latest.doc
552 Therefore, for every row in , the new version of the document would be stored with the filename and location shown
553 in the table, *and also* would be stored with the filename and location of the durable URL.
554
555 An additional procedure to be followed on the FTP site is that in both the 'ftp://ftp.pwg.org/pub/pwg/candidates' and
556 'ftp://ftp.pwg.org/pub/pwg/standards' directories, an index file (index.txt) will be added that lists all standards
557 contained in the directory. Due to the fact that the files that correspond to published Candidate Standards and
558 Standards will remain in these directories forever, the index file will list the current status of each standard, so that
559 readers can realize at least the following:
560   • A Candidate Standard has been modified and is currently being worked on as a Working Draft.
561   • A Candidate Standard has transitioned to Standard.
562 A new version of a Standard is currently being worked on (e.g. version 1.0 of the Standard is in the FTP directory, but
563 version 1.1 is currently being worked on).
564
565 Issue-1a: Should we create a new directory ftp://ftp.pwg.org/pub/pwg/final that would contain specifications that have
566 reached the "Standard" level in the PWG? The "final" directory would contain the complete, long file name of the
567 "Standard" level document. All documents that are at the "candidate" level will still go into the "candidates" directory.
568 The "standards" directory will also be maintained with an exact copy of the latest, most advanced, official, version of
569 the document using the short name of the document.
570
571 Directory: File name:
572 ftp://ftp.pwg.org/pub/pwg/standards   pwg510nm.doc
573 ftp://ftp.pwg.org/pub/pwg/final   std-xyz10-20030820-510nm.doc
574 ftp://ftp.pwg.org/pub/pwg/candidtate cs-xyz10-20030620-510nm.doc
575
576 Issue-1b: Alternatively we could create a "grandfather" directory that contains exact
577 copies of all the documents in "standards" that are there as a result of some previous
578 process (and NOT create the "final" directory.
579
580 Issue-2: Consider relocating table to durable URL and focusing PWG Process document strictly on how to publish
581 WD, CS and S.
582

	Spec Ver	Spec Doc Revision	Status	Maturity Level	WSDL Interface File / Ver	PWG Num	Document Filename *	Document Path
In Filename	X	X	X			X		
In Path			X		(For WSDL)			
On title page	X	X		X		X	X	X
Publication	**Spec Ver**	**Spec Doc Revision**	**Status**	**Maturity Level**	**WSDL Interface File / Ver**	**PWG Num**	**Document Filename ***	**Document Path**
Working Draft	XYZ 1.0	2002/01/01	WD	Initial	2002/01/01	N/A	wd-xyz10-20020101.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/
Working Draft	XYZ 1.0	2002/01/15	WD	Interim	2002/01/15	N/A	wd-xyz10-20020115.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft	XYZ 1.0	2002/07/15	WD	Prototype	2002/07/15	N/A	wd-xyz10-20020715.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft - Last Call, Formal Approval	XYZ 1.0	2003/02/07	WD	Stable	2003/02/07	N/A	wd-xyz10-20030207.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Candidate Standard	XYZ 1.0	2003/02/21	CS	N/A	2003/02/07	PWG CS 510n.m	cs-xyz10-20030221-510nm.doc	ftp://ftp.pwg.org/pub/pwg/candidates/…
Working Draft, no interface changes	XYZ 1.0	2003/03/01	WD	Prototype	2003/02/07	PWG WDWD 510n.m	wd-xyz10-20030301-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft, * interface change	XYZ 1.0	2003/03/15	WD	Prototype	* 2003/03/15	PWG WDWD 510n.m	wd-xyz10-20030315-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Working Draft, no interface change - Last Call, Formal Approval	XYZ 1.0	2003/04/15	WD	Stable	2003/03/15	PWG WDWD 510n.m	wd-xyz10-20030415-510nm.doc	ftp://ftp.pwg.org/pub/pwg/xyz/wd/…
Candidate Standard – Interop Last Call, Formal Approval	XYZ 1.0	2003/06/20	CS	N/A	2003/03/15	PWG CS 510n.m	cs-xyz10-20030620-510nm.doc	ftp://ftp.pwg.org/pub/pwg/candidates/…
Standard	XYZ 1.0	2003/08/20	STD	N/A	2003/03/15	IEEE-ISTO STD 510n.m	std-xyz10-20030820-510nm.doc	ftp://ftp.pwg.org/pub/pwg/standards/…

583   Table 4 - Sample flow of documents including versions and naming

584

585   *** Note**: In the filenames above, the substring "xyz10" is: [project][spec][version]. For version 1.0 of the main spec for the "xyz" project, the string
586   could be "xyz10" (that is, the [spec] part is left out). For all other specs created in the "xyz" project, the name would include the [spec] part; for
587   example, "xyzattr10" might be used if a separate document was detailing attributes for use in the "xyz" project.

588

589 # 8 Approval

590 ## 8.1 Last Call

591 Last Call represents a final opportunity for issues to be raised against a document. The WG Chair announces a Last
592 Call on a document with rough consensus of the working group. Last Calls are posted to all members of the PWG via
593 the PWG-ANNOUNCE mailing list. A successful Last Call indicates a higher level of maturity during the development
594 of a Standard. The Last Call period may vary, based upon the content, complexity, holidays or other circumstances,
595 but must be at least 16ten full working days (minumum 22 calendar days). A working day is a normal business day
596 and is considered to end at 105 PM USPST (Los Angeles, CA, USA). in New York City, New York, USA. Every Last
597 Call must conclude at a PWG Plenary meeting with an overview of the draft or standards document and a review of
598 detailed issues and their resolutions.
599
600 All issues raised during Last Call must be either resolved or rejected as follows:answered in one of the following
601 manners:
602 • Resolved - Document updated to reflect the resolution
603 • Rejectedsolved - No change required in the document
604
605 All issues and their resolution must be published in the Formal Approval announcement
606 ⁃ Unresolved - Document will be approved as is
607

608 ## 8.2 Formal Review

609 Last Call results must be reviewed by the PWG Steering Committee to validate that the Last Call process has been
610 conducted properly, prior to the initialization of Formal Approval.
611

612 ## 8.28.3 Formal Approval

613 ### 8.2.18.3.1 Formal Approval Process

614 Once all of the Last Call issues have been reslovedponded to or rejected, and Last Call has been reviewed by the
615 PWG Steering Committee, the PWG Secretary must announce a vote for Formal Approval to is taken on approval of
616 the resulting document and transition the document to the next maturity level. Formal approval voting must be
617 announced and conducted via the PWG-ANNOUNCE mailing list and the announcement must contain all issues and
618 their resolution which occurred during Last Call . The formal approval voting period must last at least 160 full working
619 days (minumum 22 calendar days).and may be longer at the discretion of the WG Chair. A working day is a normal
620 business day and is considered to end at 10 PM USPST (Los Angeles, CA, USA).
621
622 The PWG Secretary will administer the Formal Approval process with the assistance of the working group chair and
623 the ISTO.
624
625 Formal Approval requires
626
627 • Quorum defined by as minimum of 25% of active eligible members actually casting a vote
628 • approval by 2/3 of those casting votes (abstentions do not count) with no strong opposition
629 • approval by 80% of those casting votes (abstentions do not count), in the face of strong opposition
630
631 Strong opposition occurs when one or more companies formally calls for an 80% vote. It is the responsibility of the
632 WG chair to ensure that the results of a vote are fair and representative. If a member of the PWG has an issue with a

633 WG Chair decision, he or she can appeal that decision to the PWG Steering Committee (first) and then to the
634 membership of the PWG at large if necessary.
635
636 A no vote on a standards-track document requires the voter to state the reason for the no vote, and a description of
637 the changes that would be required to the document to turn the no vote to a yes. These will be documented on the
638 PWG-ANNOUNCE mailing list.
639
640 Formal approval is not granted until the PWG Steering Committee reviews the process used to achieve Last Call and
641 Vote insuring the PWG process was followed with fidelity.
642

643 ~~8.2.2~~8.3.2 Formal Approval voting rights

644 The following voting rights policy applies to all Formal Approval voting:
645

646 • A voter must be a representative of a PWG Member Organization.
647

648 • Votes are counted on an organization basis.
649

650 8.3.2.1 Definition of quorum

651 For Formal Approval a quorum is necessary and is defined at 25% of eligible member companies actually casting a
652 vote.
653

654 8.4 Publishing Of Approved Document

655 Documents that have passed Formal Approval must be edited by the PWG Secretary with the assistance of the WG
656 chair, to update the document number, format and the final publication date. The PWG Secretary must then publish
657 the document in the appropriate locations (see section XXX) with the appropriate file names.
658

659 ~~8.3~~8.5 Approval with a Working Group

660 ~~8.3.1~~8.5.1 Working Group approval process

661 For technical issues, a 2/3 majority of those casting votes (abstentions do not count) is required. A simple majority of
662 those casting votes (abstentions do not count) is required to pass on administrative and operational issues.

663 ~~8.3.2~~8.5.2 Working Group approval voting rights

664
665 The following voting rights policy applies to all voting done within the PWG Working Groups:
666
667 • A voter must be a representative of a PWG Member Organization.
668
669 • Votes are counted on an organization basis.
670
671 • At times it may become necessary to conduct a vote on internal WG matters. If so, eligibility is determined by an
672 organization attending two of the previous four face-to-face meetings, or two of the previous four conference
673 calls. It is the responsibility of the Secretary to maintain the list of eligible voters.
674
675 • With a simple majority vote, the working group may confer voting rights to an individual or organization that is not
676 otherwise eligible to vote due to lack of attendance. This is done on a case-by-case basis and is intended to
677 address those individuals or companies who have made significant, on-going contributions to the group – but

678 have not been able to attend the required number of meetings. In no case may a representative of a non-
679 member company be conferred voting rights by the action of a working group.
680
681 • A Working Group Chair may declare that a sufficient quorum does not exist for voting purposes if at least 50% of
682 potential voting members are not present during the vote.
683
684 • Voting is not a requirement for declaring rough consensus, unless specifically requested by a member with voting
685 rights.

686 ~~8.4~~8.6 Approval at a PWG Plenary

687 ~~8.4.1~~8.6.1 PWG Plenary approval process

688 A simple majority of those casting votes (abstentions do not count) is required.

689 ~~8.4.2~~8.6.2 PWG Plenary approval voting rights

690 The following voting rights policy applies to all voting done within the PWG plenary:
691
692 • A voter must be a representative of a PWG Member Organization.
693
694 • Votes are counted on an organization basis.
695
696 • Plenary voting occurs at plenary sessions, so participation in the plenary is required for voting.
697
698 • Voting is not a requirement for declaring rough consensus, unless specifically requested by a member with voting
699 rights.

700 9   Maintenance

701 Many PWG standards are extensible and provide the ability for additional keyword or enumerated values to be
702 registered. When approved, these have the same status as the standard to which the feature is being added. In
703 addition, as implementation work proceeds, clarifications may be required to guarantee interoperability. This section
704 addresses the process to be followed for:
705 • registrations of new operations and type 2 enums, keywords, and attributes, and
706 • clarifications of the standard and any approved registrations
707 Major changes or additions to a standard are not considered maintenance, but require engagement of the PWG
708 standards development process described above.
709
710 Proposals for registrations and clarifications will follow the following process:
711 1. Each WG will appoint a Maintenance Editor for their PWG Standard.
712 2. Anyone can initiate a proposal for a clarification or registration by starting a discussion on the appropriate project
713 mailing list.
714 3. After there is some agreement on the mailing list for the need of a clarification or the suitability of a registration,
715 the proposer and the standard's Maintenance Editor work out a proposal. Such a proposal should include:
716   • Status of the proposal, including previous reviews.
717   • A description of the requirement being met or the problem being solved.
718   • Description of the proposed solution.
719   • The exact text to be incorporated into the standard at some future date.
720 4. To make the status of proposed registrations and clarifications clear to PWG participants and others, the
721 Maintenance Editor will keep them in the appropriate sub-directory
722   ftp://ftp.pwg.org/pub/pwg/xxx/proposed-registrations
723   ftp://ftp.pwg.org/pub/pwg/xxx/proposed-clarifications
724 where xxx is the project.

725 5. All proposals must be published according to section 6 of this document.
726 6. Reviews of proposed registrations and clarifications may occur at a meeting or on the MAILING LIST.
727 7. The proposal will undergo sufficient reviews and updates until, in the opinion of the WG Chair, there is rough
728 consensus that the proposal is ready for Last Call as described in section 8.1 followed by Formal Approval as
729 described in section 8.38.2.
730 8. If, in the opinion of the WG Chair, the Last Call discussions and Formal Approval meet the voting requirements
731 described in section 18, the Maintenance Editor will move the approved registration or clarification to the
732 appropriate sub-directory for each project
733   ftp://ftp.pwg.org/pub/pwg/xxx/approved-registrations
734   ftp://ftp.pwg.org/pub/pwg/xxx/approved-clarifications
735 and announce the Formal Approval to the entire PWG via the PWG-ANNOUNCE MAILING LIST.
736 9. Periodically, the Maintenance Editor will incorporate the approved registrations and clarifications into the version of
737 the standard that the PWG keeps to record all approved registrations and clarifications. Such an updated version
738 of the standard will have a new minor version of the standard, along with a Change History Appendix that lists
739 each change.

10   PWG Semantic Model and Schema Extensions

741 The PWG Semantic Model and associated Schema are extensible and intended to be extended to meet the needs of
742 the industry. When approved, these semantic elements or values have the same status as the PWG Semantic
743 Model and Schema. In addition, as implementation work proceeds, clarifications may be required to guarantee
744 interoperability. Section 9 covrs maintenance in general. This section addresses PWG Semantic Model and Schema
745 extension specific aspects.
746 The PWG Semantic Model and associated Schema are also vendor and site extensible (see below). These private
747 vendor and site extensions require no formal PWG approval process. It is recommended that vendor publish their
748 extensions through the PWG and petition to make them PWG endorsed extensions.
749 Major changes or additions to a are defined as any changes that prevent upward and downward interoperability.
750 Major changes require engagement of the PWG standards development process described above.

10.1 Federation of vendor extensions (Namespace)

752 Any vendor or site is permitted to extend the PWG Schema. Extensions are federated through the use of
753 namespaces. Any new semantic element or value MUST be qualified by the extendor's namespace. The only
754 exception to this are the values for elements that have a specific pattern for extensions. The exceptions are
755 MediaColor, MediaType, MediaSizeName, OperatingSystemName and OutputBin. Vendors are responsible for
756 managing their own namespace to prevent collisions. When an extension is approved by the PWG the element or
757 value will be in the PWG namespace.
758 The PWG's namespace for the Semantic Model Schema (i.e. http://www.pwg.org/schemas/sm/1.0/) is expected to
759 remain constant. The PWG Schema was designed as an Open Content schema. An open content schema is one
760 that allows instance documents to contain additional elements beyond what is declared in the schema. The PWG
761 Schema implements Localized Openness that allows extension at specific points. The namespace for the PWG
762 Schema needs to remain constant and change infrequently to foster deployment. The namespace for the PWG
763 Schema will only change when aq major change is required that prevents upward or downward interoperability.
764 To accommodate minor updates each schema file contains the *schema* element with an attribute that specifies the
765 version. The *version* attribute will be incremented each time a PWG approved extension is added. Note that the
766 namespace does not change but by examining the schema file the exact version can be determined.

10.2 PWG Semantic Model and Schema Extension Process

768 Proposals for extensions will follow the following process:
769 1. Anyone can initiate a proposal for an extension by starting a discussion on the Semantic Model mailing list.
770 2. After there is some agreement on the mailing list for the suitability of the extension, the proposer creates a
771 proposal. Such a proposal should include:
772   • Status of the proposal, including previous reviews.

773   • A description of the requirement being met or the problem being solved.
774   • Description of thenes semantic element(s) or value(s).
775   • The exact text to be incorporated into the PWG Semantic Model specification at some future date.
776   • The exact XML Schema fragment to be included in the updated Schema
777   3.   To make the status of proposed extensions clear to PWG participants and others, the Maintenance Editor will
778   keep them in the ftp://ftp.pwg.org/pub/pwg/sm/proposed-registrations sub-directory
779   4.   All proposals must be published according to section 6 of this document.
780   5.   Reviews of proposed extensions may occur at a meeting or on the MAILING LIST.
781   6.   The proposal will undergo sufficient reviews and updates until, in the opinion of the SM Chair, there is rough
782   consensus that the proposal is ready for Last Call as described in section 8.1 followed by Formal Approval as
783   described in section 8.3.
784   7.   If, in the opinion of the SM Chair, the Last Call discussions and Formal Approval meet the voting requirements
785   described in section 1, the Maintenance Editor will move the approved extension to the
786   ftp://ftp.pwg.org/pub/pwg/sm/approved-registrations sub-directory and update the appropriate schema file.
787   The SM Chair will announce the Formal Approval and updates to the entire PWG via the PWG-ANNOUNCE
788   MAILING LIST.
789   8.   Periodically, the Maintenance Editor will incorporate the approved extensions, registrations and clarifications into
790   the PWG Semantic Model Specification. Such an updated version of the standard will have a new minor version
791   of the standard, along with a Change History Appendix that lists each change.
792
793

794   # 1011 Intellectual Property and Confidentiality

795   ## 10.111.1   Ownership of IP rights:

796   All patents, copyrights, or other intellectual property owned or created by any Member or member's affiliates
797   ("hereinafter "Member or Associate) outside the PWG or its work within the PWG shall remain the property of that
798   Member or Associate thereunderthere under and shall not be affected in any way by the Member or Associate's
799   participation in the PWG.
800
801   The PWG may, through its activities, generate intellectual property, and license such property to the Members and/or
802   Associates on reasonable and nondiscriminatory terms, conditions and prices; provided, however, that Members and
803   Associates receive more favorable pricing than non-Members or non-Associates.
804
805   All information and materials, and all copyrights thereto, contributed by Members and Associates and their
806   representatives and incorporated into a PWG Standard and Specification (here after "the Standard") shall be owned
807   by the contributing Member or Associate. The contributing Member or Associate shall grant PWG and its Members
808   and Associates an irrevocable license to use, reproduce, modify, distribute and sublicense the copyrighted work(s)
809   incorporated in the Standard on non-discriminatory basis and within reasonable terms and conditions.
810   Notwithstanding the above, any intellectual property independently created by a Member or Associate, but not
811   incorporated into a PWG standard, should remain the exclusive property of the original owner and no mandatory
812   license should be imposed.
813
814   Participants in the standard setting procedure shall disclose any known patents whose use would be required for
815   compliance with a proposed PWG standard. Prior to PWG's approval of the proposed standard, the PWG should
816   receive a written patent statement from the patent holder as described below in section 11.310.3.

817   ## 10.211.2   Intellectual Property Procedures

818   The PWG is not in a position to give authoritative or comprehensive information about evidence, validity or scope of
819   patents or similar rights, but it is desirable that any available information should be disclosed. Therefore, all PWG
820   members shall, from the outset, draw PWG's attention to any relevant patents (hereinafter defined) either their own

821 or of other organizations including their Affiliates (hereinafter defined) that are known to the PWG members or any of
822 their Affiliates, although PWG is unable to verify the validity of any such information.
823

824 • "Relevant Patents" means any issued or registered patent, without use of which a Proposed PWG Standard
825 cannot be practiced.
826 • " Proposed PWG Standard" means each proposal towards each PWG specification, which proposal is submitted
827 to PWG after the date of acceptance of these Procedures (hereinafter the Effective Date).
828 • "Affiliates or Associates," with respect to section 11.210.2, means any entity that as of the Effective Date directly
829 or indirectly is controlled by the PWG member, so long as such control exists, where "Control" means beneficial
830 ownership of more than fifty percent (50%) of the voting stock or equity in an entity.

831 10.311.3 Patent Statement

832 If a Proposed PWG Standard is submitted to the PWG, three different situations may arise with respect to the
833 relevant Patents:
834

835 (1) In the event the PWG Proposed Standard is adopted to become a PWG Standard, the patent holder waives his
836 rights under the Relevant Patents owned by him and hence, the Proposed PWG Standard is freely accessible to
837 everybody; no particular conditions, no royalties due, etc., with respect to such Relevant Patents. The PWG
838 Standard means any PWG specifications that are officially published by PWG after October 1, 1999.
839

840 (2) In the event a PWG Proposed Standard is adopted as a PWG Standard, the patent holder is not prepared to
841 waive his rights under the Relevant Patents owned by him but would be willing to grant licenses to other parties
842 on a non-discriminatory basis and on reasonable terms and conditions, provided a similar grant under the
843 licensee's patents within the scope of the license granted to the licensee is made available. Such license grants
844 are left to the parties concerned.
845

846 (3) In the event the Proposed Standard is adopted to become a PWG Standard, and the patent holder is not willing
847 to comply with the provisions of either paragraph 11.310.3 (1) or (2), in such a case the Proposal cannot be
848 established as a PWG Standard.
849

850 (4) Whichever option from among paragraphs 11.310.3 (1), (2) or (3) is chosen, any PWG member must provide a
851 written statement to be filed on behalf of itself and its Affiliates at the PWG secretariat with respect to the
852 Relevant Patents that are owned by the PWG member or any of its Affiliates and known to the PWG member or
853 any of its Affiliates. This statement must not include additional provisions, conditions, or any other exclusion
854 clauses in excess of what is provided for each case in paragraphs 11.310.3 (1), (2) and (3).
855

856 (5) If no Relevant Patents that are owned by the PWG member or any of its Affiliates are known to the PWG
857 member or any of its Affiliates, an affirmative disclosure to that effect must be submitted before the end of the
858 Patent Statement deadline in lieu of the Patent Statement. Any Relevant Patents that are owned by the PWG
859 member or any of its Affiliates and are found after the Patent Statement deadline are automatically subject to
860 either paragraph 11.310.3 (1) or (2) as described above.
861

862 (6) Format of Patent Statement/Patent Notice
863

864 (i) A Patent Statement should be submitted by all the PWG members for all Relevant Patents which are known
865 to the PWG members and their Affiliates and are owned by the PWG members or their Affiliate, providing the
866 following information:
867

868 1. Proposal Name
869 2. Organization: The organization that holds the patent which could include administrations, universities,
870 etc., and its contact address.
871 3. Tel. No.: The contact telephone number of the organization.
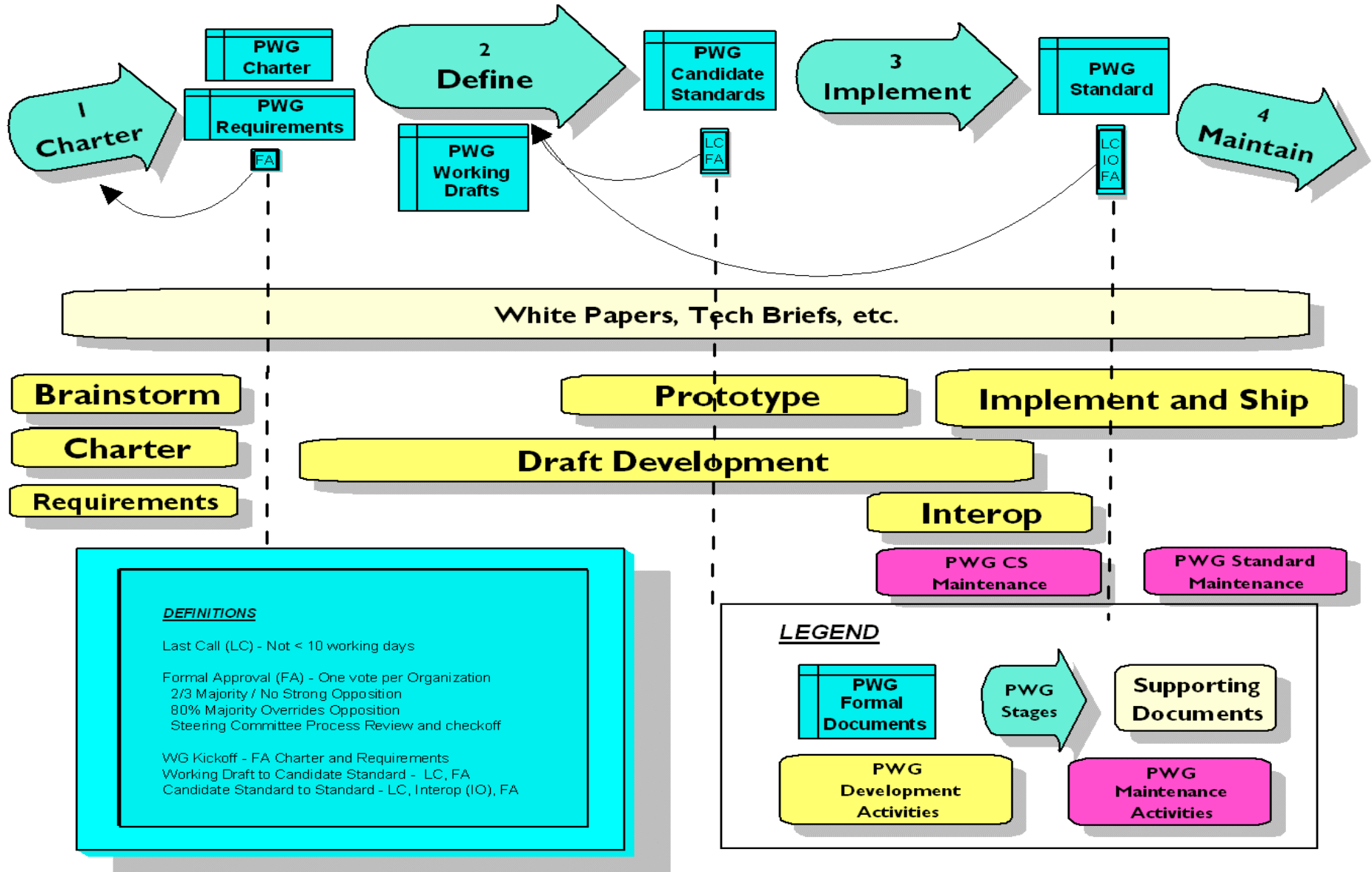872 4. Fax. No.: The contact fax number of the organization.

873   5. Patent Policy and Remarks: The declared patent policy of the organization in its communication to the
874   PWG. Most often the patent policy is given as "Pat. Policy. 11.310.3 (2)", which would mean that the
875   organization subscribes to paragraph 11.310.3 (2) of the PWG bylaws.
876   6. Patent Title: The title of a patent
877   7. Patent Number: The number of the patent.
878   8. Patent Country: The country in which the patent has been obtained. If the patent is held in several
879   countries, a list of those countries is given.
880   9. Signature: Signature of an authorized representative of the company.
881
882 (ii)   Further, a Patent Notice should be submitted by all the PWG members for Relevant Patents which are
883   known to the PWG members and their Affiliates and are not owned nor controlled by the PWG members or
884   their Affiliate, providing the following information:
885
886   1. Proposal Name
887   2. Organization: The organization that holds the patent which could include administrations, universities,
888   etc., and its contact address.
889   3. Patent Title: The title of a patent
890   4. Patent Number
891   5. Patent Country: The country in which the patent has been obtained. If the patent is held in several
892   countries, a list of those countries is given.
893   6. Signature: Signature of a representative of the company
894
895 (7) All members must submit a written patent statement according to section 11.310.3(6) between the proposal
896   deadline and the commencement of voting period.

10.411.4   Non-Confidentiality.

898 The participation in the PWG by the Members and the Associates and their appointed representatives shall be on a
899 non-confidential basis; however, a PWG Member may with the approval of the Steering Committee, wherein such
900 approval shall not be unreasonably withheld, enter into written confidentiality agreements with all other PWG
901 Members which restricts the dissemination of specified confidential information and/or materials provided by any of
902 such Member, to Persons who are not Members or Associates.
903
904 Subject only to valid patents and copyrights, all PWG Members and Associates shall be free to use all information
905 received or publicly disclosed from the PWG, its Members or Associates in connection with the normal business
906 including the processes described herein, without obligation regardless of markings including but not limited to
907 "Proprietary" or "Confidential."
908

909   **11~~11~~12 PWG Process Diagram**

Brainstorm

Charter

Requirements

White Papers, Tech Briefs, etc.

Prototype

Implement and Ship

Draft Development

Interop

PWG CS Maintenance

PWG Standard Maintenance

DEFINITIONS

Last Call (LC) - Not < 10 working days

Formal Approval (FA) - One vote per Organization
  2/3 Majority / No Strong Opposition
  80% Majority Overrides Opposition
  Steering Committee Process Review and checkoff

WG Kickoff - FA Charter and Requirements
Working Draft to Candidate Standard - LC, FA
Candidate Standard to Standard - LC, Interop (IO), FA

LEGEND

PWG Formal Documents

PWG Stages

Supporting Documents

PWG Development Activities

PWG Maintenance Activities

910

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