

1



2

3

4

5

6

7

8

9

10

Standards Development Process

11

12

13

Version 1.2

14

15

March 8, 2006

16

17

Approved by the EPCglobal Board of Governors

18

19

20

21

22

Copyright Notice

© 2006, EPCglobal Inc.

23

24

All rights reserved. Unauthorized reproduction, modification, and/or use of this document is not permitted. Requests for permission to reproduce should be addressed to epcglobal@epcglobalinc.org.

25

26

27

Disclaimer

EPCglobal Inc.™ is providing this document as a service to interested industries. This document was developed through a consensus process of interested parties. Although efforts have been to assure that the document is correct, reliable, and technically accurate, EPCglobal Inc. makes NO WARRANTY, EXPRESS OR IMPLIED, THAT THIS DOCUMENT IS CORRECT, WILL NOT REQUIRE MODIFICATION AS EXPERIENCE AND TECHNOLOGICAL ADVANCES DICTATE, OR WILL BE SUITABLE FOR ANY PURPOSE OR WORKABLE IN ANY APPLICATION, OR OTHERWISE. Use of this document is with the understanding that EPCglobal Inc. has no liability for any claim to the contrary, or for any damage or loss of any kind or nature.

28

29

30

31

32

33

34

35

36

EPCglobal STANDARDS DEVELOPMENT PROCESS

39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85

TABLE OF CONTENTS

1	OVERVIEW	3
1.1	NATURE OF THE ORGANIZATIONAL MODEL	3
2	ORGANIZATIONAL STRUCTURE.....	4
2.1	ORGANIZATIONAL CHART	4
3	GOVERNANCE	6
3.1	BOARD OF GOVERNORS.....	6
3.2	PRESIDENT, EPCGLOBAL	7
3.3	STEERING COMMITTEE.....	9
3.4	ACTION GROUPS	12
3.5	WORKING GROUPS	15
3.6	WORKING GROUP SUBCOMMITTEES.....	17
3.7	OTHER PARTICIPANTS	19
3.8	APPROVAL AND RATIFICATION PROCESS OVERVIEW	21
4	GENERAL POLICIES FOR EPCGLOBAL MEMBERS/MEETINGS	22
4.1	ANTI-TRUST CAUTION	22
4.2	MEMBER IN GOOD STANDING	23
4.3	CODE OF CONDUCT	23
4.4	DECISION MAKING PROCESS	24
4.5	APPEALS.....	27
4.6	TELECONFERENCES AND PHYSICAL MEETINGS	27
5	EPCGLOBAL STANDARD DEVELOPMENT PROCESS.....	29
5.1	OVERVIEW	29
6	SUBMISSION TRACK.....	30
6.1	SUBMISSION TRACK OVERVIEW	30
6.2	STEP 1: REQUIREMENTS DEFINITION.....	31
6.3	STEP 2: ARCHITECTURE ASSESSMENT.....	33
6.4	STEP 3: STANDARDS REQUIREMENTS AND PLAN.....	34
7	STANDARDS TRACK	35
7.1	STANDARDS TRACK OVERVIEW	35
7.2	STEP 4: WORKING GROUP FORMATION	36
7.3	STEP 5: INITIAL STANDARDS DEVELOPMENT	38
7.4	STEP 6: ACTION GROUP REVIEW	41
7.5	STEP 7: VALIDATION PROTOTYPE AND TEST.....	43
7.6	STEP 8: STEERING COMMITTEE REVIEW.....	45
7.7	STEP 9: BOARD OF GOVERNORS RATIFICATION	47
8	ENHANCEMENT REQUEST (ER) PROCESS.....	48
8.1	ENHANCEMENT REQUEST OVERVIEW	48
8.2	TYPES OF ENHANCEMENT REQUESTS (ER).....	49
8.3	REVIEWS AND APPROVALS.....	49
8.4	ERRATA PROCESSING	49
8.5	ER PROCESS FLOW.....	50
8.6	STEP A – SUBMISSION.....	51
8.7	STEP B - ASSESSMENT	52
8.8	STEP C - ASSESSMENT REVIEW	52

EPCglobal STANDARDS DEVELOPMENT PROCESS

86	8.9	STEP D - SUBMISSION TRACK	53
87	8.10	STEP E - STANDARDS TRACK	53
88	8.11	STEP F - PUBLISH	53
89	8.12	QUESTIONS AND ANSWERS	53
90	9.	VERSIONING METHODOLOGY	54
91	10	ALTERNATIVE CHARTER CREATION AND EXISTING CHARTER AMENDMENT	
92	PROCESS		55
93	10.1	ALTERNATIVE NEW CHARTER CREATION	56
94	10.2	PROCESS TO SUPPLEMENT AN EXISTING CHARTER.....	57
95	11	PROCESS FOR CHANGING SDP STANDARDS DOCUMENT.....	58
96	APPENDIX 1 - REFERENCES/DEFINITIONS		59
97	APPENDIX 2 - EPCGLOBAL INTELLECTUAL PROPERTY POLICY		63
98	APPENDIX 3 - WORKING GROUP OPT-IN AGREEMENT		69
99	APPENDIX 4 – SDP AT-A-GLANCE.....		71
100	APPENDIX 5 – FORMS AND TEMPLATES		73
101	APPENDIX 6 EPCGLOBAL CONTRIBUTION DECLARATION		74
102	MAKING OF CONTRIBUTION		74
103	RIGHTS IN CONTRIBUTIONS.....		74
104	APPENDIX 7 IP DECLARATION.....		76

105

106 1 OVERVIEW

107 The EPCglobal Standards Development Process is a user driven standards process for the
108 development of technical standards. Although many elements will be very familiar, this
109 standards organization and process is a necessary hybrid and will not look exactly like any
110 other standards organization.

111

112 EPCglobal is chartered with developing and driving the adoption of technical standards
113 pertaining to the EPCglobal Network.

114

115 1.1 Nature of the Organizational Model

116

117 EPCglobal, like its parent organizations, GS1 US and GS1, aims to be highly user and
118 participant Action and Working Group driven, while including various “management roles”
119 (i.e. Group Chairs, Steering Committees, EPCglobal staff, and the EPCglobal Board) that
120 are designed to ensure the integrity of the total system and make the organization function
121 effectively and efficiently.

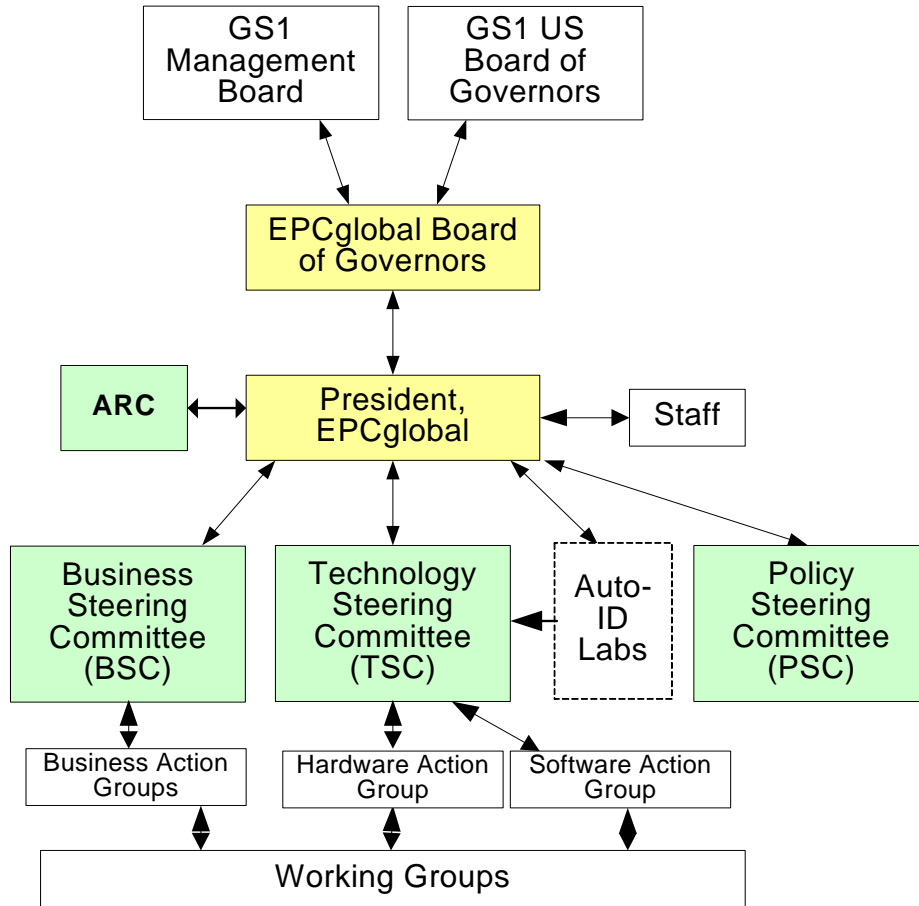
122

123 To implement this intent, the design calls for the Action and Working Groups to develop and
124 approve EPCglobal Network requirements and standards related to the subjects each Group
125 is chartered to cover, with final approval subject to subsequent review for implications on
126 parts of the EPCglobal Network that are outside the Group’s scope and on other variables
127 such as intellectual property (IP) governance. The various “management roles” are aimed at
128 providing the cross-Network and IP review and confirmation as part of final ratification. In
129 addition, they set up and govern the specific organization required to fulfill EPCglobal's
130 mission.

131
132
133
134

2 ORGANIZATIONAL STRUCTURE

2.1 Organizational Chart



135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153

EPGlobal Board of Governors

Governing body for EPCglobal standards.

President, EPCglobal

Executive leader responsible to the EPCglobal Board of Governors and to the CEOs of GS1 US and GS1.

EPGlobal Staff

The EPCglobal organization will maintain a staff focused on facilitating the development and recommendation of technical standards, managing public policy, marketing and communications, and administration.

Architecture Review Committee (ARC)

Standing committee reporting to the EPCglobal President that helps to evaluate and prioritize requirements affecting the overall EPCglobal Reference Architecture: May serve as a technical resource to the EPCglobal Board of Governors

154 **Business Steering Committee (BSC)**

155 Steering committee for all Business Action Groups and Working Groups working on End
156 User requirements and adoption activities, representing distinct user group communities and
157 industry verticals.

158

159 **Policy Steering Committee (PSC)**

160 Steering committee for all Action Groups and Working Groups working on general public
161 policy issues (e.g. privacy).

162

163 **Technology Steering Committee (TSC)**

164 Steering committee for all Action Groups and Working Groups working on software,
165 hardware or technical activities.

166

167 **Action Group**

168 Action Groups provide the business and technical perspective to support the Standards
169 Development Process. The Business Action Group identifies business needs, gathers
170 business requirements, and develops consensus on best practices. The Technical Action
171 Group facilitates the development of technical standards, based on business requirements.

172

173 **Working Group**

174 Working Groups are the primary means by which the Action Groups conduct their business.
175 A Working Group is composed of a subset of Action Group members (possibly including
176 members from multiple Action Groups), which convenes to carry out a specific task as
177 chartered by an Action Group.

178

179 **Auto-ID Labs**

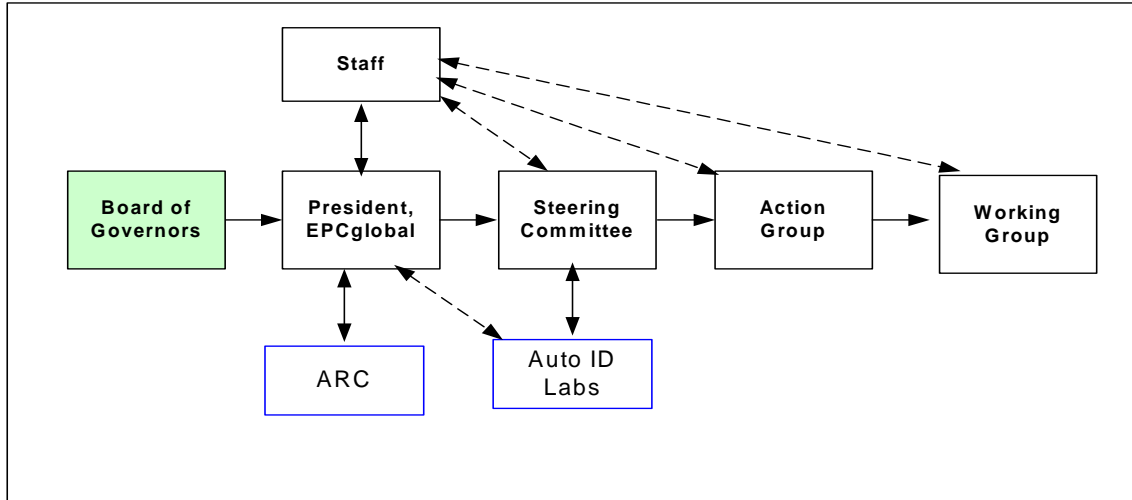
180 Transitioned from Auto-ID Center, academic entity headquartered at MIT chartered to
181 research and develop EPCglobal Network technologies and applications.

182

183
184
185
186
187

3 GOVERNANCE

3.1 Board of Governors



188
189

3.1.1 Role

- Ratification of EPCglobal Network standards.
- Set strategic direction for EPCglobal Network functionality and adoption.
- Trustee for the MIT-licensed intellectual property of EPCglobal.

194
195

3.1.2 Formation

- A Nominating Committee of the Board of Governors proposes candidates for the Board who are then recommended by the full Board of Governors to the Boards of GS1 and GS1 US for election to the EPCglobal Board of Governors.
- The Nominating Committee shall give due consideration to appropriate criteria and qualifications for suitable candidates, which may include, but are not limited to
 - Geographic diversification
 - Broad multi-industrial sector representation
 - Early support and adoption of EPC technologies
 - Affiliation with companies which have adopted EPC technologies
 - Affiliation with those research organizations instrumental in the development of EPC technologies
- Board members are limited to two consecutive three-year terms.

208
209

210

3.1.3 Composition

211

- Board members (other than the President, EPCglobal) will consist of representatives from End User companies as well as GS1 Member Organizations.

212

213

- Executive members from both GS1 US and GS1 (through the GS1 Management Board and the GS1 US Board of Governors).

214

215

- EPCglobal Board of Governors members (other than the President and GS1 Member Organization representatives) must be Subscribers of EPCglobal in good standing. Each can serve at most two consecutive three-year terms, with approximately one-third of the Board elected each year.

216

217

218

219

- Corporate Officers are the President, a Chairman and two (2) Vice Chairmen who shall be selected from the members of the Board.

220

221

- The Chairman of the Board shall serve for a two (2) year term and may serve no more than two consecutive terms. It is anticipated that one of the two Vice Chairmen of the Board will succeed to Chairman at the end of his/her term or upon resignation.

222

223

224

225

3.1.4 Staff Support Resources

226

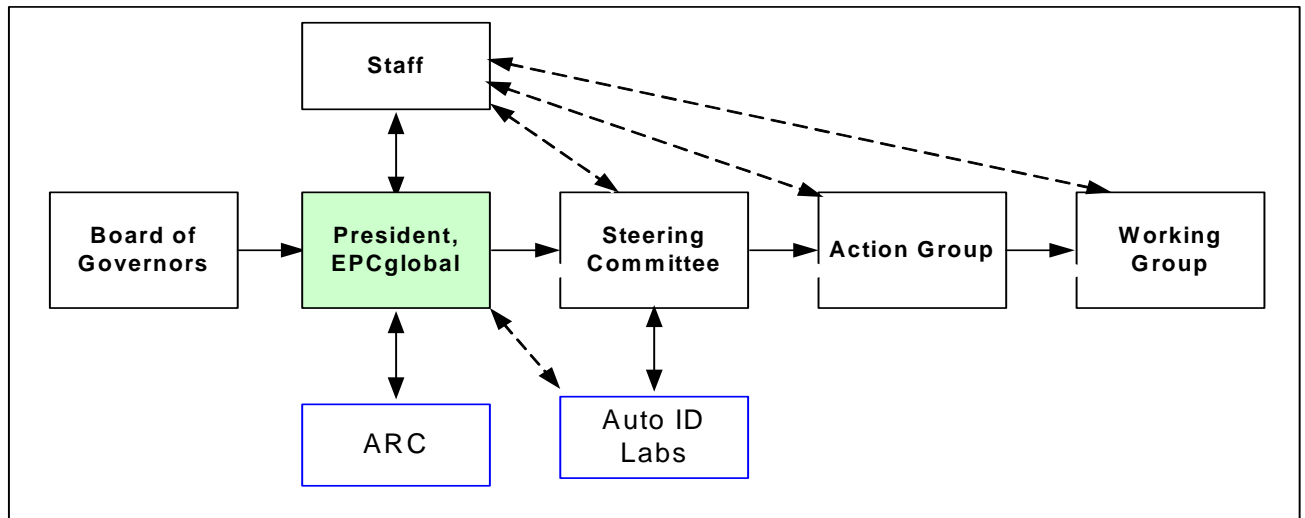
- President, EPCglobal, EPCglobal staff and other resources as needed.

227

228

3.2 President, EPCglobal

229



230

231

232

3.2.1 Roles

233

- Accountable for key strategic directives determined by the Board of Governors.

234

- Communicates EPCglobal Board of Governors strategic direction to the organization in terms of priorities and new initiatives.

235

236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261

- Annually reviews Standards Development Process for potential process updates and recommends changes to the EPCglobal Board of Governors as appropriate.
- Oversees the review of published EPCglobal standards on an annual basis for ongoing use and accuracy.
- Responsible for coordinating with the Director of the Auto-ID Labs to integrate Auto-ID Labs into the Standards Development Process at appropriate points. This may include expediting the development of certain technologies, and suggesting the need for technical support for the development of Use Cases by the Business Action Groups and further refinement and development supporting the activities of the Technical Action Groups.
- Liaises with leadership of other standards bodies. This might include the leadership of standards organizations serving a particular vertical sector, or other national or international standards organizations (ex: ANSI MH10 or ISO).
- Actively consults with, advises and leads at all levels of the EPCglobal standards development and adoption process.
- Reviews standards requests in terms of alignment with the strategic direction of the EPCglobal Board, community priority, resources, implementation commitments, etc. in the framework of the EPCglobal Standards Development Process.
- Names new BSC or TSC Action Groups as necessary, including new BSC vertical or horizontal industry Action Groups.
- Ratifies proposed Charters of Action Groups.
- Appoints Chair and two other representatives from EPCglobal to Architecture Review Committee.
- Creates ad hoc Action Groups or advisory groups as appropriate.

262 **3.2.2 Formation**

263
264
265

- The President, EPCglobal is hired by and reports directly to the EPCglobal Board of Governors and to the CEOs of GS1 US and GS1.

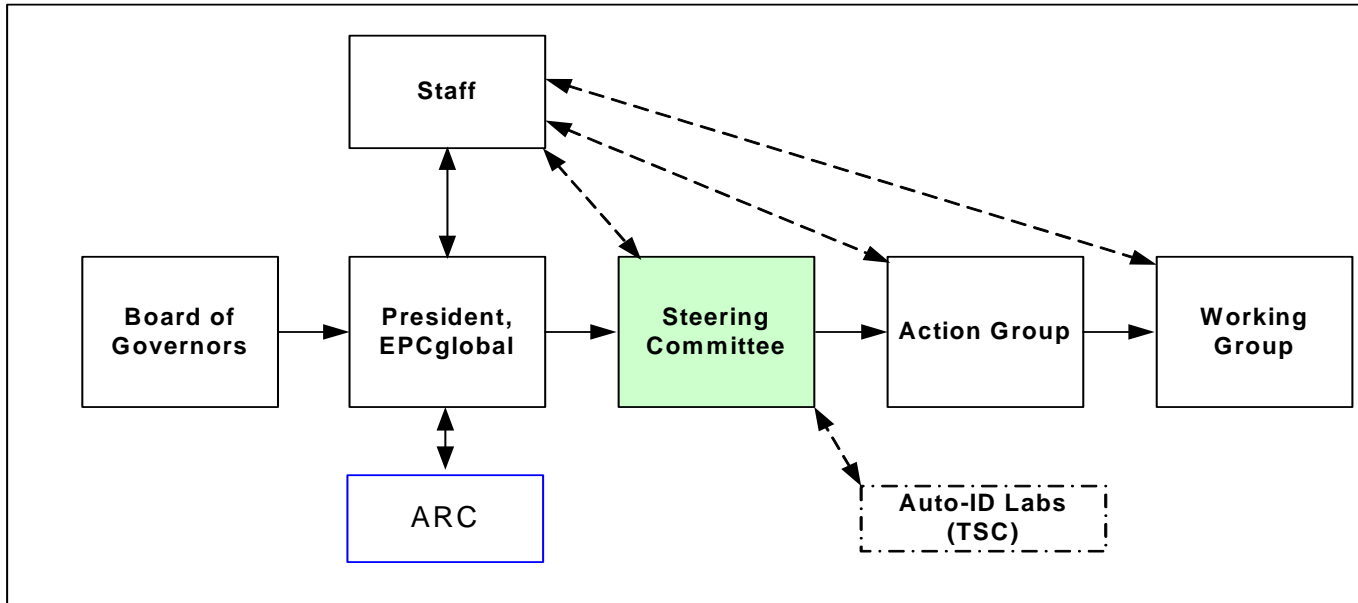
266 **3.2.3 Staff Support Resources**

267
268
269
270
271
272
273

- The President, EPCglobal will have staff resources at the EPCglobal Joint Venture level and will also have access to EPCglobal US and other GS1 Member Organization EPCglobal resources.
- EPCglobal Standards Director assists EPCglobal President in management of overall process.
 - Appoints Chief Editor of Standards Development Process (this document).

274
275

3.3 Steering Committee



276
277

3.3.1 Role

278
279
280

All Steering Committees

281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296

- Address issues affecting multiple Business and/or Technical Action Groups
- Focus on cross-Action Group issues with respect to standards requests and technical standards evaluation.
- Oversee Action Groups through Co-Chair reports, and ensure work is on time and within Charter.
- Reviews Action Group Charters for ratification by President, EPCglobal.
- Reviews, rationalizes, and ratifies Working Group Charters.
- Agrees on specific deadlines (if default process deadlines are not applicable).
- In addition to the Action Group themselves, can determine needs for specific Working Groups and recommend/recruit Working Group leads and participants.
- Responsible for reviewing and addressing EPCglobal Enhancement Requests pertaining to SDP process changes (contents, version and schedule of release). Based on Steering Committee recommendations, EPCglobal will release major or minor updates to SDP. It is expected Steering Committees will formally address SDP process requests at least once a year and produce a recommendation for changes.

Business Steering Committee (BSC)

297
298
299
300
301
302
303
304

- Identifies and addresses cross-BAG areas of synergy or conflict. These could include matters of priority, resourcing, or content/deliverables.
- Advises the President, EPCglobal on strategic End User priorities.
- Final review and recommendation of technical standards to be ratified by Board of Governors.
- Initial review and prioritizing standards requests (End User business requirements communicated through Use Cases and other requirements documents) for

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 305 forwarding to President, EPCglobal, who then forwards as appropriate to the
306 Architecture Review Committee (ARC).
307 • Makes recommendations to President, EPCglobal on formation of additional
308 Business Action Groups.
309

310 Technical Steering Committee (TSC)

- 311 • Initial review of ARC standards requests and functional requirement statements
312 (Technical Feasibility Assessments).
313 • Ensures that the proposed technical solution is consistent with the EPCglobal
314 Network principles, vision and architecture.
315 • Propose standards development activities based on general technology
316 requirements.
317 • Assigns technical development tasks to specific TSC Action Groups or Auto-ID Labs.
318 • Advises the President, EPCglobal and the ARC on strategic technical initiatives.
319 • Makes recommendations to President on formation of additional TSC Action Groups.
320

321 Public Policy Steering Committee (PPSC)

- 322 • Advises the President, EPCglobal on strategic public policy priorities.
323

324 **3.3.2 Formation**

- 325 • Steering Committees are specifically chartered by the EPCglobal Board of
326 Governors.
327 • The President, EPCglobal will appoint one member of each Steering Committee as
328 Chair of that Steering Committee.
329

330 **3.3.3 Composition**

- 331 • All Steering Committees include the Chairs or co-Chairs of the Action Groups under
332 their committee.
333 • The TSC will also be composed of a representative from Auto-ID Labs and
334 EPCglobal.
335 • The BSC will be composed of the co-Chairs of all (existing and future) Business
336 Action Groups plus an EPCglobal representative.
337

338 **3.3.4 Chair Role**

339 Steering Committee Chairs roles and responsibilities fall in three categories:

- 340 a. Process
- 341 ▪ The Chairs monitor the progress of standards development within
342 their respective Steering Committees and ensure that a due process
343 is followed
 - 344 ▪ Liaise and work together with other Steering Committees (and ARC)
345 to resolve cross Action Group issues pertaining to standards or
346 enhancement requests
 - 347 ▪ Steering Committee Chairs will operate by Consensus with other
348 members of their Steering Committee.
- 349 b. Operation

EPCglobal STANDARDS DEVELOPMENT PROCESS

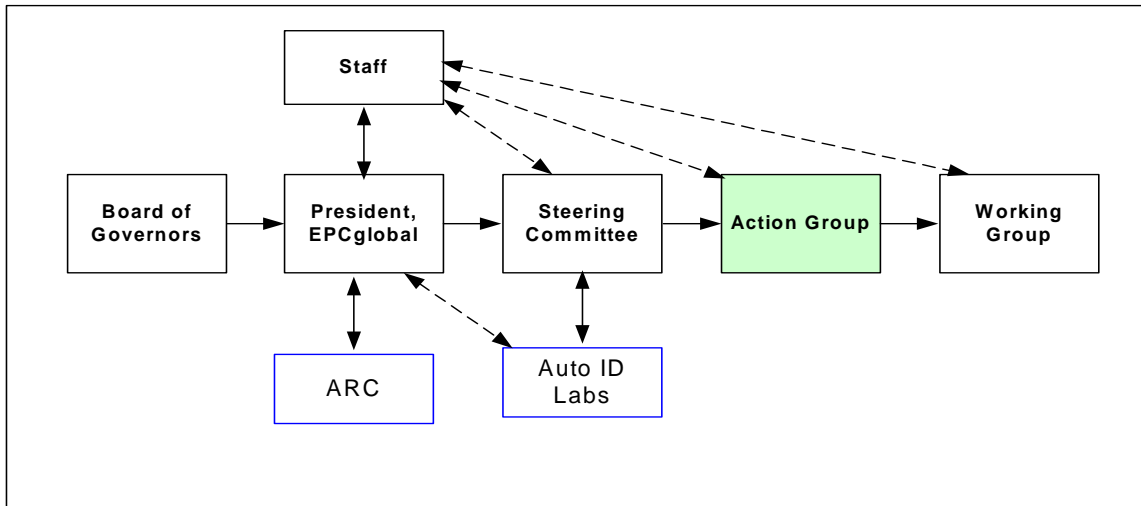
- 350 ▪ Convene regular meetings and conference call of the Steering
- 351 Committees
- 352 ▪ The Chairs manage the work structure and work load of their Steering
- 353 Committee
- 354 ▪ The Chairs report to President, EPCglobal on progress of standards
- 355 development of their respective Steering Committees
- 356 ▪ The Chairs will update their respected Action Groups on the work
- 357 Steering Committee work
- 358 ▪ The Chairs (and other members of the Steering Committee) will
- 359 respect confidentiality and privacy for subjects that warrant it
- 360 c. Planning
- 361 ▪ The Chairs working with EPCglobal and other Steering Committees
- 362 will plan the workload (either for new standards, enhancement
- 363 requests or other work) for their Steering Committee
- 364 ▪ The Chairs will champion the work plan to the rest of EPCglobal
- 365 subscribers
- 366 d. Grounds for removing a Chair from his or her position:
- 367 ▪ A Steering Committee Chair may be removed from his or her position
- 368 as the result of conduct or activities not in keeping with the SDP.
- 369 Removal shall be at the recommendation of the EPCglobal President,
- 370 with the voted approval of the EPCglobal Board of Governors.
- 371 ▪ Activities that are grounds for removal may include but are not limited
- 372 to:
- 373 1. Allowing multiple lapses in conducting conference calls
- 374 and/or allowing Charter milestones to continually slip
- 375 without taking appropriate actions.
- 376 2. Acting without the approval of EPCglobal legal counsel
- 377 in cases where such approval is required by the SDP.
- 378 3. Conduct inconsistent with the consensus-based
- 379 principles outlined in the SDP.
- 380

381 **3.3.5 Staff Support Resources**

- 382 • President, EPCglobal and one EPCglobal staff each for the BSC, TSC and PPSC.

383
384
385

3.4 Action Groups



386
387

3.4.1 Role

Business Action Group (BAG)

391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413

- Participants agree to comply with the EPCglobal Participation Framework, with the exception of signing the IP Policy.
- Members of the Business Action Group(s) are required to be EPCglobal subscribers in good standing.
- Members of Business Action Group(s) are required to actively participate and contribute to Action Group deliverables.
- Develop mechanisms to promote adoption and implementations of EPCglobal Network standards in their respective industry verticals or horizontals.
- Develop Use Cases or other business requirement documents that demonstrate a specific business application or performance requirement of the EPCglobal Network.
- Create and submit vertical (or horizontal) industry-specific standards development (and change) requests in the form of Use Cases and other business requirements documents to the BSC.
- Review and approve technical specifications against Business Action Group Use Case and other business requirement document submissions. Make recommendations to BSC to send technical specifications to be forwarded for ratification by the EPCglobal Board of Governors.
- Create BAG Working Groups as needed that conform to the specific mission of defining End User requirements and developing appropriate specifications and driving industry adoption of the EPCglobal Network standards.
- Approve the Charters for each BAG Working Group.
- Oversight of BAG Working Group(s) to ensure they are on time and within the scope of the Charter developed.

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 414 • Business Action Groups will operate under the principle of Consensus except for
- 415 election of Chairs, ratification of Use Cases, and ratification of technical
- 416 specifications. Only End User companies will have the right to vote in Business
- 417 Action Groups.
- 418 • Each End User company is to designate its voting member and register their name
- 419 with the EPCglobal staff facilitator.
- 420 • Conduct Business Action Group Chair and co-Chair elections.

421

422 Technical Action Groups

- 423 • Participants agree to comply with the EPCglobal Participation Framework, including
- 424 the EPCglobal IP Policy.
- 425 • Members of Technical Action Group(s) are required to be EPCglobal members in
- 426 good standing.
- 427 • Works in concert with Business Action Groups to assess technical impact of
- 428 business requirements.
- 429 • Coordinate resolution between Technical Action Groups on technical issues that may
- 430 span software and hardware.
- 431 • Ensure that group sessions of Action Groups or specification reviews are adequately
- 432 documented for all written/electronic comments, as well as verbal comments,
- 433 including which Participant made contributions that could be used in a revision to a
- 434 specification. All contributions from Action Groups or from Participants outside a
- 435 named Working Group must be evaluated by the Working Group for their contribution
- 436 to the specification being reviewed. If the contribution is accepted by the Working
- 437 Group, the contributing Participant must sign a Contribution (Invited Expert)
- 438 Agreement (TBD) assigning the IP related to that Contribution to the specification in
- 439 question.
- 440 • Creates TAG Working Groups to appropriately deliver technical specifications for
- 441 EPCglobal Network components for business Use Cases and other directives
- 442 forwarded by the TSC.
- 443 • Oversight of TAG Working Group(s) to ensure they are on time and within the scope
- 444 of the Charter developed.
- 445 • Technical Action Groups will operate under the principle of Consensus, except where
- 446 voting situations apply i.e., for election of Chairs and ratification of technical
- 447 specifications to be delivered to BSC.
- 448 • Each company is to designate its voting member and register their name with the
- 449 EPCglobal staff facilitator.
- 450 • Conduct Technical Action Group Chair and co-Chair elections.

451

452 **3.4.2 Formation (Business and Technical Action Groups)**

- 453 • Action Groups are created and approved through the direction of the President,
- 454 EPCglobal acting on behalf of the EPCglobal Board of Governors.
- 455 • New Action Groups can be proposed to respective Steering Committees for review
- 456 by President, EPCglobal on behalf of the EPCglobal Board of Governors.
- 457 • For a new vertical or horizontal Business Action Group to form, Participants must
- 458 represent a simple majority of the economic value of a particular vertical or horizontal
- 459 industry (as determined from public data sources), and commit (via CEO or Board) to
- 460 EPCglobal Network implementations within 12 months of Action Group formation. A
- 461 sub-set of EPCglobal Subscribers who want to create a new vertical or horizontal

EPCglobal STANDARDS DEVELOPMENT PROCESS

462 Business Action Group will need to develop and present a proposal which will
463 include the economic value and the relative percentage represented by the proposed
464 membership.
465

466 **3.4.3 Composition**

467 Business Action Groups

- 468 • EPCglobal Subscriber organizations (End Users and Solution Partners) may assign
469 representatives to any vertical (or horizontal) Action Group that falls within that
470 organization's business scope.
- 471 • Subscriber organizations are encouraged to designate their senior EPC Network
472 implementation and solution experts as their primary Action Group Representatives.
473 This includes senior strategy, supply chain and IT experts, where appropriate.
474

475 Technical Action Groups

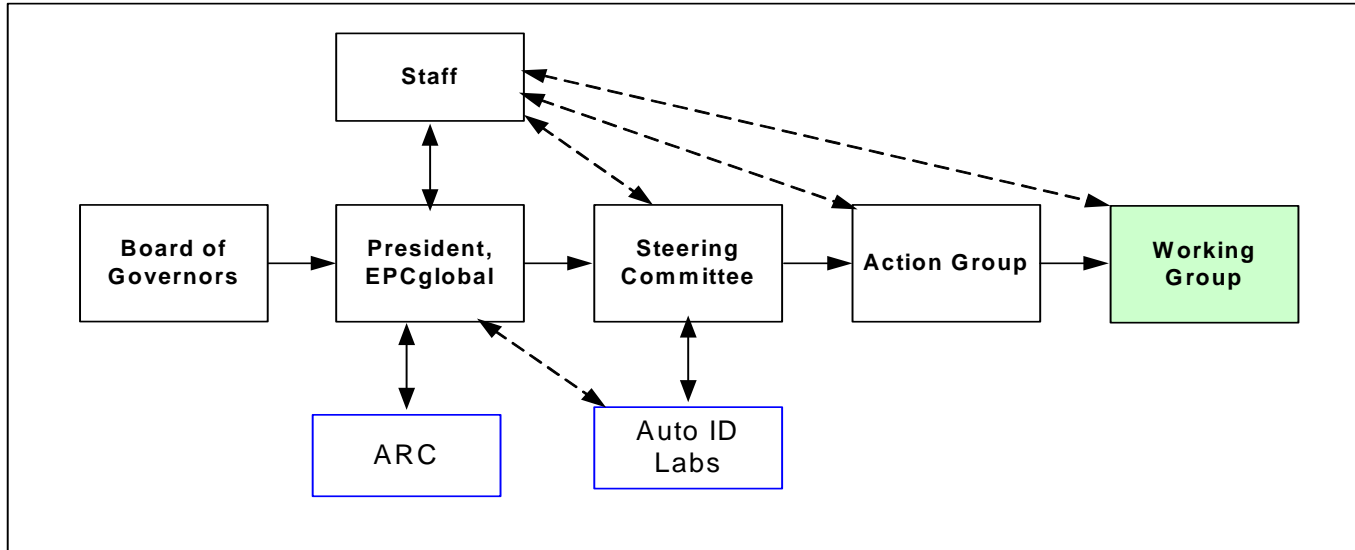
- 476 • For a company to become a member of and participate in Technical Action Groups,
477 they must sign the EPCglobal Intellectual Property Policy.
- 478 • EPCglobal Subscribers (End User and Solution Partner) may assign representatives
479 to any Technical Action Group that falls within that organization's ability to contribute
480 technical expertise.
- 481 • Subscriber organizations are encouraged to designate appropriate technology
482 experts who can provide the most positive impact on the development of technical
483 standards and technology surrounding the EPCglobal Network.
- 484 • Members of Technical Action Groups must opt into a TAG Working Group before
485 participating in activities associated with that Working Group, per the Intellectual
486 Property policy.

487 **3.4.4 Staff Support Resources**

- 488 • One EPCglobal staff facilitator for all constituted Action Groups.
- 489 • EPCglobal staff ensures that all deliverables adhere to EPCglobal Standards
490 Development Process.
- 491 • EPCglobal staff facilitator is responsible for keeping the "official" list of EPCglobal
492 Staff, and Subscribers who have signed the IP Policy on the EPCglobal website.
493
494

495
496
497
498

3.5 Working Groups



499
500
501
502
503
504

There are two types of Working Groups

1. Working Group (WG) that is chartered by one Action Group
2. Joint Working Group (JWG) that is chartered by two or more Action Groups

505

3.5.1 Role

506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522

- Participants agree to comply with the EPCglobal Participation Framework (the BAG Working Groups are required to sign the EPCglobal IP policy and may be requested to Opt-In.
- Members of Working Groups are required to be members in good standing.
- Working Group membership is closed two weeks (14 days) prior to LCWD declaration. Membership is re-opened after either (a) the LCWD has been promoted to Candidate Status, or (b) the LCWD has been rejected by a vote of the corresponding Action Group and the Action Group co-Chairs reopen the Working Group to new members.
- BAG Working Groups deliver specific work product or reports to support the delivery of End User business requirements and/or driving of EPCglobal Network adoption. In some cases a BAG Working Group may develop a use case that may become a normative document i.e. it will be ratified by EPCglobal Board as a standard)
- TAG Working Groups create drafts or revisions to drafts of specifications and other documents as identified by their Charters.
- Working Groups develop, communicate, and secure ratification of Working Group Charters based on approval of the Business and Technical Action Group co-Chairs.

- 523 • Working Groups will operate under the principle of Consensus.
- 524 • Chair or Co-Chairs are responsible that each meeting or conference call must have
- 525 minutes produced within two weeks of the meeting or call. Minutes shall be
- 526 distributed to all Working Group Participants and kept as part of the permanent
- 527 record.
- 528 • Agendas shall be produced and circulated at least two days prior to working group
- 529 conference calls and at least one week prior to face-to-face meeting. Approved
- 530 agendas shall be kept part of the permanent Working Group record.
- 531 • EPCglobal facilitator helps with processing issues relating to agenda and minutes
- 532 distribution, while WG co-Chairs and participants are responsible for developing or
- 533 capturing documented content.
- 534 • Members of a Working Group shall not distribute working drafts or non-ratified
- 535 specifications to individuals/organizations that are not opted-in. Distribution of
- 536 Working Groups' documents is normally the responsibility of the WG Co-Chair or
- 537 EPCglobal facilitator.

538 **3.5.2 Formation**

- 539 • Working Groups are formed by the Action Groups as needed to support the needs of
- 540 the Action Groups.
- 541 • Charters are documents created to form Working Groups. Charters contain the
- 542 scope and timetable for deliverables created per the SDP. Any exclusion to the
- 543 documented SDP deliverables shall also be documented in the Charter. For
- 544 example, if a Working Group's charter was to create a ratified standard and
- 545 EPCglobal has decided that Certification is not required, then the charter should
- 546 specify that the Working Group will not be creating Conformance Requirements.
- 547 • Draft charters for new Working Groups in a BAG or TAG can be created by the
- 548 Action Group co-Chairs. If User Requirements are available from a BAG, then TAG
- 549 co-Chairs may create new charters.
- 550 • If no specific User Requirements are available, a TAG may create charters based on
- 551 the Alternative Charter Creation method in Section 10 of this document.
- 552 • Action Group co-Chairs may direct a small subgroup from the pool of participants
- 553 within the Action Group's existing WGs to help draft a new or modified charter,
- 554 whether there are user requirements available or not.
- 555 • Action Group Co-Chairs approve the charter for each Working Group. Approved
- 556 charters are ratified by the Steering Committees, both Business and Technical
- 557 Steering Committees.

558

559 **3.5.3 Composition**

- 560 • Working Groups shall be composed of EPCglobal Subscribers and EPCglobal staff
- 561 resources.
- 562 • All members of the Working Group must have the requisite expertise to achieve
- 563 Chartered deliverables. A required skills description will be included in each Working
- 564 Group Charter.
- 565 • Members of Working Groups in Action Groups under the TSC and the BSC must
- 566 sign specific Working Group Opt-In agreements prior to participation (see Appendix
- 567 2).
- 568

569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593

3.5.4 Leadership

- Working Group Chairs or co-Chairs shall be appointed by the Action Group co-Chairs with consideration given to expertise, leadership abilities and commitment to Consensus, diversity and geography.
- Working Group (co-) Chairs are responsible for delivering Working Group Charters, defining work methods, and directing the administration of the Working Group.
- For Joint Working Group:
 - Joint Working Group Chairs or co-Chairs shall be appointed by the sponsoring Action Groups co-Chairs with consideration given to expertise, leadership abilities and commitment to consensus, diversity and geography.
- It is possible for the Working Group to have more than 2 co-chairs (in case where there are 3 BAGs there will be 3 co-chairs, one from each BAG)
- Joint Working Group (co-) Chairs are responsible for delivering Working Group Charters, defining work methods, and directing the administration of the Joint Working Group. There are also primary liaisons to their respective AGs.
- Grounds for removing a Working Group Chair from his or her position:
 1. Documented participation in activities that pose a conflict of interest to the work of EPCglobal, such as the development of competing standards
 2. Allowing multiple lapses in conducting conference calls and/or allowing Charter milestones to continually slip without taking appropriate actions.
 3. Working Group Chair removal shall be determined by recommendation of EPCglobal Facilitator and the Action Group co-Chairs. Recommendation to remove co-Chairs shall require the two thirds majority approval of TSC or BSC participants.

594
595
596
597
598
599
600
601
602
603
604
605
606

3.5.5 Staff Support Resources

- One EPCglobal staff facilitator for all constituted Working Groups under a particular Action Group.
- EPCglobal staff ensures that all deliverables adhere to EPCglobal guidelines.
- EPCglobal staff facilitator is responsible for keeping the “official” list of EPCglobal Subscribers, EPCglobal Subscribers who have signed the IP Policy, and Subscribers who have signed Working Group specific Opt-in agreements on the EPCglobal website.
- EPCglobal staff facilitator is responsible for making sure that the Standards Development Process is followed.

3.6 Working Group Subcommittees

607
608
609
610
611
612
613
614

3.6.1 Formation

Subcommittees are formed by Working Groups to support the needs of the Working Group. The Working Group co-Chairs shall define the Subcommittee deliverables and timeline.

Subcommittees shall automatically expire at the end of their defined timeline, unless granted an explicit extension by the co-Chairs of the parent Working Group. Under no circumstances shall a Subcommittee outlive its parent Working Group.

615 **3.6.2 Composition**

616

617 Subcommittee members shall be drawn from those members of the parent Working Group
618 who have the expertise to achieve the subcommittee deliverables, and from EPCglobal staff.
619 Subcommittees shall be inclusive rather than exclusive, meaning that Working Groups
620 members who wish to participate and who confirm, in writing, that they can devote the
621 necessary time to the Subcommittee shall be accepted.

- 622 • Subcommittee members shall be EPCglobal™ members in good standing, where
623 “good standing” is defined in Section 4.2 of the EPCglobal™ SDP Process
624 document.
- 625 • Subcommittee members must sign Opt-In agreements for the parent Working Group
626 (see Section 3.5.3 of the EPCglobal™ SDP Process document) prior to participation.
- 627 • Subcommittee members shall agree to follow the Code of Conduct defined in Section
628 4.3 of the EPCglobal™ SDP Process document.
- 629 • All Subcommittee decisions shall be made under the principle of Consensus, defined
630 in Section 4.4.1 of the EPCglobal™ SDP Process document.
- 631 • All Subcommittee meetings shall follow the format and the requirements of Section
632 4.6 of the EPCglobal™ SDP Process document.

633

634 **3.6.3 Leadership**

635 Subcommittees may have a single Chair, or may have two co-Chairs.

636

637 The Working-Group co-Chairs shall request nominations for Subcommittee (co-) Chairs from
638 the general Subcommittee membership.

- 639 • If only one or two Subcommittee members are nominated, or if the Subcommittee
640 can reach consensus on a single Chair or two co-Chairs, the Working-Group co-
641 Chairs shall appoint the chosen Subcommittee (co-) Chairs.
- 642 • If there are more than two nominees, or the Subcommittee members cannot reach
643 consensus, or for any other reason, the Working-Group co-Chairs may call for a
644 vote. The voting population will consist of all Subcommittee members in good
645 standing. The voting procedure shall follow Section 4.4.2.1 of the EPCglobal™ SDP
646 Process document.

647 The Subcommittee (co-) Chairs are responsible for defining the work plan required to meet
648 the timeline and deliverables, and are ultimately responsible for delivering the final work
649 product. The final work product must fall within the scope of the parent Working Group's
650 Charter.

651

652 **3.7 Other Participants**

653

654 **3.7.1 Legal Counsel**

- 655 • Attends meetings as needed and provides guidance as needed
- 656 • Review and approve agendas and minutes of all meetings before circulated.
- 657 • Performs regular reviews of patents in applicable markets.
- 658 • Maintains records of all IP disclosures
- 659 • Review and approve charters for Working Groups
- 660 • Prepares reports and analyses on IP declared for each Working Group
- 661

662 **3.7.2 Architecture Review Committee (ARC)**

663

664 **3.7.2.1 Role**

665 The Architecture Review Committee is a standing body that has two primary roles:

666 **1. Overseer of the EPCglobal Network architecture**

- 667 ○ The Architecture Review Committee has responsibility for the creation,
668 documentation and maintenance of the EPCglobal Network Architecture per the
669 strategic direction of the EPCglobal Board of Governors. They are encouraged to
670 work closely with the TSC and BSC to ensure understanding of and alignment to that
671 Architecture. In addition, cost implications to the user of the ARC recommendations
672 must be considered in the design alternatives and presented with any
673 recommendations where appropriate.
 - 674 ▪ Document and build consensus around principles of EPCglobal Network,
675 interpret and clarify these principles when necessary
 - 676 ▪ Develop and maintain a document outlining the EPCglobal Network logical
677 components and layers, identify areas requiring standards, identify interfaces
678 within the EPCglobal network and with outside systems. (Note: Packaging of
679 logical components in physical realizations [implementation definitions] is outside
680 the scope of EPCglobal specifications.)
 - 681 ▪ Identify external technical, process and data standards that support EPCglobal
682 Network
 - 683 ▪ Resolve issues involving general EPCglobal Network architecture brought to the
684 ARC
 - 685 ▪ Coordinate cross-technology architecture development/reapplication within
686 EPCglobal Network Standards and with other standards bodies as appropriate
 - 687 • Maintain the written architecture findings, as necessary.
 - 688 • Ensure that all specifications are consistent with the architecture and
689 compatible with each other.
 - 690 • Act as a consultative body on the EPCglobal Network Architecture, i.e. Board of
691 Governors, Action Groups, other standards bodies
- 692
- 693 ○ ARC also performs a yearly review of the EPCglobal Network Architecture in
694 cooperation with the TSC and BSC for accuracy and completeness and may
695 recommend changes and additions to the EPCglobal Board of Governors. This
696 review is due by September 30.

697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717

2. Participant in the Standards Development Process

In this role, ARC will assess a proposal (represented either as a Use Case or Technical Requirement) vis-à-vis the EPCglobal Network Architecture. This may include drawing on other resources from the EPCglobal community via a request for help to the TSC/BSC. ARC will advise on the impact on existing:

- Supply Chain Architecture
 - Impact on existing major industry initiatives (registries, data pools, exchanges, etc.)
- EPCglobal Network Architecture
 - Identify components in the architecture requiring standards.
 - Recommend appropriate standards (i.e., new radio frequency, or new interface specification).
 - Review with Auto-ID Labs for basic research requirements
- Standards Development Organizations (SDO)
 - Assess if there is a solution already developed by other SDOs.
 - Identify external technical, process and data standards.
 - Recommend which SDO (including EPCglobal) is the most effective organization to submit the request to and create the standard.

3.7.2.2 Formation

718
719 ARC is a standing committee reporting to the EPCglobal President. The ARC may also
720 serve as a technical resource to the EPCglobal Board of Governors
721

722 ARC is a nine (9) member standing committee appointed for a renewable, three-year term.
723 The term for ARC members should be staggered, such that there is continuity and only
724 three members (one per appointing body) are replaced in any given year.

725 The ARC members are appointed as follows:

- The Chair and two (2) members (all EPCglobal staff), are appointed by the President, EPCglobal
- Through Consensus, three (3) members are appointed by the Technical Steering Committee (TSC), with representation that can cover the technical breadth of TSC.
- Through Consensus, three (3) members are appointed by the Business Steering Committee (BSC), ideally representing multiple industries.

732 No active Action Group chairs may be appointed to open seats on the ARC.

733
734
735
736
737
738
739
740
741
742

Changes in member situations (e.g. a person leaves their company, or changes role, etc) such that continued participation is in question requires resignation by the member holding the seat on the Committee. The company of the resigning member may nominate another staff member for consideration to the opening and so may the resigning member submit a new request for nomination for the open seat on the Committee. The appointment of a replacement for the resigning member will be made in the same manner as the original appointment (by the TSC, BSC, or EPCglobal as appropriate).

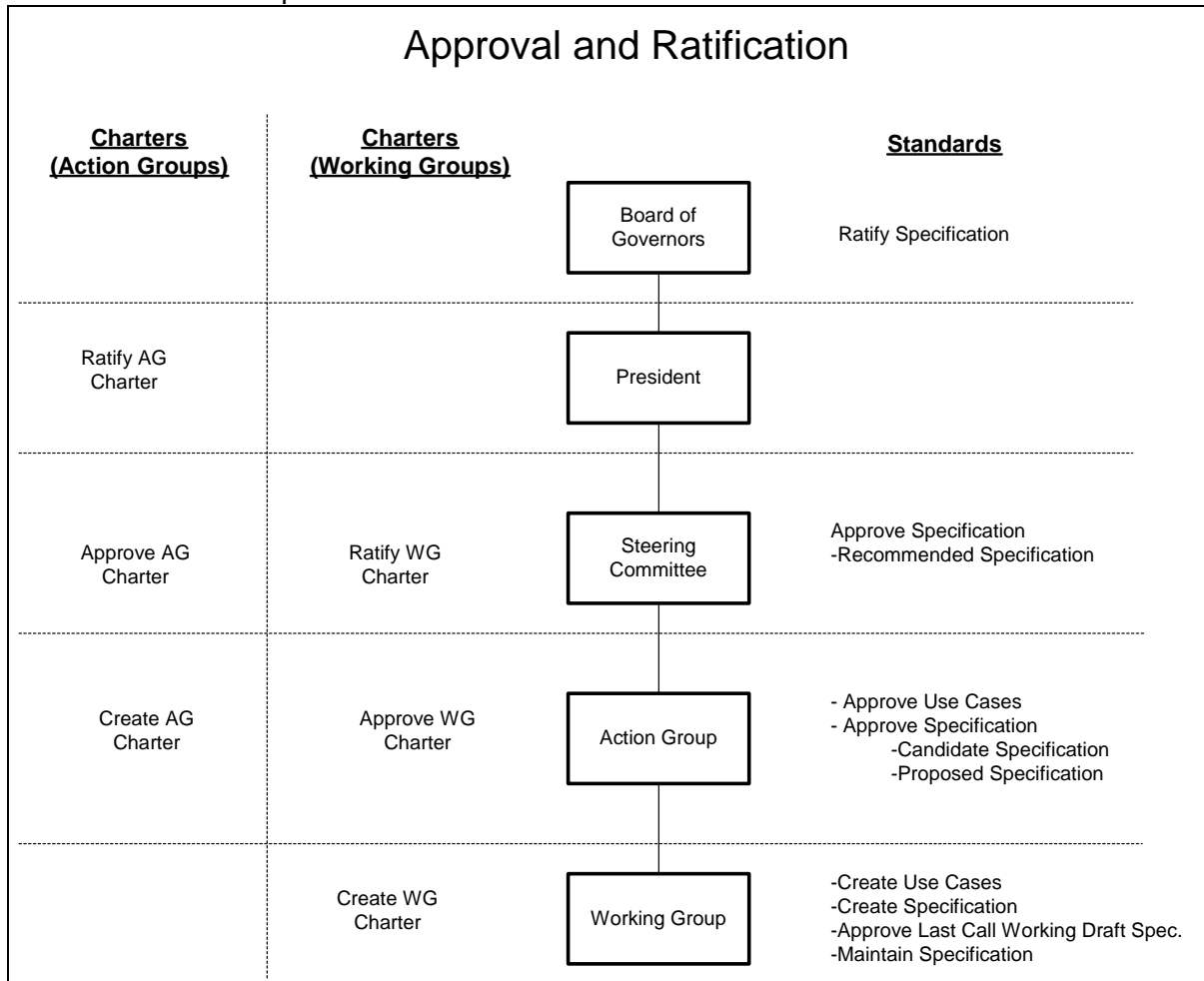
743 **3.7.2.3 Composition**

744 The ARC is composed of members from EPCglobal Subscribers and EPCglobal staff with
 745 the following experience:

- 746 • Business or marketing requirements gathering
- 747 • Technical system design or architecture design
- 748 • Extensive knowledge of the current state of the EPCglobal Network and technical
 749 specifications
- 750 • Prior working knowledge of other standards bodies is helpful, but not required.

751
 752
 753 **3.8 Approval and Ratification Process Overview**

754 For convenience, the following diagram outlines the roles of the various Participants in the
 755 creation of Working Group Charters and the approval and ratification of technical
 756 specifications and standards. The detailed steps in the Standards Development Process
 757 are defined in subsequent sections of this document.



758
 759

760 **4 General Policies for EPCglobal Members/Meetings**

761 **4.1 Anti-Trust Caution**

762 Many of EPCglobal's Participants compete with each other. The competition is both
763 horizontal and vertical. This means that EPCglobal's every activity must be measured
764 against the antitrust laws, which proscribe combinations and conspiracies in restraint of
765 trade, monopolies and attempts to monopolize, and unfair or deceptive acts or practices.
766 These are very broad. Violations of the antitrust laws can result in injunctions, treble
767 damage judgments, heavy fines, and even imprisonment.

768

769 Strict compliance with the antitrust laws is and always has been the policy of EPCglobal.
770 EPCglobal exercises extreme care to avoid not only violation, but anything that might raise
771 even a suspicion of possible violation.

772

773 An action, seemingly innocent when taken by itself, may be viewed by antitrust enforcers as
774 part of a pattern of activity, which constitutes an antitrust violation. Therefore, participants
775 on EPCglobal Working Groups, Action Groups, Steering Committees, or other similar
776 bodies, must always remember the purpose of the Working Group or other body is to
777 enhance the ability of all industry members to compete more efficiently and effectively to
778 provide better value to the consumer or end user. However, because EPCglobal activity
779 almost always involves the cooperation of competitors, great care must be taken to assure
780 compliance with the antitrust laws.

781

782 This means:

783

- 784 • Participation must be voluntary, and failure to participate shall not be used to
785 penalize any company by denying access to published specifications.
- 786 • There shall be no discussion of prices, allocation of customers or products, boycotts,
787 refusals to deal, or market share.
- 788 • If any participant believes the group is drifting toward impermissible discussion, the
789 topic shall be tabled until the opinion of counsel can be obtained.
- 790 • Meetings shall be governed by an agenda prepared in advance, and memorialized
791 by minutes prepared promptly after the meeting. Both agendas and minutes are to
792 be reviewed by counsel before they are circulated.
- 793 • Tests or data collection shall be governed by protocols developed in consultation
794 with and monitored by counsel.
- 795 • The recommendations coming out of an EPCglobal Working Group, Action Group,
796 Steering Committee or other body are just that. Individual companies remain free to
797 make independent, competitive decisions.
- 798 • Any standards developed must be voluntary standards.

799

800 **4.2 Member in Good Standing**

801 Members of Action Groups and Working Groups must come from companies that are
802 EPCglobal Subscribers. Each member of a Working group must be in good standing to
803 remain a member of the Working group. The expectation is that each person who
804 participates in a Working Group must bear his or her fair share of the work assigned to the
805 Working group, and must not impede the work of other group members.

806 Participation on an ongoing basis implies a serious commitment to the Working Group
807 Charter, including:

- 808 • Abiding by the IP Policy and opting into Working Group participation in writing by
809 signing the Opt-In Agreement (see Appendix 2).
- 810 • Attending meetings and teleconference calls of the Working group
- 811 • Providing deliverables or drafts of deliverables in a timely fashion
- 812 • Being familiar with the relevant documents of the Working group, including minutes
813 of past meetings
- 814 • Following and contributing to discussions on relevant mailing list(s)
- 815 • Not distributing unratified specifications to individuals or companies who are not
816 opt'd-in to the Working Group.

817

818 When the WG Chair, Action Group Chair and EPCglobal Action Group Director agree, the
819 Chair **MAY** declare that a participant is no longer in Good Standing (henceforth called "Bad
820 Standing"). A participant **MAY** be declared in Bad Standing in any of the following
821 circumstances:

- 822 • the individual has missed more than one of the last three distributed meetings.
- 823 • the individual has missed more than one of the last three face-to-face meetings.
- 824 • the individual has not provided deliverables in a timely fashion twice in sequence.
- 825 • the individual has not followed the conflict of interest policy by disclosing information
826 to the rest of the group.

827 Although all participants representing an organization **SHOULD** attend all meetings,
828 attendance by one representative of an organization satisfies the meeting attendance
829 requirement for all representatives of the organization.

830

831 When a participant risks losing good standing, the Action Group co-Chairs and Working
832 group Chairperson must discuss the matter with the participant and with his/her company
833 primary contact for EPCglobal before declaring the participant in "Bad Standing". In order for
834 a participant to regain good standing, the participant must meet the participation
835 requirements for two consecutive meetings.

836 A participant in Bad Standing **SHALL NOT** vote or participate in WG decisions.

837 Changes in an individual's standing in a Working Group have no effect on the obligations
838 associated with Working Group participation that are described in the EPCglobal IP Policy

839

840 There are no Good Standing requirements for Action Group membership.

841 However, if a company is not represented at two consecutive Action Group Meetings, the
842 Action Group Director should contact inform the subscriber company Primary Contact.

843

844 **4.3 Code of Conduct**

845 **4.3.1 Principles**

846 To be communicated at all group meetings:

EPCglobal STANDARDS DEVELOPMENT PROCESS

847 One of EPCglobal's greatest and proudest strengths is the rich diversity of people and
848 businesses that work with the organization and attend meetings. We recognize that not
849 everyone is used to working in such a diverse group, and therefore draw your attention to
850 basic principles and standards of behavior that apply at all meetings.

- 851 1. Comments on the following subjects may cause offense and are not acceptable,
852 however intended:
 - 853 • Race, national identity, national language or nation of origin. All races and
854 nations are equal at EPCglobal;
 - 855 • Age, gender, sex, or sexuality. Men and women of all ages and backgrounds are
856 treated as equals;
 - 857 • Disparaging remarks about companies, types of companies or industries. We
858 welcome all types and sizes of enterprise from all industries.
 - 859 a. EPCglobal is a place where buyers and sellers meet, however:
 - 860 b. Presentations and remarks may not promote or attempt to sell a particular
861 company, proprietary product or product type, implicitly or explicitly;
 - 862 c. Please do not hound potential customers or partners during breaks and
863 social gatherings. These are networking opportunities, not sales calls – if
864 you want to do deals please arrange a private follow-up visit.

- 865 2. EPCglobal depends on a constructive spirit of innovation. You are welcome to be as
866 positive or skeptical as you like about prospects, but you should respect the views
867 and credibility of others, especially those with credentials and training in their field.
868 Do not denigrate individuals or their ideas just because you disagree with them about
869 whether or not something is possible.

870

871 **4.4 Decision Making Process**

872

873 **4.4.1 Consensus**

874 Decisions of Action Groups and Working Groups within the EPCglobal Standards
875 Development Process are made by Consensus.

876

877 Consensus is defined as general agreement, characterized by the absence of sustained
878 opposition to substantial issues by any important part of the concerned interests and by a
879 process that involves seeking to take into account the views of all parties concerned and to
880 reconcile any conflicting arguments. It is important to understand that Consensus does not
881 mean unanimity. It is the responsibility of the (co-) Chairs to judge whether Consensus
882 indeed has been reached. If Consensus cannot be reached the (co-) Chair can call for a
883 vote, which will take place under the voting rules set out in Section 4.4.2.3. If the co-Chairs
884 cannot agree on whether or not Consensus has been reached, a vote is called, subject to
885 the voting rules set out in Section 4.4.2.1.

886

887 **4.4.2 Voting Procedures**

888 There are three different categories of voting process that apply to the EPCglobal Standards
889 Development Process and they are each enumerated below. No matter what the category of
890 voting process is, only one vote per company will be accepted. Also, EPCglobal and GS1
891 staff cannot vote, nor can members of MIT or Auto-ID Labs. If someone is a member of
892 Auto-ID Labs and a subscriber to EPCglobal under a separate business entity name, then
893 they can vote, if they are the only voting participant from their company.

894
895

896 **4.4.2.1 Voting in Elections**

- 897
- 898 • Action Groups **SHALL** elect two co-chairs. Co-Chairs of Business Action Groups
899 must be representatives of End-User companies.
 - 900 • The voting population will consist of all Action Group members in good standing
901 (Denominator is total votes cast – no abstentions: 2/3 or greater majority)
 - 902 • Chairs and/or co-Chairs are nominated from the membership of each Action Group.
903 Nominees must be members in good standing. The nomination is submitted to the
904 President, EPCglobal with a candidate qualifications and a commitment letter
905 (indicating their organization commitment to time and resources) from the
906 candidate's company. All nomination requests endorsed by a candidate company
907 will be accepted.
 - 908 • A two-thirds majority vote is required for a candidate to be elected if no other
909 candidates are vying for open Chair seats.
 - 910 • If there are multiple candidates vying for election to an open chair seat the election
911 will be conducted as follows:
 - 912 ○ If the first round voting yields a candidate with a two-thirds majority, that
913 candidate is elected
 - 914 ○ If the first round of voting does not yield a candidate with a two-thirds
915 majority, the two candidates receiving the most votes will participate in a run-
916 off election. The result is decided by simple majority
 - 917 • The election of the (co-) Chair may be conducted electronically (confidential eBallot)
918 or at the physical meeting (provided there is a sufficient quorum, defined as 2/3 of
919 eligible voting members).
 - 920 • Only End User companies may vote to elect co-Chairs of Business Action Groups.
921 The President, EPCglobal will have the right to appoint an interim (co-) Chair
922 following a resignation of a (co-) Chair, to serve out the remainder of the term.
 - 923 • Action Group co-Chairs shall serve one-year renewable term and until their
924 successors are elected and qualified. Co-Chairs terms are staggered with elections
925 being held in the first and third quarters.

926 **4.4.2.2 Voting in Steering Committees**

927 Voting decisions at the Steering Committee level are based on a simple majority, given the
928 limited size of each steering committee.
929

930 **4.4.2.3 Voting on Standards**

931 Voting on standards can occur at the Work Group or at the Action Group Levels.

932
933 A group should conduct a vote to resolve a *substantive issue* after the co-Chairs have
934 determined that all available means of reaching Consensus through technical discussion
935 and compromise have failed, and that a vote is necessary to break a deadlock. In this case
936 the Chair must record (e.g., in the minutes of the meeting or in an archived email message):

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 937 • an explanation of the issue being voted on;
- 938 • the decision to conduct a vote to resolve the issue;
- 939 • the outcome of the vote;
- 940 • any objections.

941

942 In order to vote to resolve a substantive issue, a Representative must be from a Participant
943 company. Each Participant company represented in the group has one vote, even when the
944 Participant is represented by several Representatives in the group.

945 The voting population will consist of all Action Group members in good standing.

946 (Denominator is the total number of votes cast – no abstentions: 2/3 or greater)

947 A two-thirds majority is required for a matter to pass. Voting may be accomplished either
948 through eBallots (in an open environment, i.e. all votes are visible) or during the group's
949 meetings (provided appropriate representation exists).

950 If a Representative is unable to attend a vote, that individual may authorize anyone at the
951 meeting to act as a proxy. The absent Participant must inform the Chair in writing who is
952 acting as proxy, with written instructions on the use of the proxy. Use of the proxy
953 mechanism will not affect future voting privileges.

954

955 **Work Group Voting**

- 956 • The voting population **SHALL** consist of members in good standing

957 **Action Group Voting**

- 958 • The voting population **SHALL** consist of members in good standing.
- 959 • During Action Group voting, the Opt-in Process will remain open and new opt-ins will
960 be processed for Working Groups. However, participants from newly subscribed
961 companies cannot vote 14 days prior to and during the Action Group voting period.
962 After the vote is completed, newly subscribed participants shall be able to vote, if
963 they are a member in good standing, during the next Action Group vote.

964

965 **Joint WG Voting**

966 (in a scenario to advance LCWD to Candidate Specification)

- 967 • Concurrent voting between impacted Actions Groups will occur.
- 968 • Both Action Groups vote at the same time, but separately under the same rules as
969 dictated in the EPCglobal SDP. The results are averaged together.
- 970 • Only one vote from a company is permitted (even though a company may be
971 represented on multiple BAGs or on TAGs. The vote has to be cast by company's
972 primary EPCglobal contact.
- 973 • The voting population **SHALL** consist of members in good standing.
- 974 • Tabulating Votes (see Appendix for more examples)
 - 975 a. 2/3rds of the combined result is necessary for approval with a minimum threshold
976 of 66% overall for approval
 - 977 b. Each Action Group must achieve a 2/3rds majority.

978

979 Voting privileges are lost when:

- 980 • Member misses two consecutive votes (Abstentions are not missed votes) or
- 981 • Member misses three consecutive conference calls or
- 982 • Member misses two consecutive physical meetings

983 Participants may regain their voting rights by attending two consecutive physical meetings or
984 three consecutive conference calls.

985

986 **4.4.3 IP Policy**

987 In the event of a conflict between components of the EPCglobal Participation Framework,
988 the terms and conditions of the EPCglobal Intellectual Property (IP) Policy shall control.

989

990 **4.5 Appeals**

- 991 • Groups resolve issues through dialog. Individuals who disagree strongly with a
992 decision should register with the Chair any objections (e.g., to a decision made as
993 the result of a vote).
- 994 • When group participants believe that their concerns are not being duly considered by
995 the group, they may ask the appropriate Steering committee to confirm a decision.
- 996 • Any requests to the Steering Committee to confirm a decision must include a
997 summary of the issue (whether of procedural), decision, and rationale for the
998 objections. All counter-arguments, rationales, and decisions must be recorded.
- 999 • If a participant believes due process has not been followed by the Steering
1000 Committee, they may ask the EPCglobal Board of Governors to confirm or deny a
1001 decision by the Steering Committee. The Board of Governors may assign one
1002 member of the Board to act as a case manager for each appeal brought before it, to
1003 be responsible for conducting the appeal. The case manager shall report to the full
1004 Board at each Board meeting and make recommendations regarding any appeals
1005 then pending. The Board shall accept or reject recommendations made by the case
1006 manager, either individually or together, as appropriate.

1007

1008

1009 **4.6 Teleconferences and Physical Meetings**

1010

1011 **4.6.1 Tracking Membership Participation**

1012 An attendance list will be maintained and published through meeting minutes.

1013

1014 **4.6.2 Agendas and Protocols /Other Documentation**

1015 Every EPCglobal meeting involving multiple outside parties must be governed by an agenda
1016 prepared in advance, and memorialized in minutes of the meeting.

1017 Agendas and minutes may not be circulated or filed until EPCglobal counsel has reviewed
1018 and approved them.

1019 Minutes constitute the official record of the meeting. Minutes must contain:

- 1020 • Name of group meeting
- 1021 • Date of meeting and beginning and ending time
- 1022 • List of all attendees
- 1023 • Name of minute taker
- 1024 • A reflection of the fact that the meeting followed an agenda made available in
1025 advance, and attendees were given the antitrust caution
- 1026 • A memorialization of any contributions – including oral contributions – to technical
1027 specifications.

1028

1029 From a strictly legal standpoint, minutes are best limited to a list of actions taken at the
1030 meeting. Often, however, there are business reasons for including something more than a
1031 bare recitation of actions. In drafting minutes, remember that minutes are not a transcript.

EPCglobal STANDARDS DEVELOPMENT PROCESS

1032 They should focus on what was done, not what was said (aside from recording oral
1033 contributions to a specification as noted above). Any questions or concerns should be sent
1034 to the EPCglobal General Counsel.

1035 All publication of agendas, minutes, working documents, etc is done via the EPCglobal e-
1036 Room.

1037

1038 Participants may use the User-ID ("participant") and password ("participant").

1039 Any Participant/Subscriber may submit agenda items to the appropriate Action Group Co-
1040 Chair with sufficient time to be included for discussion at the next meeting/teleconference. It
1041 is the responsibility of the co-Chairs whether or not to include those suggested agenda
1042 items and send notification to the original submitter.

1043

1044 **4.6.3 DO'S - Conference Calls / Physical Meetings**

- 1045 • Speak English clearly and slowly and encourage others to do so.
- 1046 • If you are new to the group or are a new group try to introduce yourself when
1047 speaking.
- 1048 • Please make sure that your cell phone does not ring.
- 1049 • Please be on time (especially for a teleconference).
- 1050 • Sign on the Webex 5 minutes before the session begins.
- 1051 • If unable to stay for the duration of the call, please say so during introductions.
- 1052 • "2-minute-guide"- Comments from the respective members should not last longer
1053 than 2 minutes to ensure that everybody can be heard.
- 1054 • When there are new members of a discussion, the facilitator should make an attempt
1055 to provide high-level orientation for topics. The orientation should help newcomers
1056 understand the scope of the discussion, the decisions that have been taken so far,
1057 and the decisions remaining before the group.

1058

1059 **4.6.4 DONT'S - Conference Calls / Physical Meetings**

- 1060 • Avoid the use of acronyms, analogies, colloquialisms, etc., that are not globally
1061 known. The first time an acronym is introduced, the full name must also be stated.
- 1062 • Avoid speaking fast or softly.
- 1063 • Never place the phone on hold during the teleconference.
- 1064 • Never assume that silence is approval, always encourage participation.
- 1065 • Avoid discussing past issues. When past issues are brought up for discussion, avoid
1066 spending too much time addressing.

1067

1068

1069
 1070
 1071
 1072
 1073
 1074
 1075
 1076
 1077
 1078
 1079
 1080
 1081
 1082
 1083
 1084
 1085
 1086
 1087
 1088
 1089
 1090
 1091
 1092
 1093
 1094

5 EPCglobal Standard Development Process

5.1 Overview

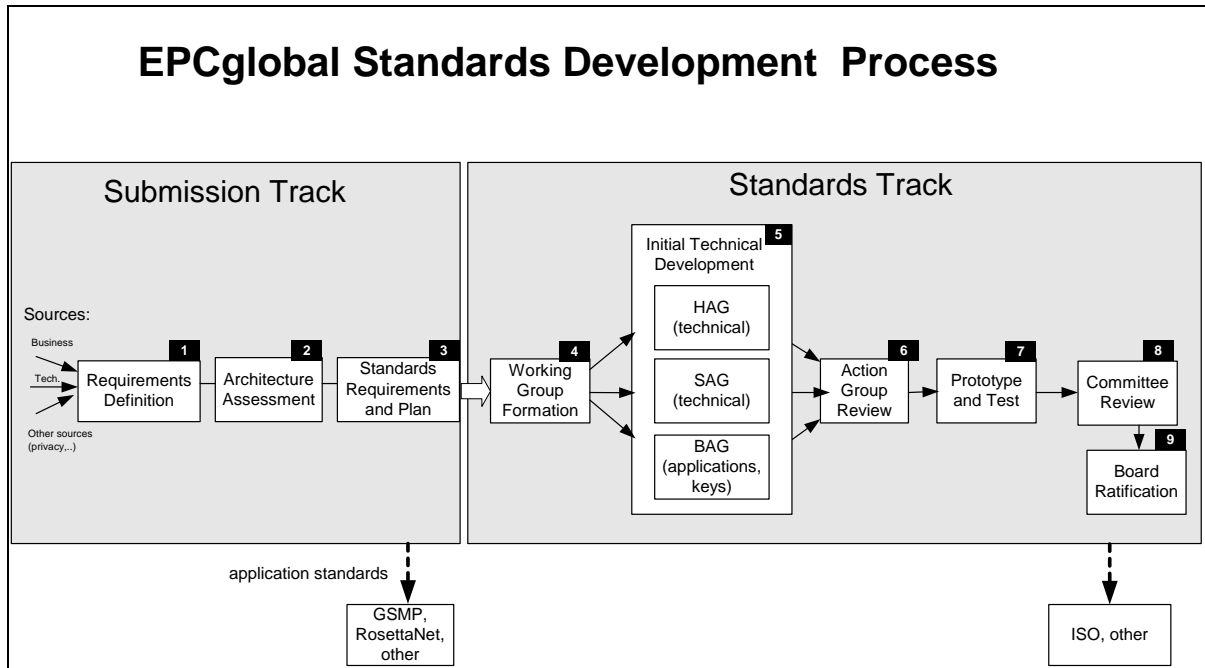
The EPCglobal Standards Development Process has been designed in such a way that all groups' decisions will be consistent with the principles, vision and architecture of the EPCglobal IP Policy. The process consists of two tracks that are outlined in Figure 1:

- Submission Track
- Standards Track

These tracks are segmented into a series of steps to allow users to separate the requirements gathering process from the design and standards development. The submission track consists of steps that are designed to ensure that business requirements are captured, validated against the EPCglobal Reference Architecture, and requirements for standards are documented. The output of this track feeds into the Standards Track. As can be seen from the Submission Track, a mechanism has been built to enable a routing of business requests that might result in Application Standards to the appropriate standard organizations (for example, EAN.UCC GSMP, or RosettaNet or SWIFT). In the case where a specific industry does not have such a standard process, a request may be carried out by the industry Business Action Group.

The Standards Track is designed to create standards, prototype and test them, and take them through several layers of reviews, culminating in their ratification.

Each of these steps has a process owner from the EPCglobal member community.



1095
 1096
 1097

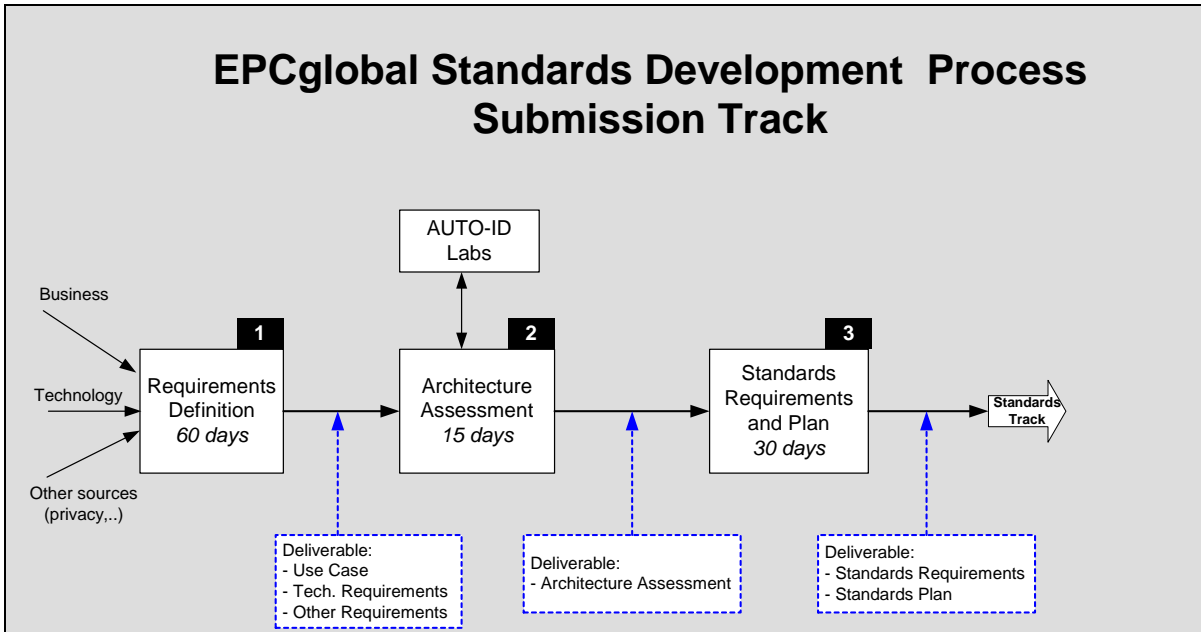
Figure 1

1098
 1099
 1100
 1101
 1102
 1103
 1104
 1105
 1106
 1107

6 SUBMISSION TRACK

6.1 Submission Track Overview

The submission process is defined in Figure 2. This schematic lists only major deliverables created as outputs from each step. There can be other deliverables produced by these steps.

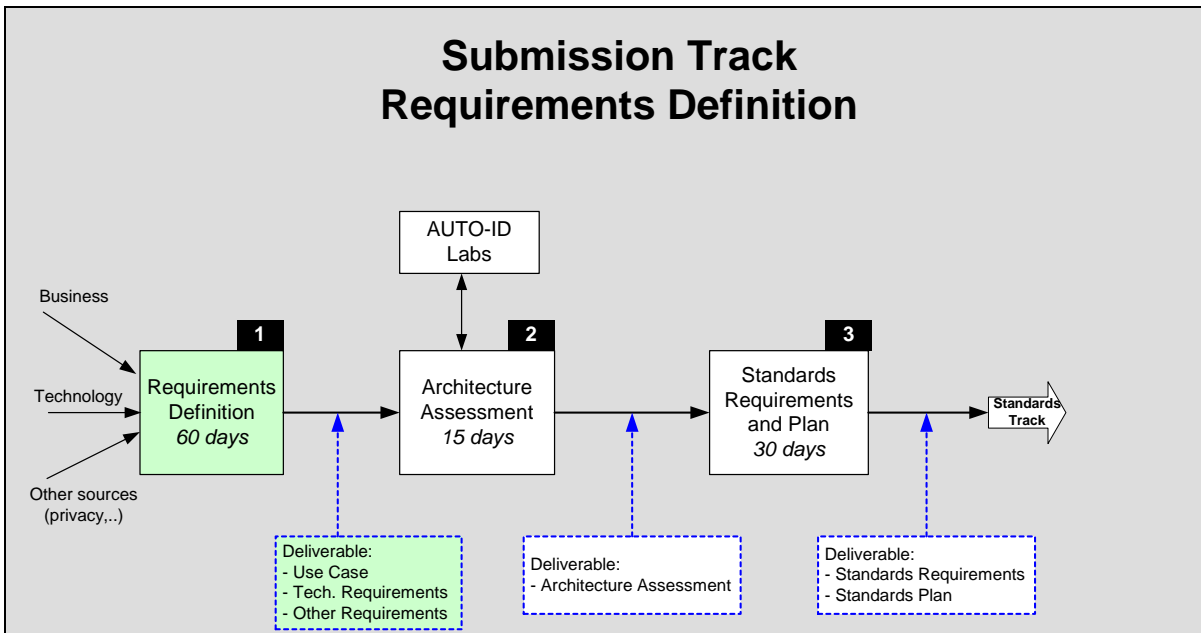


1108
 1109
 1110
 1111
 1112
 1113
 1114

Figure 2

1115
1116
1117

6.2 STEP 1: Requirements Definition



1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132

6.2.1 Target Timeframe

Default = 60 days.

6.2.2 Process Owner

Business Request

- BSC with BAG

Technical Request

- TSC with TAG

6.2.3 Process

The purpose of this process is to gather and assess business and technical requests, and based on this, to develop requirements and Use Cases. A request may come from the business, technical, privacy/legal groups or from Auto-ID Labs. This is a generic step that is appropriate to both BAG and TAG.

1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145

- Any Representative or group of Representatives may submit a business request or technical request for evaluation to the appropriate Action Group.
- A business request must address a business issue for which the EPCglobal Network requires a standard, e.g. standardizing the tracking and tracing of goods in the supply chain.
- A technical request will identify a need for a specific technology that the EPCglobal Network has to support e.g. to develop a security framework for the EPCglobal Network.

EPCglobal STANDARDS DEVELOPMENT PROCESS

1146 Business Action Group

1147 At each BAG meeting, the BAG can assess new business requirements and prioritize
1148 the total portfolio of business requests to be developed based on weighted criteria such
1149 as:

- 1150 • Alignment with Strategic Direction
- 1151 • Commitment to implement
- 1152 • Market Potential
- 1153 • Demonstration of EPCglobal Network component such as EPCIS

1154

1155 Working Group Formation

1156 The requirements work should be conducted by a chartered BAG WG (or a Joint WG) as
1157 explained in section 3.5.

1158

1159

1160 Technical Action Group

1161 At each TAG meeting, the TAG can assess new technical requirements and prioritize the
1162 total portfolio of technical requests to be developed based on industry needs for new
1163 standardized technology.

1164

1165 Action Groups

1166 Action Groups then submit prioritized business and technical requests to BSC or TSC for
1167 submission to President, EPCglobal for approval to develop Use Cases or technical
1168 solutions, including the possible reprioritization of previous requests.

1169

1170 Use Case Development

- 1171 • A BAG Working Group (co-) Chair (acting as Use Case champion) is designated to
1172 work with the technical community to ensure that the Use Case is developed
1173 sufficiently so as to expose the technical requirements.
- 1174 • Create joint BAG and TAG Use Case development team Representatives (to be led
1175 by BAG End User Representative) identified by Business and Technical Action
1176 Group co-Chairs.
- 1177 • Joint Use Case teams form and develop work plan.
- 1178 • Joint Use Case content reviewed and approved by BAG and delivered to BSC to be
1179 passed to the ARC.
- 1180 • Use Cases advanced to the Business Steering Committee must be approved by the
1181 President, EPCglobal before being communicated to the ARC.

1182

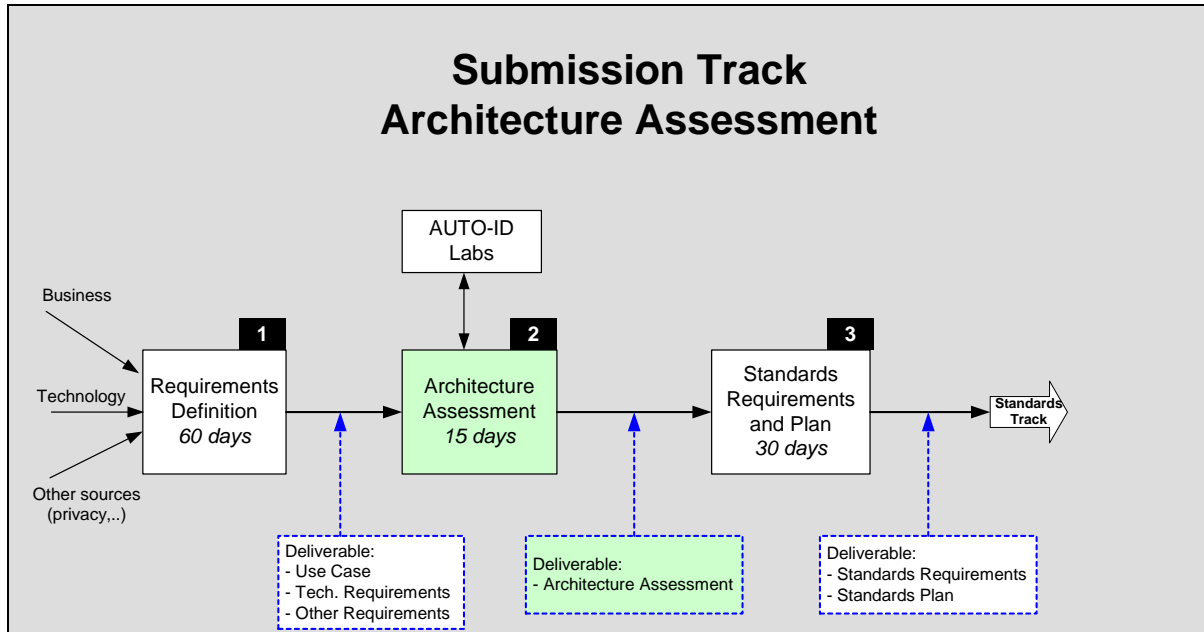
1183

1184 **6.2.4 Deliverables**

- 1185 • Business requests (prioritized)
- 1186 • Use Case(s)
 - 1187 - Use Case requirements include timeframe goal for publication of technical
 - 1188 specifications to address requirements.
 - 1189 - May also include performance requirements.
- 1190 • Technical requirements
 - 1191 - For SAG or HAG.

1192
1193

6.3 STEP 2: Architecture Assessment



1194
1195

6.3.1 Target Timeframe

Default = 15 days.

1196
1197

6.3.2 Process Owner

The Architecture Review Committee

1198
1199
1200

6.3.3 Process

The purpose of this step is to assess a proposal (represented either as a Use Case or technical request) vis-à-vis the EPCglobal Reference Architecture.

1201
1202
1203

Advise the impact on existing:

1204
1205

- Supply chain architecture
 - Impact on existing major industry initiatives (registries, data pools, exchanges, etc.)
- EPCglobal Reference Architecture
 - Identify components in the architecture requiring standards.
 - Recommend appropriate standards (i.e., new radio frequency, or new interface specification).
 - Assess viability of technical solution to satisfy the request.
 - Ensure that the proposed solution is consistent with the EPCglobal Reference Architecture principles.
 - Review with Auto-ID Labs for basic research requirements
- Standards Development Organizations (SDO)
 - Assess if there is a solution already developed by other SDOs.
 - Identify external technical, process and data standards.
 - Recommend which SDO (including EPCglobal) is the most effective organization to submit the request to and create the standard.

1206
1207
1208

1209
1210

1211
1212

1213
1214

1215
1216

1217
1218

1219
1220

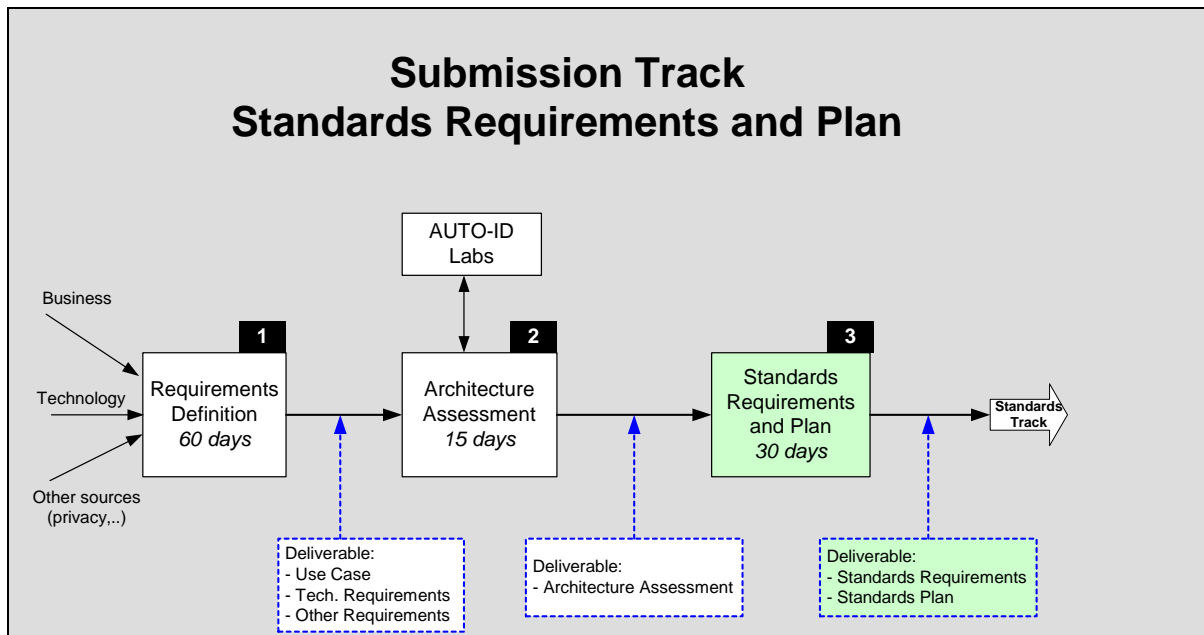
1221
1222

6.3.4 Deliverables

- Architecture Assessment Report

1224
1225
1226

6.4 STEP 3: Standards Requirements and Plan



1227
1228

6.4.1 Target Timeframe

Default = 30 days.

1231

6.4.2 Process Owner

Architecture Review Committee and Action Group (Business or Technical)

1234

6.4.3 Process

Architecture Review Committee:

1237

- Using the Use Case or technical requirements and the Architecture Assessment Report identify and define areas requiring standardization.

1238

1239

- Present them as Standards requirements.
 - Specify where they would be incorporated into the EPCglobal Network
 - Propose a technical solution.

1240

1241

1242

Action Group:

1243

- Develop a Plan for the technical solution (including resource requirements and timeline).
- The TSC reviews Use Cases (and other business/technology requirements documents) and determines if work can be accomplished within TAG or needs to be assigned to Auto-ID Labs for further primary research.
- If work remains within a TAG (as opposed to going to Auto-ID Labs), the TSC appoints an ad hoc team (which shall include an EPCglobal representative) to manage assembly of TAG Working Group(s), and recommends Working Group Chair(s).

1244

1245

1246

1247

1248

1249

1250

1251

1252

6.4.4 Deliverable(s)

1253

- Standards requirements
- Standards Development Plan (for the Standards Track)

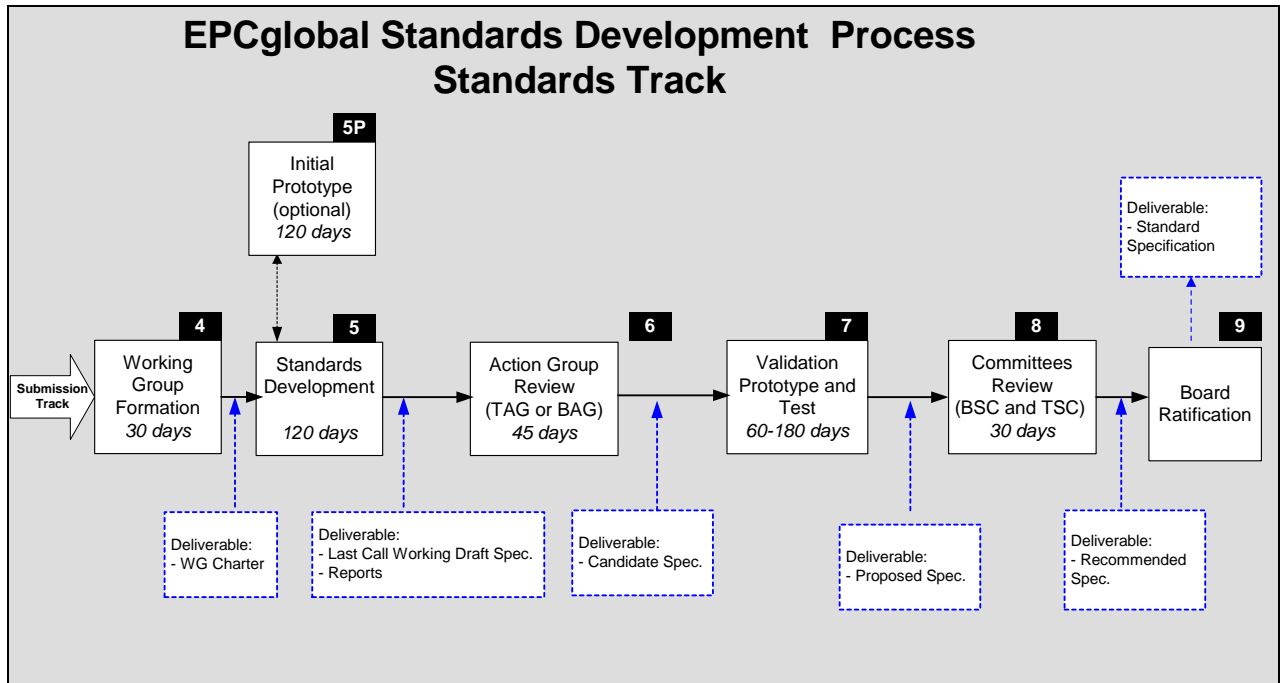
1254

1255

1256
 1257
 1258
 1259
 1260
 1261
 1262
 1263
 1264
 1265
 1266

7 STANDARDS TRACK
7.1 Standards Track Overview

The standards process is defined in Figure 3. This schematic lists only major deliverables created as outputs from each step. There can be other deliverables produced by these steps. The specification deliverable indicates that it is a normative document, one that is on track to become an EPCglobal standard. This track is designed to accommodate the creation of technical standards.

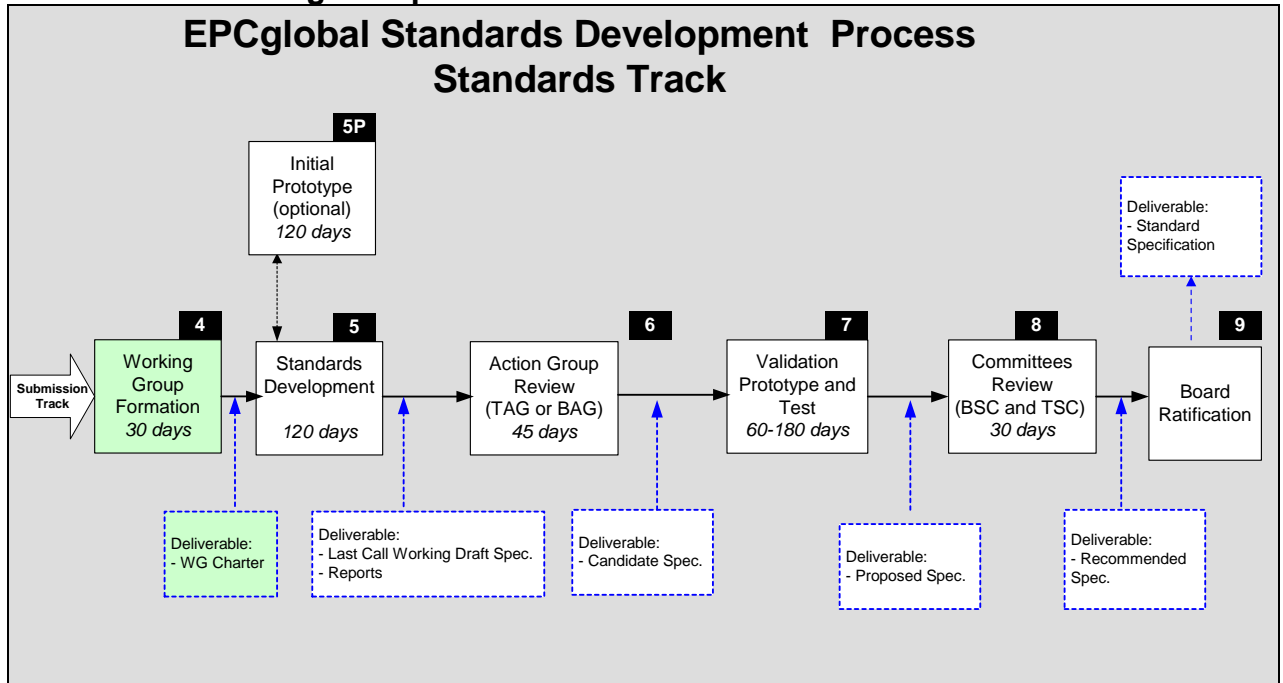


1267
 1268
 1269
 1270
 1271
 1272

Figure 3

1273
1274

7.2 STEP 4: Working Group Formation



1275
1276
1277

7.2.1 Target Timeframe

Default = 30 days.

7.2.2 Process Owner

Working Group (co-) Chairs.

7.2.3 Process Oversight

EPCglobal Legal Counsel and EPCglobal IP Policy.

7.2.4 Process

- Operating in an IP-Neutral Environment, the Working Group (co-) Chairs or selected leads named by the Action Group co-Chairs meet to craft the charter for the Working Group developing a charter based on the standards requirements from Step 3 of the SDP. If there are no User Requirements or Standards Requirements from the Business Action Groups, then they may alternately create a charter as directed by the TSC to meet emerging technical requirements based on input from the Technical Action Groups (See section 10 for details). Normally, obtaining user requirements from a BAG is the preferred source for starting a new charter. Note that a charter shall be written to comply to meet all deliverables as specified in the SDP.
- The draft charter is submitted to the EPCglobal Legal Counsel for legal review and approval.
- After approval by the EPCglobal Legal Counsel, TAG co-Chairs approve Working Group Chair(s) and will submit Working Group Charter to the TSC for ratification.
- TSC ratifies the Working Group Charter.
- TAG openly solicits participation from the Subscriber pool.

1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302

1303

1304

7.2.5 IP Policy Governance

1305

- EPCglobal Legal Counsel shall review and approve all Working Group Charters.

1306

- Subscribing companies must specifically opt-in to participate in the Working Group, and comply with the EPCglobal IP Policy.

1307

1308

- Explicit records of each Participant's decision to opt-in to each Working Group must be made in writing and must be communicated to EPCglobal. This opt-in shall become part of the permanent record to the Working Group's activities.

1309

1310

1311

- In the event a Participant wishes to make a Contribution to a Working Group, the Participant may want to complete and sign a Contribution Declaration for each

1312

1313

Contribution. This Declaration shall be submitted to EPCglobal in conjunction with the submission of the Contribution. Participants wishing to utilize the Contribution

1314

1315

Declaration shall use the Declaration attached hereto as Appendix 6. The completed

1316

Declaration shall include the following information:

1317

- The name of the Working Group to which the contribution is being made;
- The name of the Participant (and relevant company if applicable) making the Contribution;
- The name of the work contained in the Contribution;
- A description of the material contained in the Contribution;
- The date of creation of the work contained in the Contribution; and
- A copy of the Contribution.

1318

1319

1320

1321

1322

1323

1324

1325

- Submissions will be placed into the Working Group eRoom, only to be viewed by Working Group Participants; and

1326

1327

1328

- Once technical requirements and recommendations are developed, materials are archived and removed from the eRoom.

1329

1330

1331

7.2.6 Deliverable(s)

1332

- Working Group Charter (Mission and scope) document with timeline.

1333

1334

- List of Working Group members.

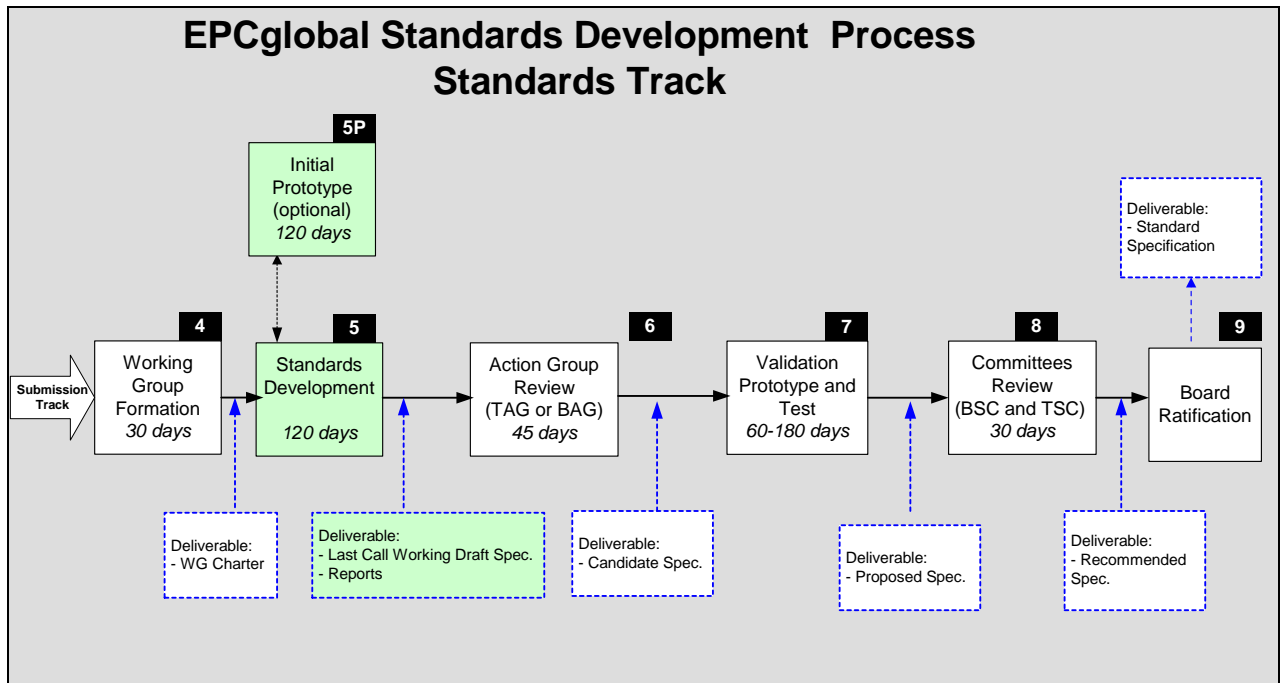
1335

- Signed Opt-in agreement from Working Group members to honor the EPCglobal IP Policy.

1336

1337
1338
1339

7.3 STEP 5: Initial Standards Development



1340
1341
1342

7.3.1 Target Timeframe

Default = 120 days.

7.3.2 Process Owner

Working Group.

7.3.3 Process

- During this step, the Standards Development Process is closed and confidential, and open only to Working Group members.
- During the first 60 days, the Working Group meets to turn the business requirements contained within the Use Case into a technical approach that can become a final specification. At the end of this period, all Working Group members must be notified that the draft is ready for review.
- This step can also include an optional initial prototype process, depending on the standard being developed: The need for an initial prototype phase to run in parallel with this step should be called out in the Working Group’s Charter and timeline.
- As part of the Last Call Working Draft, the Working Group should define any prototyping and acceptance test criteria to be used in Step 7 (Validation Prototyping and Test).
- When the Working Group assesses that this process is complete, they release their work product for TAG review as the Last Call Working Draft. For a Last Call Working Draft announcement up to and including publication as a Standard Specification, the Working Group must:

- 1366 1. Indicate whether the document has been modified substantively since the
1367 previous step. A substantive change (whether deletion, inclusion, or other
1368 modification) is one where someone could reasonably expect that making the
1369 change would invalidate an individual's review or implementation experience.
1370 Other changes (e.g., clarifications, bug fixes, editorial repairs, and minor error
1371 corrections) are minor changes. A Working Group must document changes (both
1372 substantive and minor) between steps.
- 1373 2. Fulfill the relevant requirements of the Working Group Charter and those of any
1374 accompanying requirements documents, or report which relevant requirements
1375 have not been fulfilled. For relevant requirements that have not been fulfilled, the
1376 Working Group must provide rationale to the satisfaction of the President,
1377 EPCglobal.
- 1378 3. Indicate which dependencies with other groups the Working Group believes it
1379 has generated or satisfied, and report which dependencies have not been
1380 satisfied.
- 1381 4. Show evidence of wide review within the Working Group, i.e. posted on website,
1382 e-mail with formal call to review.
- 1383 5. Formally address all issues raised about the document since the previous step.
1384 In practice, once a Working Group wishes to advance to Candidate Specification
1385 or beyond, the TSC and BSC committees expect positive documentation that
1386 issues have been formally addressed (e.g., in an issues list that shows their
1387 disposition). For the Working Draft stage, less formal documentation generally
1388 suffices (e.g., evidence in an archived mailing list).
- 1389 6. Indicate any formal objections.
- 1390 7. If Consensus cannot be reached, the co-Chairs can call for a vote per Section
1391 4.4.

1392 If dissenters say they can live with a given decision, this is a sufficient indication
1393 that the group can move on to the next topic, but the inverse is not necessarily
1394 true: dissenters cannot stop a group's work simply by saying that they cannot live
1395 with the decision. When the Chair believes that the legitimate concerns of the
1396 dissenters have received due consideration as far as is possible and reasonable,
1397 then objections must be recorded and the group should move on. A formal
1398 objection should include technical arguments and propose changes that would
1399 remove the dissenter's objection; these proposals may be vague or incomplete.
1400 The Chair must report an objection that includes such information to the BSC and
1401 TSC committees at later review stages. If an objection does not include this
1402 information, the Chair is not required to report it at later review stages. A version
1403 of each formal objection must be publicly available.

- 1404 • Develop Conformance Requirements (Conformance Requirements are used by others to
1405 develop test procedures for certification)

1407 **7.3.4 Deliverable(s)**

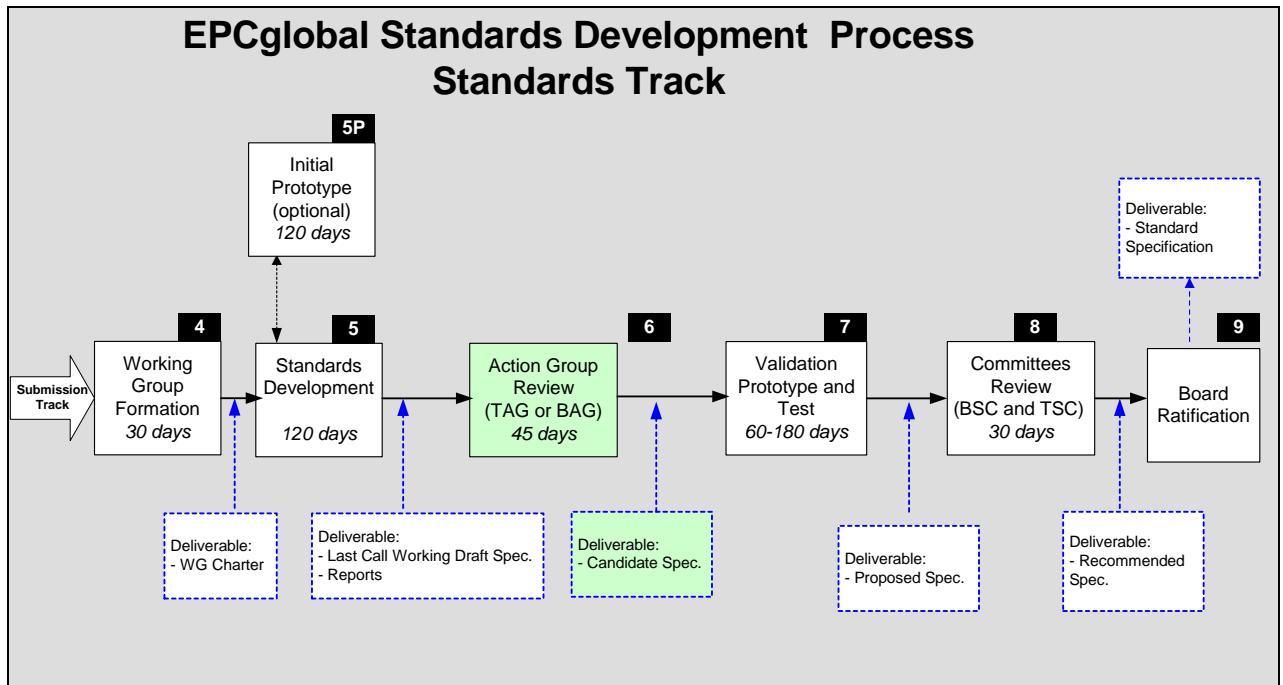
- 1408 • Working Draft,
- 1409 • Last Call Working Draft Approved by WG (ready for Action Group Review)
- 1410 • List of participants who will prototype (Can be done early in Step 5 or later in Step 6)
- 1411 • Prototyping and Acceptance Test Plan

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 1412 • Conformance Requirements (Note that Conformance Requirements do not need to be
- 1413 completed at this time, but initial planning should be completed so that by the end of
- 1414 Step 7, this document is completed including any impact from Prototyping.)
- 1415 • Record of formal objections to LCWD from any WG participants, and how they were
- 1416 processed.
- 1417 • Record of any votes taken to pass Working Draft to LCWD.
- 1418
- 1419
- 1420

1421
1422
1423

7.4 STEP 6: Action Group Review



1424
1425
1426

7.4.1 Target Timeframe

Default = 45 days.

1429

7.4.2 Process Owner

Working Group, with approval by the appropriate Action Group (HAG, SAG).

1432

7.4.3 Process

1434

- A Last Call Working Draft document is posted to the Action Group website for a 3-week commentary period. The entire member community of that Action Group is notified (via email). A review is then held, which can be done via electronic means and/or by a live draft review, depending on the complexity of the specification.
- The Working Group then has 2 weeks (or as negotiated with the Action Group co-Chairs) to resolve all the comments and corrections and re-post the Last Call Working Draft for a vote by the Action Group to advance to Candidate Specification status. NOTE: The two week resolution period is a default value. The actual comment resolution period can be negotiated between the Working Group and the Action Group depending on the number and complexity of the requested changes.
- If the vote in the Action Group is not successful, the Action Group returns the Last Call Working Draft to the Working Group for further work, based on the comments submitted by the Action Group members.

1435

1436

1437

1438

1439

1440

1441

1442

1443

1444

1445

1446

1447

1448

7.4.4 IP Policy Governance

1449

- The Working Group facilitator shall announce the opening of the IP Declaration period in which Participants shall have thirty (30) days to submit their IP Declaration stating their intent not to license their “Necessary Claims” (see Sections 3.1 and 3.3

1450

1451

EPCglobal STANDARDS DEVELOPMENT PROCESS

1452 of the IP Policy) or declare their knowledge of any patents or intellectual property that
1453 may preclude the Trustee from ratifying the Candidate Specification. Participants
1454 shall use the IP Declaration annexed hereto in Appendix 7 to submit all IP
1455 Declarations.

1456

1457 • Once submitted to EPCglobal, all IP Declarations shall be forwarded to EPCglobal
1458 Legal Counsel for review. The submitter of the IP Declaration shall be informed that
1459 his/her IP Declaration is currently under review.

1460

1461 • The IP issues will be resolved by either EPCglobal's outside counsel's finding that
1462 the claims are not necessary to the Specification, the Working Group's decision to
1463 revise the Specification or EPCglobal Board's decision to proceed with a RAND
1464 exception.

1465

1466 • All IP Declarations and any legal analysis letter(s) shall be posted in the eRoom for
1467 the Specification at issue once the Specification has been ratified by the Board
1468 of Governors.

1469

1470

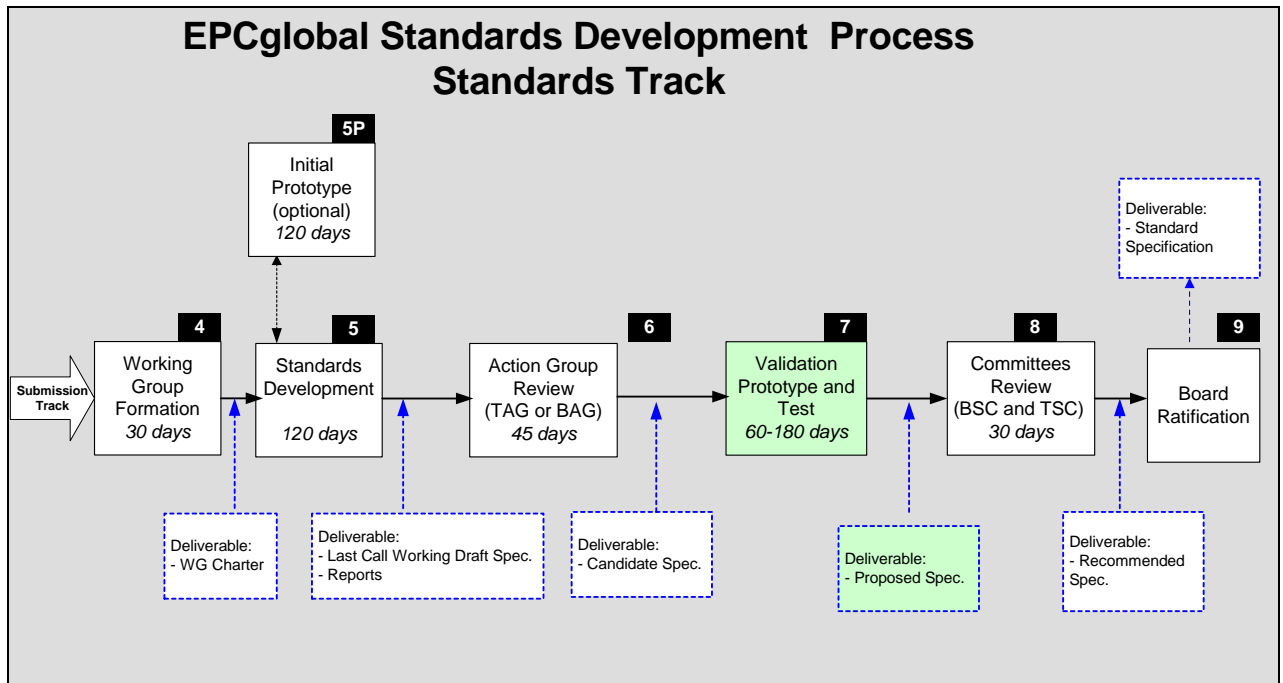
1471

1472 **7.4.5 Deliverable(s)**

- 1473 • Action group Comments and Resolutions (kept for the record)
- 1474 • Amended LCWD (LCWD revised per Action Group comments)
- 1475 • Action Group Vote on Amended LCWD
- 1476 • Candidate Specification
- 1477 • List of Solution Partners committed to prototype (if not already completed in Step 5)
- 1478 • Start or continue to develop of the Conformance Requirements.

1479
1480
1481

•
7.5 STEP 7: Validation Prototype and Test



1482
1483
1484

7.5.1 Target Timeframe

Depends on the specific Working Group work plan (software could be 2 to 6 months, hardware could be 6 months plus).

1485

7.5.2 Process Owner

- TAG with Solution Providers

1490

7.5.3 Process

- The specifics of the minimum prototyping criteria and the acceptance test plan are defined as part of the Working Group's work plan prior to submitting the Last Call Working Draft.
- Solution Partner Participants that have committed to the prototype and test phase perform those activities and report their results back to the TAG.
- For software specifications, a prototype must be produced demonstrating the specification.
- For hardware specifications, a working artifact must be produced.
- The results of the prototyping activity can result in modifications to the Candidate Specification, which would require a return to Step 5 in the process for re-engineering by the original Working Group.
- Required to provide production or pilot implementation as part of specification validation process.

1501

7.5.4 Deliverable(s)

- Prototype and test report.

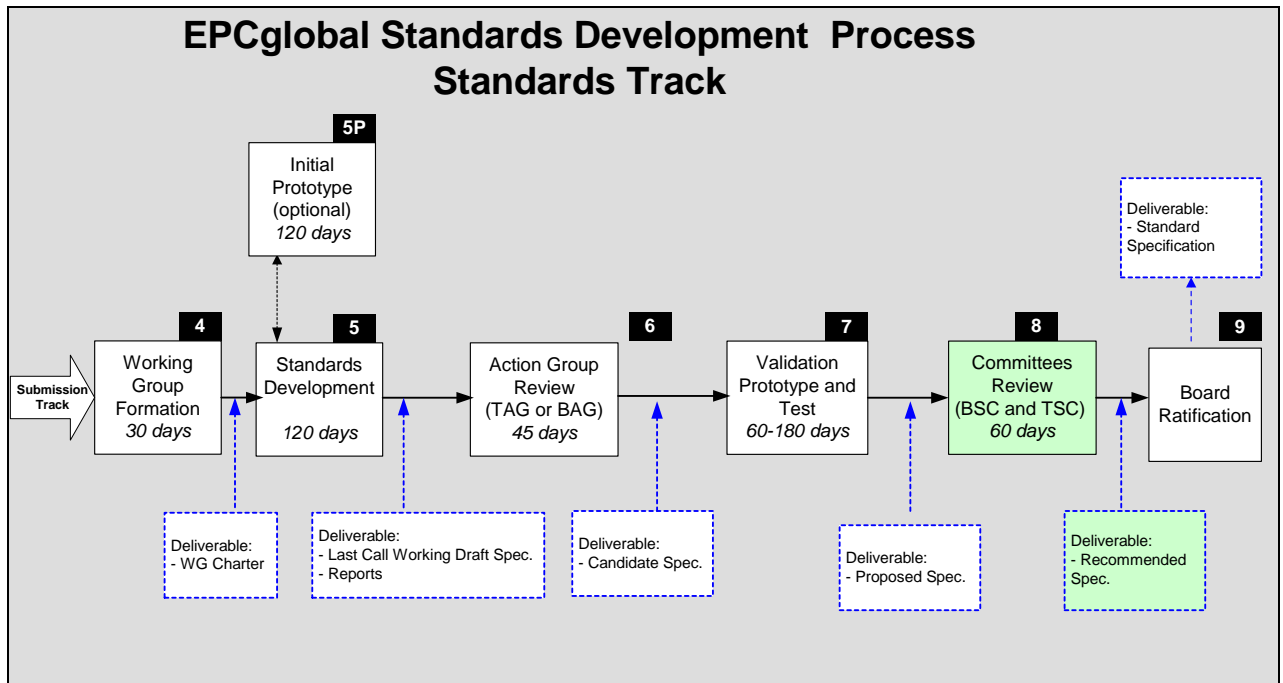
1502
1503
1504
1505
1506
1507

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 1510 • Specific References to Prototypes used and produced to test software specifications
- 1511 or working artifact for hardware specifications
- 1512 • Revised Candidate Specification and Conformance Requirements (If normative
- 1513 content revised, need Action Group approval by repeating Step 6 above)
- 1514 • Proposed Specification
- 1515
- 1516
- 1517
- 1518
- 1519

1520
1521
1522

7.6 STEP 8: Steering Committee Review



1523
1524
1525

7.6.1 Target Timeframe

Default = 60 days.

1526

7.6.2 Process Owner

- TAG, with TSC Committee and BSC review and approval.

1527

7.6.3 Process

- At the end of the prototyping process, the TAG asks the TSC and BSC to review the Proposed Specification (PS), along with the prototype results, and Conformance Requirements. Conformance Requirements shall be completed and revised with impacts from Prototype testing and submitted with the PS for review and approval. Failure to supply Conformance Requirements will result in the PS not being approved until this deliverable is met, unless this deliverable is not a requirement of the charter or EPCglobal Certification program.
- The TSC and BSC should evaluate the Proposed Specification against the original Use Case or business requirement document.
- If the PS meets those requirements successfully, the PS gets promoted to a Recommended Specification that can be tested against for certification purposes.

1528

7.6.4 IP Policy Governance

- At the beginning of the Steering Committee Review, all Participants in the Working Group that developed the Proposed Specification and Conformance Requirements shall be provided with notice of the impending review along with copies of the Proposed Specification and Conformance Requirements. Note that in some cases Conformance Requirements may not be required as determined by EPCglobal.

1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550

1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589

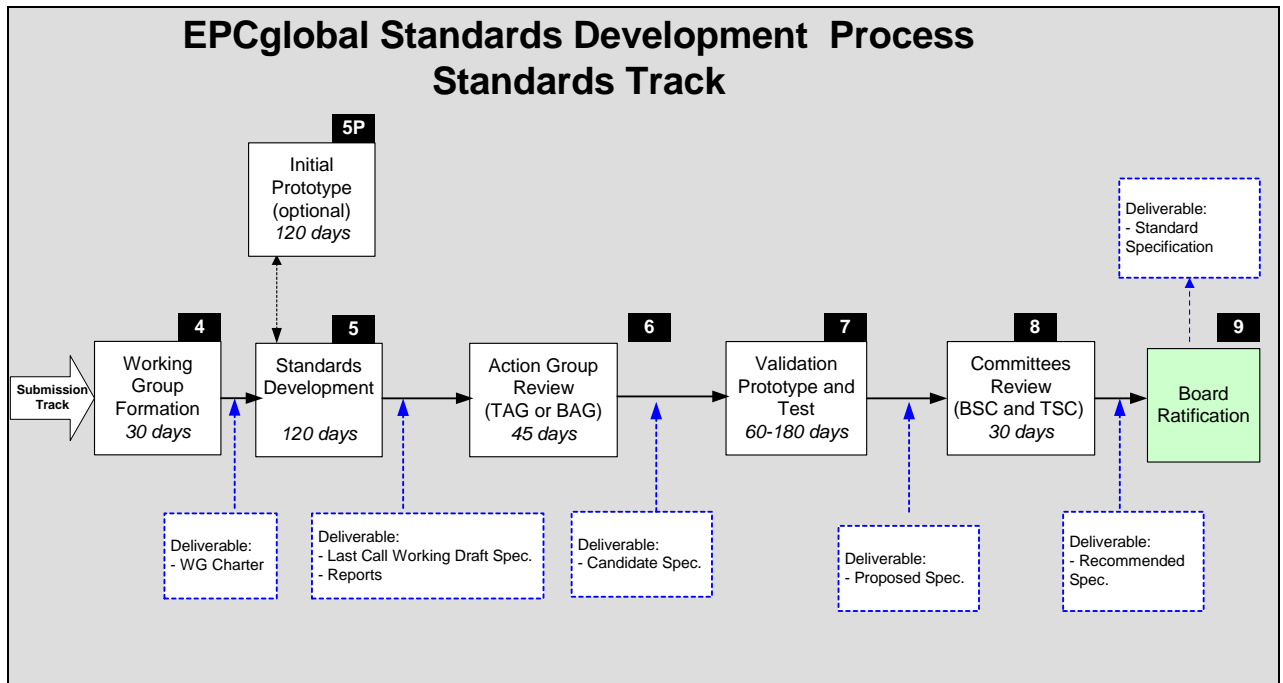
- Following the declaration that a Candidate Specification has been promoted to a Proposed Specification, all participants in the Working Group shall be provided with at least 60 days notice prior to the anticipated date of ratification of the Specification by the Board of Governors.
- All such Working Group Participants have a final opportunity to make their notification of their intent not to *grant a nonexclusive, nontransferable, non-sub licensable, worldwide royalty-free or otherwise reasonable and non-discriminatory* license no later than 30 days before the anticipated date of ratification of the Recommended Specification by the EPCglobal Board of Governors by using the IP Declaration annexed hereto in Appendix 7.
- Once submitted, all IP Declarations shall be forwarded to EPCglobal Legal Counsel for review. The submitter of the IP Declaration shall be informed that his/her IP Declaration is currently under review.
- The IP issues will be resolved by either EPCglobal's outside counsel's finding that the claims are not necessary to the Specification, the Working Group's decision to revise the Specification or EPCglobal Board of Governors' decision to proceed with a RAND exception.
- Once all IP issues are resolved, the Recommended Specification shall be submitted to the Board of Governors for ratification. Following ratification, the IP Declarations shall be posted in the relevant e-room to be accessed by the Working Group Participants at their discretion and option. At this time, notice will be given to the party(ies) which filed an IP Declaration that review of their IP Declaration has concluded, a summary of the findings and a copy of the analysis letter.

7.6.5 Deliverable(s)

- Approved Compliance Requirements
- Recommended Specification.
- Recommendation to the Board of Governors for ratification by other standards bodies.

1590
1591
1592

7.7 STEP 9: Board of Governors Ratification



1593
1594
1595

7.7.1 Target Timeframe

30 days.

7.7.2 Process Owner

President, EPCglobal.

7.7.3 Process

- President, EPCglobal performs due diligence that due process was followed and presents to EPCglobal Board the Recommended Specification for ratification.
- Board of Governors ratifies based on a 2/3rd's majority vote
- Any parties that believe that they were denied due process should register their concerns with the Board of Governors at this time.
- The technical specification achieves the highest maturity status. It becomes the EPCglobal Standard Specification.
- Separately, the EPCglobal Board of Governors may consider the recommendations of the BSC and TSC to send the Standard Specification to another standards body for ratification.

1601
1602
1603

7.7.4 Deliverable(s)

- EPCglobal Standard Specification. Note that EPCglobal Standard Specifications are published and presented on the EPCglobal Inc. Website. As part of EPCglobal Publishing policy, ratified Standard Specifications are published without specific reference to the many volunteers who help to create the documents.

1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619

EPCglobal STANDARDS DEVELOPMENT PROCESS

1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639

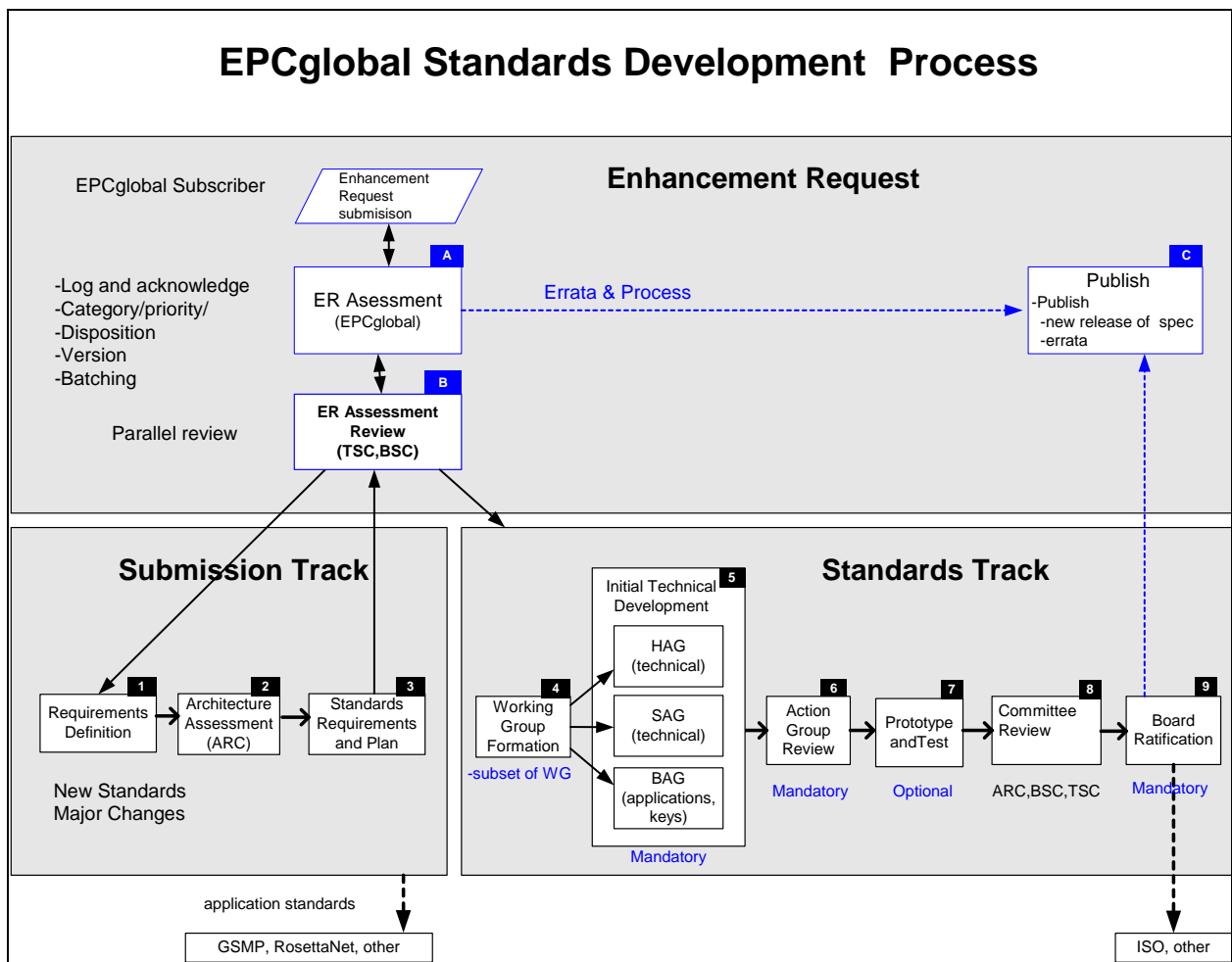
- Presentation package for appropriate standards body.

8 Enhancement Request (ER) Process

The Enhancement Request (ER) process will manage changes to EPCglobal standards. The process is designed to be open to the subscriber community, efficient and with appropriate level of audit to ensure that EPCglobal due process and IP guidelines are followed. It is important to note that once the document is an EPCglobal Standard Specification, it belongs to the EPCglobal Inc. as a whole, not to the Working Group, and the Working Group no longer has sole say over it. Any changes to the specification will be managed through the EPCglobal ER process. The following sections discuss the management of errors and the process for making normative changes or enhancements to an EPCglobal Standard Specification.

8.1 Enhancement Request Overview

The ER process utilizes existing SDP process. It can be thought of as a “lightweight”: SDP as not all tasks and deliverables from SDP may be appropriate. However, any IP related task and SHALL be followed as they are in SDP.



1640
1641

1642
 1643
 1644
 1645
 1646
 1647
 1648
 1649
 1650
 1651
 1652
 1653
 1654
 1655
 1656
 1657
 1658
 1659
 1660
 1661
 1662
 1663
 1664
 1665
 1666
 1667
 1668
 1669
 1670
 1671
 1672
 1673
 1674
 1675
 1676
 1677
 1678

8.2 Types of Enhancement Requests (ER)

EPCglobal recognizes two categories of changes to the EPCglobal Standard Specification:

Errata

These changes include fixing broken links, invalid markup and similar improvements. It also includes editorial changes and improved explanation as long as it does not change the technical content of the specification.

An Errata List will be owned by the appropriate WG or the EPCglobal owner of the Specification if a related WG no longer exists. EPCglobal will ensure that it is correctly updated with new requests and items on the list have appropriate resolution.

Once a WG has developed corrections or resolutions to items on the list, then the Errata List will be reviewed by the Action Group (allowing two weeks review period). The Errata List (per each version of the specification) will be created and will be available for downloads to Action Group members.

Enhancements

It is an Enhancement if:

- a. The corrections to the specification will affect the conformance rules of the specification, i.e.
 - Turn conforming data / commands / processes into non-conforming ones
 - Turn non-conforming ones into conforming ones
- b. A new feature is proposed to be added to existing EPCglobal Standard Specification

The Enhancements that handle more substantive changes require:

- Review by the community, as outlined in the table below, to ensure the technical soundness of proposed corrections.
- Timely publication of the edited EPCglobal Standard Specification, with corrections incorporated

8.3 Reviews and Approvals

The ER process has been designed to provide visibility for the Action Group members to review the requests and their resolutions. The table below summarizes the approach.

Type of ER	ARC Review	Public Review (AG and WG)	Committee Reviews (TSC, BSC)	President Approval	BOG Ratify
New Doc	Yes	Yes	Yes	Yes	Yes
Enhancement	Yes	Yes	Yes	Yes	Yes
Errata	No	Yes	No*	Yes	No

* As an exception

8.4 Errata Processing

Working Groups or the EPCglobal owner of a Specification for which a WG no longer exists **SHALL** track errata on an "errata page." An errata page is a list of enumerated errors,

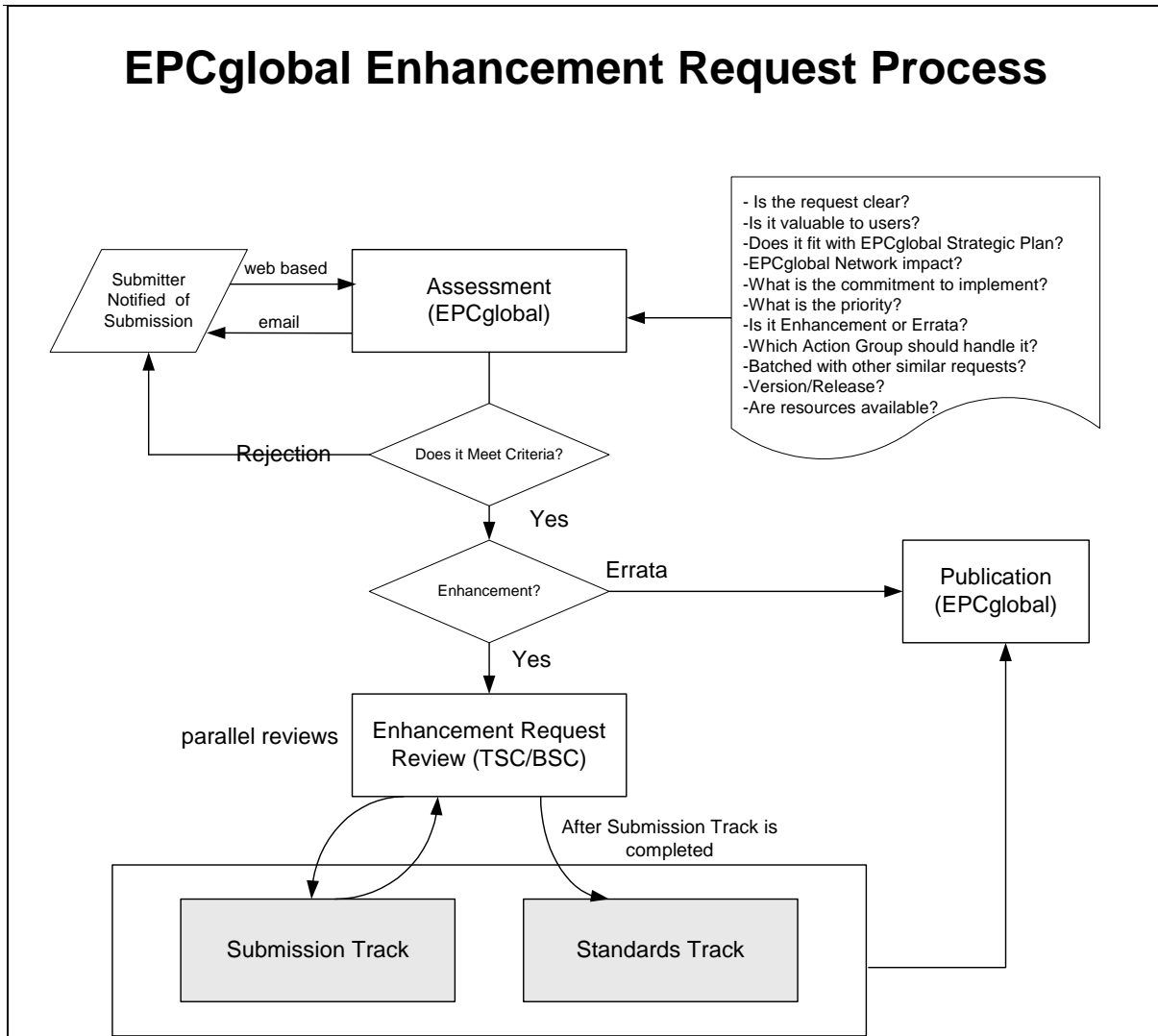
1686 possibly accompanied by corrections. Each EPCglobal Standard Specification **SHALL** either
1687 have an Errata Section or provide a link to an errata reports changes to an errata page. A
1688 Working Group **SHALL** keep their errata pages up-to-date, as errors are reported by
1689 readers and implementers.
1690 EPCglobal will work with the WG responsible for the errata to ensure that a due process is
1691 followed.

1692
1693 When minor changes are made, the specification should get either a new Revision number
1694 (XYZ 1.2 Technical specification, Second revision) or a new Version number.
1695 The rules for review of proposed changes of this kind are almost exactly the same as for
1696 enhancement requests: members of Action Groups will have up to three weeks to review the
1697 proposed changes and comment. If there are no objections then the erratum will be
1698 submitted for publication. If there are objections and EPCglobal staff cannot resolve them in
1699 a satisfactory manner, the errata will be referred to TSC/BSC for an opinion.

1700
1701

1702 **8.5 ER Process Flow**

1703 The following figure describes the ER flow. The detail description of each of the step and the
1704 flow is described in the following sections.
1705



1706
 1707
 1708
 1709
 1710
 1711
 1712
 1713
 1714
 1715
 1716
 1717
 1718
 1719
 1720
 1721
 1722
 1723

An enhancement submission may be in one of the following states: Assessment, Rejection, Withdrawn, Review, Submission Track, Standards Track, and Publication

8.6 STEP A – Submission

Any subscriber of the EPCglobal can submit an Enhancement Request, be it an errata or an Enhancement Request. A submission will be made using an ER Submission form that shall be faxed to the fax number printed on the form. A submitter will be notified (via email) within 10 business days that submission was successful and a tracking number will be assigned to the request.

At that point the request will be published on the EPCglobal secured web site.

When more than one Subscriber Company jointly participates in a Submission request, only one Member formally sends in the request. That Member **SHALL** copy each of their respective company’s primary contacts with EPCglobal and each of those Advisory

EPCglobal STANDARDS DEVELOPMENT PROCESS

1724 Committee representatives **SHALL** confirm (by email to EPCglobal) their participation in the
1725 Submission request.
1726 At any time prior to acknowledgment, any Submitter **CAN** withdraw support for a Submission
1727 request. A Submission request is "withdrawn" when no Submitter(s) support it. The
1728 EPCglobal will not make statements about withdrawn Submission requests.
1729 Prior to acknowledgment, the Submitter(s) **SHALL NOT, under any circumstances**, refer
1730 to a document as "submitted to the EPCglobal" or "under consideration by EPCglobal" or
1731 any similar phrase either in public or subscriber communication. The Submitter(s) **SHALL**
1732 **NOT** imply in public or Member communication that EPCglobal is working (with the
1733 Submitter(s)) on the material in the Member Submission. The Submitter(s) **MAY** publish the
1734 documents in the Member Submission prior to acknowledgment (without reference to the
1735 Submission request).
1736 After acknowledgment, the Submitter(s) **SHALL NOT, under any circumstances**, imply
1737 EPCglobal investment in the Member Submission until, and unless, the Enhancement
1738 Request reaches the Standards Track.

1739
1740
1741

8.7 STEP B - Assessment

1742 The tasks in this step will be performed by EPCglobal staff.
1743 They will include:

- 1744 • Validation of the request submitted
 - 1745 ○ All required fields filled
 - 1746 ○ Clarity of the request
 - 1747 • Assessment to determine if request is valuable to users
 - 1748 • Alignment with EPCglobal Strategic Plan
 - 1749 • EPCglobal Network impact
 - 1750 • Existing Specification impact
 - 1751 • Commitment to implement
 - 1752 • Assignment of priority
 - 1753 • Categorization: Enhancement or Errata
 - 1754 • Recommended Action Group to handle the
 - 1755 • Batching of requests
 - 1756 • Recommendation on Version/Release
 - 1757 • Resources availability
 - 1758 • Plan to process the Request through the Standards Track
- 1759 This may involve creation of a new WG in the Business Action Group, a subgroup of
1760 an existing WG) to work on the ER. An expert(s) on the subject from the TAG
1761 (Technical Action Group may be invited to participate.
1762

1763
1764 If a request fails validation criteria it will be rejected and the submitter will be notified with a
1765 reason given.

1766 The assessed request (or a batch of them) will be presented to both TSC/BSC for their
1767 review and approval (Step C)

1768

8.8 STEP C - Assessment Review

1769 The Steering Committees (both TSC and BSC) receive EPCglobal assessed ERs. They
1770 review the assessment (or a batch of them) and EPCglobal recommendations for the course
1771 of action.
1772

1773 The Steering Review Committee has the authority to override EPCglobal recommendations.
1774 For example, it may change priority or even reject the ER.
1775

1776 **8.9 STEP D - Submission Track**

1777 After the Steering Committees Review, an enhancement request enters the Standard
1778 Development Process and it is obliged to follow all steps and produce deliverables as
1779 specified in the SDP.

1780 In Step 3 (Standards Requirement and Plan), a plan for the Standards Track is developed. It
1781 will include necessary steps (see Fig 1) to complete the ER.
1782

1783 **8.10 STEP E - Standards Track**

1784 The enhancements will follow all steps as defined in the SDP. Step 7 (Prototype and Test) is
1785 defined as optional for enhancement requests.

1786 The timing for delivery and reviews should be significantly shorter than when developing a
1787 new specification.

1788 In Step 4, Working Group Formation, activities will involve selecting a team to respond to
1789 enhancement request. It is strongly recommended that an Editor be nominated by the WG
1790 chairs to lead the team.

1791 The team should be selected from subject matter experts in the area of the request.

1792 The team should assess the request(s) and provide estimated completion date.
1793

1794 The documents made available for review may be either a new version of the Specification
1795 with all changes folded in (including current errata) or a list of changes; in either case, the
1796 deltas between the existing Specification and the proposed correction must be highlighted.
1797

1798 **8.11 STEP F - Publish**

1799 Errata publishing will be accomplished in one of the two ways:

- 1800 a. A specification's revision number will be incremented. For details on revision numbers
1801 see Section 9.0. A link will be created in the specification to Errata to ensure that that
1802 specification has always the right errata accompanying it. That Errata List will also be
1803 available for separate downloads.
- 1804 b. A specification itself may be revised and include errata changes. This may happen if
1805 there are too many items on the Errata list. In that case, the specification **SHALL** clearly
1806 state what Errata List was used.
1807

1808 The Enhancement Requests will be published as part of the Specification.

1809 A specification version number will be revised and will include all the Enhancement
1810 Requests as well as any changes from the current Errata List pertaining to that version. A
1811 specification **SHALL** clearly state what Enhancement Requests and Errata List have been
1812 included in the current revision or release...
1813

1814 The Enhancement Request will enter its final state "Publication" to indicate that it has been
1815 completed.
1816

1817

1818 **8.12 Questions and Answers**

1819

1820 **How frequently should corrections or enhancements be made normative?**

1821 Working Groups should not propose normative corrections too frequently. Perceived instability in
1822 specifications will cause confusion in the public and impede adoption. The need for a very important
1823 correction may be the best trigger for when to request review.

1824 Opinions differ, of course, as to what is "too frequent." Some suggest not more frequent than every
1825 three months; some, every six months.

1826 **What appeal process is available?**

- 1827 • People dissatisfied with a Working Group decision should make their case to the Working
1828 Group first, who may back off from, or modify, the proposed change.
- 1829 • If the Working Group and those dissatisfied with the proposed change cannot agree, the ARC
1830 must decide.

1831 **How frequently should revised Recommendations be published?**

1832 In general, the EPCglobal should discourage republication more frequently than approximately every
1833 6 months, and require a rationale when more frequent publication is requested. Similarly, the
1834 Consortium should discourage frequent revision for errata only.

1835 For the intervening period, it's useful to maintain the current organization of Specification + errata
1836 page.

1837

1838 **Should the Working Groups maintain a separate errata list?**

1839 Yes, they definitely should maintain a list of known errata and their corrections.

1840

1841 **Why not just allow items in a separate errata document to be marked normative?**

1842 It is always simpler for implementers and users of specifications to have a single source of
1843 authoritative information than to have two.

1844

1845

1846 **9. Versioning Methodology**

1847

1848 **Introduction**

1849

1850 Within the Hardware and Software Action Groups, EPCglobal Inc. develops open standards
1851 that impact the implementation of RFID technology. Keeping track of the various stages of
1852 standards development requires a coherent and documented versioning methodology that
1853 shall be implemented across all Working Groups.

1854

1855

1856 **Overview of Methodology:**

1857

1858 The Versioning Strategy encompasses the use of three numbers to denote a
1859 change/update to the Standards as outline below:

1860

1861 **N.** Used for major changes to the Architecture and Core Components. No
1862 backward -compatibility between Standards Publications.

1863 **N.n** Used for publication updates, there may be some backward compatibility.

1864 **N.n.n** Used for minor changes: Errata, navigation, document updates, new
1865 guidelines, release of additional messages that are compliant but not
1866 originally part of the N.n publication. There is always backward
1867 compatibility.
1868

1869 An example:
1870 EPC Tag Data Translation Standard Specification 1.0
1871

1872 **Timing:**

1873 Generally, changes are expected to occur no more frequently than as follows,
1874 except in unusual circumstances normally involving early releases of a
1875 Specification:

1876 **Specification:**

1877 **N.** Changes could occur once per year.

1878 **N.n** Publication could occur semiannually or twice per year.

1879 **N.n.n** Minor change(s) could happen up to 4 times per year.
1880

1881

1882

1883

1884 **10 Alternative Charter Creation and Existing Charter Amendment Process**

1885

1886 As indicated in previous SDP Steps, the BSC or TSC can authorize an Action Group's co-
1887 Chairs to create a new charter to cover development of new standards based on
1888 requirements created by a Business Action Group. In some cases where no user
1889 requirements or lack of sufficient user requirements are produced by a BAG, it may be
1890 necessary for an Action Group to draft a charter for ratification by the Steering Committees.
1891 The scope of work for the new charter should fall within the boundaries set by the ARC
1892 Architectural Framework specification.
1893

1894

1895 In other cases an existing ratified charter may need to be changed or amended to
1896 accommodate an emerging requirement or process oversight. Charters will be considered
1897 for amendment if they can be adjusted to accommodate emerging and new or additional
1898 standards requirements. The Steering Committee must decide whether it is better to have:
1899 (a) an existing charter of an impacted Working Group supplemented; (b) a new charter
1900 written that will be executed after the current charter is completed; or (c) a new charter
1901 written that will be executed in parallel with an existing Working Group. Supplemented
1902 charters, like any new charter, should drive for the creation of standards that fall within the
1903 boundaries set by the ARC Architectural Framework Specification.

1904

1905 If the Architectural Framework Specification does not fully cover the scope of work of the
1906 new charter or the amended charter, the process allows for ARC findings (technical
1907 interpretations and recommendations relevant to the Architectural Framework) to be created
1908 to amend the Architectural Framework Specification or provide recommendations to the
1909 team who is crafting the new charter. ARC Findings need to be reviewed and approved by
1910 the TSC when they are relevant to charter amendment and creation processes.

1911 **10.1 Alternative New Charter Creation**

1912 This section documents the steps in the process to create a new charter in the absence of
1913 fully defined user requirements from a BAG. Note that creating charters from user
1914 requirements is the preferred method.

1915

1916 TSC, BSC, or Technical Action Group (TAG) co-Chairs can initiate a request to create a new
1917 Technical Action Group charter.

1918

1919 The TAG co-Chairs form a team of 2 to 6 participants to create a rough draft of the charter
1920 that meets the top line direction set by themselves or the TSC/BSC. A draft charter team
1921 leader is appointed by the TAG co-Chair(s). If the new charter is related to an existing WG,
1922 at least one team member should be chosen from the existing WG, preferably a co-Chair of
1923 the WG that might be impacted by the new charter. As an alternate to forming a charter
1924 drafting team, the TAG co-Chairs may ask an existing WG to perform this function.

1925

1926 The initially drafted charter will be placed in a TAG review cycle so that all TAG participants
1927 (including participants from a Working Group that might be impacted) can provide additional
1928 input and comment to develop the draft further. These comments are to be collected and
1929 consolidated into a comment and resolution matrix (see Appendix 5 for reference), similar to
1930 what is done for LCWDs.

1931 The draft charter review within a Technical Action Review will be conducted over a 2 week
1932 period, and a communication will be made before the period starts to announce that this
1933 process step is taking place.

1934 The comments are processed by the draft Charter team (or WG assigned to perform the
1935 charter drafting function) within a 2 week period

1936 The initial rough draft of the charter amended with Action Group comments now becomes a
1937 proposed draft of the new Charter.

1938

1939 The proposed draft of the new charter is then sent to the ARC for a compliance check
1940 against the Architectural Framework. If the charter is out of alignment with the Architectural
1941 Framework the ARC should state in a brief Finding what specifically is the cause and what is
1942 their recommendation to change the Charter to get it in alignment, else the ARC should
1943 state that the Architectural Framework needs specific revision. Normal processing should be
1944 2 weeks.

1945 Changes suggested by the ARC are to be assessed by the charter drafting team, and if they
1946 agree with the assessment, they can amend the drafted charter and run it through the TAG
1947 review cycle again for final ratification. If the suggested changes from the ARC are not
1948 agreed to by the charter drafting team and they wish to challenge the finding, then the
1949 Action Group co-Chair and the lead person of the charter drafting team can address counter
1950 arguments to the ARC and TSC to resolve the disagreement.

1951

1952 The proposed draft of the Charter is reviewed by the TAG co-Chairs to make sure that the
1953 final output meets the basic criteria of the initiating request to create the charter and review
1954 Findings from the ARC. In case of a dispute between the ARC and the draft Charter team
1955 lead or team members, the Action Group co-Chair shall try to resolve the dispute with those
1956 involved. If the attempt by the Action Group co-Chair to resolve the dispute is still
1957 unsatisfactory, then the party or individual who is dissatisfied can file an appeal [Reference
1958 Section 4.5].

1959

EPCglobal STANDARDS DEVELOPMENT PROCESS

1960 The proposed draft of the new charter is then processed by the TAG EPCglobal Facilitator
1961 to seek review and approval by EPCglobal Legal Counsel. Once EPCglobal Legal Counsel
1962 approves the draft charter, it becomes an approved charter. At this point the charter is not
1963 ratified nor can it be executed.

1964
1965 The approved Charter is submitted to TSC and BSC for ratification. The approved charter is
1966 sent to both steering committees, since we are creating a new charter without any or
1967 significant input from the BAGs. A 2/3's approval of all participants in each Steering
1968 Committee is required for the charter to be ratified. If the charter fails TSC or BSC
1969 ratification, a charter can be reworked to correct the deficiencies and can be resubmitted.
1970 The charter drafting team shall address all charter adjustments as directed by the TSC or
1971 BSC. Adjusted Charters will be maintained in the TAG records for all to see.

1972
1973 Once the Charter is ratified by the BSC/TSC, continue with Steps 4 and 5 of the SDP: New
1974 charters require WG formation, opt-ins, etc.

1975

1976 **10.2 Process to Supplement an Existing Charter**

1977 The Charter Amendment Process allows for existing ratified charters to be supplemented.
1978 Supplementing an existing charter can be initiated as a result of new, emerging user
1979 requirements or new realizations that charter deliverables need to be adjusted for business
1980 or technical reasons that weren't envisioned at the time of charter's initial creation. Charters
1981 can be supplemented to address scope changes that the BSC, TSC, or the Action Group
1982 co-Chairs determine are necessary. WG co-Chairs, with input and agreement from their
1983 participants, can initiate a request to supplement their current charter if they submit the
1984 request to their Action Group co-Chairs.

1985 Unlike the Alternative new charter creation method, supplementing an existing charter shall
1986 be done with the involvement of an existing Working Group, since the process is primarily to
1987 make smaller adjustments. Supplemented charters will require the approval of the Steering
1988 Committees, following the same process as the alternate new charter creation.

1989

1990 **Process Steps to Produce a Ratified, Supplemental Charter**

1991 A. TSC/BSC directs the impacted WG to supplement its charter based on a document
1992 that contains User Requirements from a BAG, or the Action Group Co-Chairs initiates
1993 a modification based on input from the ARC, WG itself, or other sources. The
1994 reasons for initiating a charter change should be documented and as much
1995 supporting evidence for generating the change should be kept within the record
1996 retention area of the impacted WG. If a WG or Action Group co-Chair initiates a
1997 request for charter amendment, it should be reviewed and approved by BSC/TSC
1998 before proceeding.

1999

2000 B. The WG within the Action group whose charter will be amended drafts a
2001 supplemented charter per the approved written direction. The amended draft charter
2002 shall be approved by WG participants. This can be accomplished by a 2/3 vote
2003 amongst participants in good standing. The vote should be documented in the
2004 meeting minutes.

2005

2006 C. The draft supplemented charter is processed by the EPCglobal Facilitator, who seeks
2007 EPCglobal Legal Counsel's review and approval of the proposed draft of the

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 2008 supplemented charter.
- 2009
- 2010 D. EPCglobal Legal Counsel's approved supplemental charter is sent to the Technical
- 2011 Action Group for additional review and comment.
- 2012
- 2013 E. The charter is adjusted to include relevant comments received during the TAG
- 2014 review, ARC Findings, or additional direction to clarify as given by the TAG co-
- 2015 Chairs.
- 2016
- 2017 F. The supplemental charter is presented to TSC and BSC for final approval.
- 2018 Supplemental charters require a 2/3 approval of all TSC and BSC participants.
- 2019
- 2020 G. Once the approved, amended charter is ratified, WG members may progress with
- 2021 the newly ratified, supplemental charter. There is no requirement to re-opt-in to a
- 2022 supplemented charter (the original WG opt-in is considered to remain in force),
- 2023 though Participants can withdraw from the WG if they consider the amendments to
- 2024 be unacceptable. Additionally, all intellectual property contributed under the original
- 2025 charter now carries over to the supplemental charter and Specification unless an IP
- 2026 Declaration was previously and properly submitted as per the IP Policy.
- 2027
- 2028

2029 **11 Process for Changing SDP Standards Document**

2030 This section documents the process and procedures for addressing changes to the SDP

2031 itself.

2032

2033 The SDP will be assigned a chief editor of the document within EPCglobal Staff. The editor

2034 of the SDP document shall be appointed by the EPCglobal Standards Director or the

2035 EPCglobal President.

2036

2037 Proposed changes or enhancements to the SDP will be submitted to a common area or

2038 electronic tool designated for collection by EPCglobal support staff. This tool will allow

2039 sharing amongst the EPCglobal subscriber community.

2040

2041 Comments shall be collected by the EPCglobal staff member (Chief Editor or appointee) and

2042 consolidated into a Change and Resolution form (See Appendix 5).

2043

2044 Collected proposals will be reviewed by the TSC and BSC once per quarter. The TSC and

2045 BSC shall determine which proposed changes get highest priority for implementation.

2046

2046 EPCglobal Staff, through the appointed chief editor of the document, shall develop new SDP

2047 process refinements that address the proposed enhancement from the users.

2048

2049 The proposed enhancements will be reviewed and approved by EPCglobal Legal Counsel,

2050 TSC and BSC in the following quarter. All changes to the SDP must be ratified by the

2051 EPCglobal Board of Governors.

2052

2053 Publication and update of the SDP will be conducted a maximum of two times per year.

2054

2055

2056

APPENDIX 1 - References/Definitions

2057

2058

Application Standards

2059

2060

Purpose: Standards for the production use of technical standards and how those standards are applied to specific business problems.

2061

2062

2063

Examples: Framework for implementing the EPCglobal Network in a sector, guidelines for physical application of tags to goods.

2064

2065

2066

GSMP application guidelines for the EAN.UCC System Standard and RosettaNet business process standards are other examples of application standards.

2067

2068

2069

BSC Business Steering Committee

2070

2071

Consensus

2072

A general agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. It is important to understand that Consensus does not mean unanimity. It is the responsibility of the (co-) Chair(s) to judge whether Consensus indeed has been reached. If Consensus cannot be reached, a vote is called.

2073

2074

2075

2076

2077

2078

2079

2080

CS

Candidate Specification. A Candidate Specification (Recommendation) is a document that EPCglobal believes has been widely reviewed and satisfies the Working Group's technical requirements. EPCglobal publishes a Candidate Specification to gather implementation experience (equivalent to Candidate Recommendation in W3C terms).

2081

2082

2083

2084

2085

2086

End User

This group includes manufacturers, retailers, wholesalers, carriers, and government. In general terms, these are the organizations that have objects in motion in the supply chain. End User companies join the EPCglobal Community by licensing EPC Manager numbers and registering those EPC Manager numbers with the Object Name Service (ONS). This is also the mechanism that retailers and carriers, who will be primarily users of the EPC Network, use to establish access to that network.

2087

2088

2089

2090

2091

2092

2093

2094

2095

EPCglobal Network

Radio Frequency Identification (RFID) is a technology used to identify, track and locate assets. The vision that drives the developments at the Auto-ID Center is the universal unique identification of individual items. The unique number, called EPC (electronic product code) will be encoded in an inexpensive Radio Frequency Identification (RFID) tag. The EPC Network will also capture and make available (via Internet and for authorized requests) other information that pertains to a given item to authorized requestors.

2096

2097

2098

2099

2100

2101

2102

2103

2104

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 2105 **EPCglobal Reference Architecture**
- 2106 Purpose is to clarify where standards should be created or changed to meet new
- 2107 business or technical requirements, as well as to ensure the coherence and
- 2108 consistency of the standards set published by EPCglobal. The Reference
- 2109 Architecture includes a set of principles, guidelines, and strategies governing the
- 2110 implementation of the EPCglobal Network and related RFID technologies.
- 2111 **EPCglobal Standard Specification**
- 2112 An EPCglobal Standard is a specification or set of guidelines that, after extensive
- 2113 Consensus-building, has received the endorsement of EPCglobal members and
- 2114 the EPCglobal Board. EPCglobal recommends the wide deployment of its
- 2115 Standards. **Note:** EPCglobal Standards are similar to the Recommendations
- 2116 published by other organizations such as W3C and ISO.
- 2117 **EPCglobal Website** www.epcglobalinc.org
- 2118 From this location participants will find all current members of each EPCglobal
- 2119 Action Group, view all existing working groups, access the EPCglobal e-Rooms,
- 2120 and reference the latest EPCglobal SDO information.
- 2121
- 2122 **GSMP** Global Standards Management Process.
- 2123
- 2124 **Guidelines** EPCglobal guidelines provide written clarifications and direction for
- 2125 implementing ratified standards.
- 2126
- 2127 **HAG** Hardware Action Group.
- 2128
- 2129 **IP Neutral Environment**
- 2130 Period of time during the creation of Working Group Charters: Called out in IP
- 2131 Policy to provide a “safe haven” for early Participants while Charter is being
- 2132 developed and Participants opt-in to the Working Group
- 2133 **Participant**
- 2134 An individual or legal entity bound by the EPCglobal IP Policy
- 2135 **Participation Framework**
- 2136 Set of documents that govern subscription to EPCglobal and participation in the
- 2137 Standards Development Process. At the time of this writing, the Participation
- 2138 Framework includes:
- 2139 ○ EPCglobal IP Policy
 - 2140 ○ IP Policy Opt-In Agreement
 - 2141 ○ EPCglobal Subscriber Agreement
 - 2142 ○ Antitrust Caution
 - 2143 ○ EPCglobal Standards Development Process
- 2144
- 2145 **PS** Proposed Specification. A Proposed Specification is a mature technical report
- 2146 that, after wide review for technical soundness and implementability, EPCglobal
- 2147 has sent to the TSC and BSC committees for final endorsement. Proposed
- 2148 Specification is the equivalent to Proposed Recommendation in W3C terms.
- 2149
- 2150 **Quorum** Presence of 2/3rds of eligible voting members
- 2151
- 2152 **RAND** Reasonable and Non-Discriminatory.
- 2153

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 2154 **Representative**
2155 The individual(s) authorized by the Participant to represent the Participant in the
2156 activities of a Working Group. Such Representatives shall be specifically
2157 identified upon enrollment in a Working Group.
2158
- 2159 **RF** Royalty Free.
2160
- 2161 **SAG** Software Action Group.
2162
- 2163 **Solution Partner**
2164 This group includes hardware and software companies, consultants, systems integrators,
2165 training companies, and trade associations. In general terms, these are the organizations
2166 that help the End User community implement the EPC Network and its technologies.
2167 Solution Partner companies join the EPCglobal community by paying an annual Solution
2168 Partner program fee. Solution Partner companies may also license EPC Manager numbers
2169 and register in ONS through the End User subscription fee schedule, in which case they
2170 also belong to the End User group of subscribers.
2171
- 2172 **Standard** Per ISO definition, “Standards are documented agreements containing technical
2173 specifications or other precise criteria to be used consistently as rules,
2174 guidelines, or definitions of characteristics, to ensure that materials, products,
2175 processes are fit for their purpose”.
2176
- 2177 **Subscriber**
2178 An EPCglobal Subscriber is a Participant company who has paid the appropriate
2179 subscription fee and has executed a Subscription Agreement with EPCglobal.
2180
- 2181 Current sponsors of the Auto-ID Center may continue their Action Group
2182 participation and attendance at the Auto-ID Labs research meetings at no
2183 additional charge according to the following formula:
2184
 - 2185 ○ Board of Overseers members can participate in Action Groups through
2186 December 2005. As a formality, in order to continue their participation, Board
2187 of Overseers members must execute a Memo of Agreement with EPCglobal,
2188 Inc.
 - 2189 ○ Technology Board members can participate in Action Groups through
2190 December 2004. In order to continue their participation, Technology Board
2191 members must execute a Memo of Agreement with EPCglobal, Inc., as well
2192 as the appropriate IP Policy Declaration. Executing these documents
2193 ensures that all participants, old and new, are operating under the same
2194 expectations of openness and neutrality.
2195 Auto-ID Center sponsors requiring additional services (EPC Manager numbers,
2196 certification services, etc.) during the continued participation period will need to
2197 become EPCglobal, Inc. Subscribers according to the appropriate schedule.
2198
- 2199 **Technical Standards**
2200 Purpose: Specifications for network and physical protocols and interfaces.
2201
2202 Examples: Air Interface Protocol Specifications, Savant Functionality and API definitions.
2203

EPCglobal STANDARDS DEVELOPMENT PROCESS

2204 **TSC** Technical Steering Committee.

2205

2206 **Use Case** Use Cases are an efficient tool for communicating business requirements. A Use
2207 Case is a detailed description of a single activity in a business process. It
2208 typically would identify data inputs and outputs, performance/timing
2209 requirements, handling of error conditions and interfaces with external
2210 applications
2211

APPENDIX 2 - EPCglobal Intellectual Property Policy

EPCglobal Intellectual Property Policy
Working Group Declaration
Rev. 12/15/2003 A

2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266

Whereas EPCglobal Inc. (hereinafter "EPCglobal") intends to facilitate the cooperative development and publication of useful standards for radio-frequency identification (RFID) tags, in order to provide a common set of Specifications by which manufacturers and end users of such RFID tags may utilize an interoperable system for making and using RFID tags in reliance on this Declaration relative to intellectual property claims; this Declaration is intended as a binding agreement with EPCglobal and an admission required to participate in a Working Group of EPCglobal for the purpose of developing useful Specifications for radio-frequency identification tags. EPCglobal Working Group activity is generally intended to encompass sufficient aspects of (i) tag programming, operation and tag-reader communication protocols, (ii) reader compatibility and interface protocols with data processing systems, and (iii) information exchange protocols based upon data obtained from RFID tags, to provide a sufficient standard platform for the use of radio-frequency identification tags. The intent of the policies embodied herein is to facilitate adoption of such a set of Specifications while avoiding uncertainty to the extent possible regarding intellectual property claims in the Specifications. EPCglobal seeks to encourage the development, exploitation and competition of proprietary technology and innovative approaches to implementing such specifications, while avoiding blocking proprietary claims or monopolization of use of the Specifications.

Therefore, I/We, The Working Group Participant named below as an individual and/or as an agent of the below identified Participant, intending to be legally bound hereby, declare and agree to terms of participation in the Working Group activities of EPCglobal Inc. as follows:

1. DEFINITIONS

1.1 "Participant" means an individual or legal entity bound hereby.

1.2 "Representatives" means the individual(s) authorized by the Participant to represent the Participant in the activities of a Working Group. Such Representatives shall be specifically identified upon enrollment in a Working Group.

1.3 "Trustee" means EPCglobal Inc., its assigns or successors in interest. Actions of Trustee as referenced herein are actions authorized by the Board of Governors of EPCglobal.

1.4 "Specification" means a technical specification approved by the Working Group and ratified by the Trustee.

1.5 "Certified Compliant System" means any system (e.g. an RFID tag, an RFID reader, an ONS server), which has been certified in a manner established by the Trustee to comply with a Specification and is subject to compliance certification conditions established by Trustee. Such certification conditions shall include licensing obligations by the party seeking certification commensurate with those set forth herein in Section 3.1. "Candidate Certified Compliant System" means any system developed, or under development, solely for the purpose of obtaining compliance certification.

1.6 "Compliant Portion" means a portion, module, or component of a Certified Compliant System or a candidate Certified Compliant System which implements no more than is required to operate in accordance with the Specification and which performs or implements such function only as set forth in the Specification.

1.7 "Necessary Claims" means all present, pending and hereafter acquired patent claims that would be necessarily infringed by implementing the Specification. A claim is necessarily infringed only when

EPCglobal STANDARDS DEVELOPMENT PROCESS

2267 it is not possible to avoid such infringement because there is no non-infringing alternative for
2268 implementing the Specification.

2269
2270 1.8 “Contribution” means any submission of concepts, data, suggestions, or revisions to a draft
2271 Specification, whether in written or oral form, made with the intention of inclusion thereof into the
2272 Specification.

2273
2274 1.9 “Affiliate” means any entity that directly or indirectly controls another entity via beneficial
2275 ownership of more than fifty percent of the voting power or equity in another entity (“Control”), or is
2276 controlled by another entity, or is under common Control with another entity, so long as such Control
2277 exists.

2278
2279 1.10 “Working Group” shall mean a body constituted by the Trustee for the purpose of developing a
2280 Specification.

2281
2282 2. GENERAL

2283
2284 2.1 Participant understands, admits and consents to the terms hereof as a condition of our/my
2285 participation in a Working Group of EPCglobal, and in which we intend to participate for the purpose
2286 of establishing a Specification for Certified Compliant Systems. It is our intention that the
2287 Specification is to be made freely available for use in developing Candidate Certified Compliant
2288 Systems and for use in Certified Compliant Systems free of claims of infringement, or subject to
2289 defined licensing terms under Section 3.4 hereof, to the extent that such Certified Compliant Systems
2290 operate in accordance with the Specifications.

2291
2292 2.2 Designation of the Representative(s) by Participant is hereby made by an officer or equivalent
2293 individual having the power to bind the Participant to the terms and conditions hereof.

2294
2295 2.3 Participation in a Working Group shall not constitute an undertaking to make or use any system or
2296 component in accordance with the Specification and a Participant shall not be required to implement
2297 any Specification.

2298
2299 2.4. The Trustee shall ensure that all Participants in a Working Group have committed to this
2300 Declaration as a condition for participation in a Working Group.

2301
2302 2.5 The terms and conditions hereof are intended to be limited to and binding relative to each
2303 Working Group in which the Participant participates.

2304
2305 3. INTELLECTUAL PROPERTY

2306
2307 3.1 Agreement to Grant Licenses.

2308
2309 Subject to Section 2.5, 3.2, 3.3, 3.4 and 4.3 hereof, the Participant and its Affiliates shall not assert,
2310 and shall grant to the extent that it owns or has a right to grant, a nonexclusive, nontransferable, non-
2311 sublicensable, worldwide royalty-free and otherwise reasonable and non-discriminatory license upon
2312 request in, its Necessary Claims to other Participants in the Working Group, and to allow Participants
2313 and others to make, have made, use, import, offer to sell, lease and sell and otherwise distribute
2314 Compliant Portions, provided that such agreement to license shall not extend to any part or function
2315 of a product in which a Compliant Portion is incorporated, which part or function is not itself part of the
2316 Compliant Portion, and further provided that such Participants and others comply with Section 3.2
2317 hereof. Participant and its Affiliates shall not transfer patents having Necessary Claims for the
2318 purpose of circumventing this Section, and any transfer shall be conditioned upon the obligation to
2319 license stated herein. The covenant of non-assertion and license herein shall not extend to any
2320 claims other than Necessary Claims.

2321

EPCglobal STANDARDS DEVELOPMENT PROCESS

2322 With respect to component parts of a Compliant Portion that are otherwise not subject to certification,
2323 but which establish compliance with the Specification, such component parts shall be admitted to be
2324 capable of substantial non-infringing use with respect to Necessary Claims if suitable for use in
2325 connection with a Certified Compliant System, for the purposes of a claim of contributory infringement
2326 or provided under non-infringing intent for a claim of induced infringement. Participant shall license
2327 any intellectual property associated with any testing and compliance certification process in
2328 connection with the Specification on a royalty-free and otherwise reasonable and non-discriminatory
2329 basis for the purpose of conducting compliance certification tests and processes.

2330

2331 3.2 Reciprocity Required.

2332

2333 The Participant's agreement to Section 3.1 and 3.4 shall not be effective as to any party that does not
2334 make the patent license grant of Section 3.1 or 3.4 available on substantially equivalent respective
2335 terms with respect to the same Specification as that requiring a license from the Participant.

2336

2337 3.3 Limited Agreement to Disclose.

2338

2339 In the event that the Participant is unwilling to provide the license of Section 3.1 to a work-in-progress
2340 of the Working Group(s) in which Participant has joined, such Participant agrees to promptly provide
2341 written notification to the Trustee of such Participant's intent not to license. After the Specification is
2342 approved by the Working Group, Participants therein shall be provided with at least 60 days notice
2343 prior to the anticipated date of ratification of the Specification by the Trustee. Notification of intent not
2344 to license shall be given no later than 30 days before the anticipated date of ratification of the
2345 Specification by the Trustee. Such notification shall specifically disclose and identify to the Trustee
2346 the claim(s) believed to be Necessary Claims and which are not subject to license. The Participant
2347 shall also identify any portion of a draft Specification or other work-in-progress, which is not subject to
2348 license. The Trustee shall have the discretion to return the draft Specification to the Working Group
2349 for revision to avoid the identified claim(s), to proceed under the provisions of Section 3.4 hereof, or
2350 to decline to ratify the Specification. Failure to provide such notification of intent shall constitute
2351 consent of the Participant to the provisions of Section 3.1. Provision of notification under this section
2352 shall not operate to revoke licenses granted hereunder to the Participant.

2353

2354 3.4 Reasonable and Non-Discriminatory Licensing

2355

2356 Notwithstanding any contrary provision hereof, the Trustee shall have the option, upon notification
2357 received in accordance with Section 3.3 of determining whether identified Necessary Claims shall be
2358 permitted for inclusion in the Specification. Such option will be granted only in extraordinary
2359 circumstances. In such circumstances, the Participant shall agree to license such Necessary Claims
2360 on reasonable and non-discriminatory (RAND) terms, and the Specification shall identify the
2361 Necessary Claims available for such license. The Trustee may require the Participant affirm that the
2362 Participant is willing to offer a license to its Necessary Claims on RAND terms to all implementers of
2363 the Specification, and to specifically state the terms of such license, including the manner in which
2364 any royalty is to be computed. In no event shall the Trustee approve, or the Participant assert, a
2365 royalty right in any Specification for which the notification of intent of Section 3.3 was not provided by
2366 the Participant. The Trustee shall have the right to seek a determination of the validity of any claims
2367 identified under the terms of Section 3.3, and approval of RAND licensing terms shall not constitute
2368 an admission by Trustee that such claims are valid or infringed by practice of the Specification.
2369 Under no circumstances shall the Trustee be obligated to exercise its discretion under this Section.
2370 Participants shall enjoy the benefit of any license obtained by the Trustee from non-Participant
2371 granting rights in a patent having Necessary Claims.

2372

2373 3.5 No Other License

2374

EPCglobal STANDARDS DEVELOPMENT PROCESS

2375 The Participant and its Affiliates retain the independent right to grant or withhold a nonexclusive
2376 license or sublicense of patents containing Necessary Claims for use other than in connection with
2377 the license granted in Section 3.1.
2378

2379 No patent license, immunity or other right is granted under this Declaration by any Participant, its
2380 Affiliates, or any other party to any other Participant, its Affiliates, or any other party either directly or
2381 by implication, estoppel or otherwise, other than the agreements to grant licenses expressly set forth
2382 herein. All rights not affected by this Declaration are expressly reserved by the Participant.
2383

2384 3.6 Transfer of Necessary Claims to Third Parties. 2385

2386 Any transfer by Participant to a third party of a patent having Necessary Claims shall include, in the
2387 transfer agreement, a provision that the transfer is subject to existing obligations of the transferor.
2388

2389 3.7 Contributions Otherwise Subject to Copyright 2390

2391 By making a Contribution of copyrightable material, including without limitation drawings, compilations
2392 of data, software, or text, the Participant shall grant to any party a worldwide, non-exclusive, royalty-
2393 free license to copy, publish, distribute and make derivative works that are based on or incorporate all
2394 or part of the Contribution, for use (a) in developing and publishing the Specification and related
2395 materials for which such Contribution was made; (b) in developing and implementing a Candidate
2396 Certified Compliant System or a Certified Compliant System; and (c) by other standards development
2397 organizations, such as ISO, solely for the purpose of adopting the same or a substantially related
2398 Specification. Such license shall be revocable with respect to any party, which fails to make the
2399 license of this Section or Section 3.1 available.
2400

2401 4.0 Termination 2402

2403 4.1 Termination by Participant 2404

2405 Unless terminated as provided in this Section, this Declaration shall remain in full force and effect.
2406

2407 The Participant may withdraw from Participation by terminating this Declaration at any time upon the
2408 giving of written notice to the Trustee. If the Participant participates in multiple Working Groups, such
2409 notice shall indicate which Working Groups are covered by such notice. Upon termination, licenses
2410 granted by other Participants under Sections 3.1 and 3.4 shall remain in full force and effect as to the
2411 terminating Participant only as to Specifications that have been approved and ratified prior to the date
2412 of termination.
2413

2414 4.2 Termination by Trustee. 2415

2416 Trustee may terminate this Declaration on written notice, if Participant breaches its obligations under
2417 this Declaration, provided Trustee shall first give Participant written notice and thirty (30) days
2418 opportunity to cure the breach. After the effective date of termination, Participant shall not be subject
2419 to any agreement to grant a license of its Necessary Claims, except as provided in Section 4.3.
2420 Participants are encouraged to utilize alternative dispute resolution for disputes arising hereunder.
2421 The Trustee may terminate this agreement upon the Participant commencing litigation alleging direct
2422 or indirect infringement on the basis of a Necessary Claim asserted against a Compliant Portion,
2423 unless such litigation is consistent with the provisions of this Policy. Any such Trustee-initiated
2424 termination shall indicate whether the termination applies to Participant's Participation in all or only
2425 certain Working Groups.
2426

2427 2428 4.3 Survival of Agreement to Grant License 2429

EPCglobal STANDARDS DEVELOPMENT PROCESS

2430 Notwithstanding termination under Section 4.1 and 4.2, and except as otherwise provided herein,
2431 Participant's agreement to grant licenses as provided in Section 3.1, 3.4 and 3.7 shall remain in full
2432 force and effect:

2433

2434 (i) for subject matter included in a draft Specification more than sixty (60) days before the date of
2435 Participant's termination, for which the Participant had not given notification under Section 3.3, even if
2436 the Specification is approved by the Trustee after the date of Participant's termination; and (ii) for any
2437 Contribution made by the terminating Participant to the Specification prior to the effective date of its
2438 termination. No license grant shall survive termination for Contributions not incorporated into, or
2439 withdrawn from, the Specification under Section 3.3 or 3.4.

2440

2441

2442 5. REPRESENTATION. THE PARTICIPANT REPRESENTS THAT ITS REPRESENTATIVES TO
2443 THE WORKING GROUP SHALL NOT SUBMIT A CONTRIBUTION THAT ITS REPRESENTATIVES
2444 KNOW VIOLATES THE COPYRIGHT OR TRADE SECRET RIGHTS OF ANY OTHER
2445 PARTICIPANT OR THIRD PARTY.

2446

2447 6. OTHER PROVISIONS

2448

2449 6.1 No Transfer

2450

2451 Neither the Participant nor the Trustee may transfer, assign or sublicense any of its rights or
2452 obligations of participation under this Declaration without the prior written consent of the other party.
2453 Such consent shall not be unreasonably withheld.

2454

2455 6.2 The Participant designates the Representative identified below for the purpose of receiving notice
2456 under this Declaration. The Participant may change the designated Representative by written notice
2457 to Trustee.

2458

2459 6.3 No Joint Venture

2460

2461 Nothing contained in this Declaration and no action taken by the Participant shall be deemed to
2462 render the Participant or its Affiliates an employee, agent or representative of Trustee or any other
2463 Participant or their Affiliates, or shall be deemed to create a partnership, joint venture or syndicate
2464 among or between any of the Participants or their Affiliates or Trustee.

2465

2466 6.4 Governing Law

2467

2468 This Declaration shall be governed by and construed under, and the legal relations among the parties
2469 hereto shall be determined in accordance with, the laws of the State of Delaware, excluding
2470 conflict-of-law principles that would cause the application of the laws of any other jurisdiction. This
2471 Declaration may be asserted against the Participant as a binding admission in defense of a claim of
2472 infringement in any jurisdiction.

2473

2474 6.5 Integration

2475

2476 This Declaration supersedes and replaces any and all prior representations, agreements and
2477 understandings relating to the participation in the Working Group, including without limitation any prior
2478 version of this Declaration. The terms of this Declaration cannot be amended without express
2479 consent of the Participant to any such revision.

2480

2481 6.6 Authority

2482

EPCglobal STANDARDS DEVELOPMENT PROCESS

2483 The Participant represents and warrants that it is authorized to enter into this Declaration. The
2484 undersigned person represents and warrants that he/she is authorized to sign this Declaration on
2485 behalf of the Participant.
2486

2487 6.7 Specific Software Code Shall Not be Referenced in Specifications

2488
2489 EPCglobal Specifications shall not include software object code or source code in any required
2490 portion of the Specification. Further, the use of particular software code shall not be a requirement for
2491 conformance to the Specification. Specifications may refer to software code that demonstrates a
2492 reference implementation of the Specification as an optional portion of the Specification.
2493

2494
2495 Agreed by:

2496 Participant Name:

2497
2498 Address:

2499
2500 Officer Name:

2501
2502 Title:

2503
2504 Signature:

2505
2506 Date:

2507
2508

APPENDIX 3 - Working Group Opt-In Agreement

EPCglobal, Inc.

_____ Action Group
_____ Working Group
Participation Commitment (Opt-In)

By signing below, the undersigned acknowledges and certifies as follows:

1. He/she is authorized to sign this Participation Commitment on his/her own behalf and on behalf of the entity indicated below.
2. He/she and his/her company desires to participate in the activities of the Working Group named above.
3. He/she has reviewed the Working Group Charter, as ratified on X, and attached hereto as Exhibit 1 and understands the nature and scope of the work to be undertaken by the Working Group.
4. To participate in this Working Group, it is necessary to execute the EPCglobal Intellectual Property Policy (IP Policy) which provides, *inter alia*, that Participant and its Affiliates shall grant a royalty-free or otherwise reasonable and non-discriminatory license to any Necessary Claims contained in intellectual property owned or controlled by Participant or its Affiliates that may be embodied in the work of the Working Group (See §3.1 of the IP Policy), by submitting an IP Declaration attached hereto. If Participant is unwilling to grant such a license, it shall disclose this fact at least 30 days before a specification is finalized (See §3.3 of the IP Policy). Participant or a duly authorized member of Participant's company has executed the IP Policy and delivered same to EPCglobal. In the event of any difference between the provisions of the IP Policy and this, or any other document, the IP Policy shall control.
5. Participant agrees to waive his/her IP rights during the prototyping stage, for prototyping purposes only, whether or not Participant is involved in prototyping. The prototyping stage shall be considered completed upon the transition of the Specification from Candidate status to Proposed status and submission of the Proposed Specification to the Business Steering Committee (BSC) and Technical Steering Committee (TSC) for review. At this time, the waiver will lapse.

Signature

Print Name

Company Name

Address Line 1

Address Line 2

Email Address

Phone Number

_____, 200_

Date

EPCglobal STANDARDS DEVELOPMENT PROCESS

2560 Working Group Charter Template
2561 Chairs:
2562 Objective:
2563 Work Method (email, teleconference, Webinar, face-to-face, etc.):
2564 Member Skill Profile:
2565 Work Plan with Milestones:
2566 Deliverables:
2567 Working Group Members:
2568
2569 Upon receipt of this Agreement, EPCglobal will verify subscribing company's Subscription and
2570 Intellectual Property Policy Agreement. When verified, EPCglobal will add
2571 representative(s) to the Working Group mailing list and provide access to the document
2572 repository.
2573

EPCglobal STANDARDS DEVELOPMENT PROCESS

2574
2575
2576
2577
2578

APPENDIX 4 – SDP At-a-Glance

Submission Track: Requirements definition, Architecture Assessment and Standards Development plan.

EPCglobal Standards Development Step Number / Name	Participant	Document / Status upon completion
0. Working Group Formation 0.1. Chartering team/Co-Chair selection 0.2. Charter Creation 0.3. Charter Approval 0.4. Call for Participation	0.1 Action Group Co-Chairs 0.2 Chartering or WG Co-Chairs 0.3 Action Group & steering Committee 0.4 WG Co-Chairs & EPCglobal Staff	Working Group Charter
1. Requirements Definition 1.1. Use Case Development 1.2. Business Requirements Development 1.3. Technical Requirements Development 1.4. Working Group Consensus	1.1 Working Group 1.2 Working Group 1.3 Working Group	Business / Technical Requirements Document
2. Architectural Assessment 2.1. Supply Chain Impact 2.2. EPCglobal Reference Architecture Impact 2.3. Standards Development Organizations Assessment 2.4. Architectural Review Committee Consensus	2.1 Architectural Review Committee (ARC) 2.2 ARC 2.3 ARC 2.4 ARC	Architectural Assessment Report
3. Standards Requirements and Plan 3.1. Identify Standardization Opportunity 3.2. Standards Requirements 3.3. Standards Development Plan	3.1 ARC 3.2 ARC 3.3 Action group	Standards Requirements Standards Development Plan

2579
2580
2581
2582

Standards Track: Standards Development, Review and Ratification.

EPCglobal Standards Development Step Number / Name/Participant	Standard status upon completion
4. Working Group Formation 4.1. Co-Chair selection.....Action Group Co-Chairs 4.2. Charter Creation.....WG co-Chairs 4.3. Charter Approval.....Action Group & TSC or BSC 4.4. Call for Participation.....WG co-Chairs & EPCglobal Staff	
5. Development of Specification (All Done by Working Group Participants) 5.1. Development 5.2. Last Call Working Draft complete 5.3. Intellectual Property Review	Last Call Working Draft

EPCglobal STANDARDS DEVELOPMENT PROCESS

EPCglobal Standards Development Step Number / Name/Participant	Standard status upon completion
6. Action Group Review 6.1. Review & CommentsAction Group 6.2. Comment Resolution.....Working Group 6.3. Action Group Vote..... Action Group 6.4. Prototype participants' selection Working Group	Candidate Specification
7. Validation, Prototype & Test (All done by Working Group Participants) 7.1. Prototype Facility setup 7.2. Prototype Creation 7.3. Prototype Execution 7.4. Prototype and test report 7.5. Decision to move to step 5 or 8 7.6. Conformance Requirements	Proposed Specification
8. Committees Review (Business (BSC) & Technical (TSC)) 8.1. Working Group Notification.....EPCglobal Facilitator 8.2. Board notification of "Necessary Claims" ... WG Participants 8.3. Specification review.....BSC and TSC 8.4. Decision to move to step 5 or 9.....BSC and TSC	Recommended Specification
9. Board Ratification 9.1. Due diligence.....EPCglobal Inc. President 9.2. Board presentation.....EPCglobal Inc. President 9.3. Board Ratification.....EPCglobal Inc. Board 9.4. Presentation package for other standards bodies WG & EPCglobal Facilitator 9.5. Presentation of Ratified Standard to other standards bodies.....EPCglobal Facilitator 9.6. Publish Standard Available on EPCglobal Inc. WebsiteEPCglobal Facilitator	EPCglobal Standard Specification

2583

2584 **APPENDIX 5 – Forms and Templates**

2585

2586 The following forms and templates are available on EPCglobal Inc Subscriber Community
2587 eRoom.

2588 http://eroom.uc-council.org/eRoom/facility/EPCglobalCommunity/0_2753a

2589

2590 1 Working Group Charter Template

2591 2 Use Case Templates

2592 3 Enhancement Request Form (will be phased out once the ER Process is automated)

2593 4 Agenda and Minutes template (One template that provides both functions)

2594 5 Invited Experts Document

2595 6 Comment and Resolution Form

2596 7 SDP Enhancement Request Form

2597 8 Conformance Requirements Template

2598

2599

APPENDIX 6 EPCglobal Contribution Declaration

2600
2601
2602
2603
2604
2605
2606
2607
2608
2609
2610
2611
2612
2613
2614
2615
2616
2617
2618
2619
2620
2621
2622
2623
2624
2625
2626
2627
2628
2629
2630
2631
2632
2633
2634
2635
2636
2637
2638
2639
2640
2641
2642
2643
2644
2645
2646
2647
2648
2649
2650
2651
2652

Contributor, the undersigned individual or authorized representative of the company listed below, makes the following Contribution to a Working Group of EPCglobal Inc. This Declaration is intended to set forth the terms pertaining to the use of any intellectual property rights of Contributor in said Contribution.

Specifically, Contributor is making the following Contribution: (please submit a separate Declaration for each Contribution)

1. Identify EPCglobal Working Group: _____
2. Name of individual/company making Contribution: _____
3. Name of work submitted in Contribution: _____
4. Brief description of Contribution: _____

(Please continue on additional paper if necessary.)
5. Date of creation of work contained in Contribution: _____
6. Actual Contribution to be attached to this Declaration (or submitted via facsimile to Working Group following submission of Declaration).

Making of Contribution

All Contributions contained in this Declaration shall be recorded by the Working Group EPCglobal Facilitator, or by such other person(s) as shall be designated by the Working Group Chair in written form.

Rights in Contributions

1. Contributor warrants that he/she is authorized to make Contribution(s) to the Working Group by any party known to the Contributor to have intellectual property rights in the Contribution, whether alone or in combination with the subject matter of the Specification under development by the Working Group.
2. Contributor warrants that, to the best of his/her knowledge, there is no third party owning an exclusive right in the Contribution(s) alone or in combination with the subject matter of the Specification under development by the Working Group.
3. As a condition of making a Contribution to the Working Group, Contributor authorized the Working Group to incorporate the Contribution in the Specification, and hereby grants a non-exclusive, non-transferable, non-sublicensable, worldwide royalty-free right or otherwise reasonable and non-discriminatory license in any Necessary Claims to the Contribution, alone or in combination with the subject matter of the Specification, to any party implementing a Compliant Portion relative to the Specification.
4. By making a Contribution of copyrightable material, including without limitation, drawings, compilations of data, software, or text, the Contributor shall grant to any party a worldwide, non-exclusive, royalty-free license to copy, publish, distribute and make derivative works that are based on or incorporate all or part of the Contribution, for use (a) in developing and publishing the Specification and related materials for which such Contribution was made; (b) in developing and implementing a Candidate Certified Complaint System or a Certified Compliant System; and (c) by other standards development organizations, such as ISO, solely for the purpose of adopting the same or a substantially related Specification.

EPCglobal STANDARDS DEVELOPMENT PROCESS

2653 Contributions Included

2654 This Contribution shall apply to the Contribution to the Working Group specifically referred to
2655 herein.

2656
2657 Reciprocity

2658 The Contributor's license in Contribution(s) set forth herein shall not be effective as to any
2659 party that does not make a license available on substantially equivalent terms with respect to
2660 the same Specification as that requiring a license from the Contributor.

2661
2662 Authority

2663 The Contributor represents and warrants that it is authorized to enter into this Declaration.
2664 The undersigned person represents and warrants that he/she is authorized to sign this
2665 Declaration on behalf of the Contributor.

2666
2667
2668 By: _____

2669
2670 Contributor Name: _____

2671
2672 Print Name: _____

2673
2674 Address: _____

2675
2676 Employer (if any): _____

2677
2678 Date: _____

2679
2680

2681
2682
2683
2684
2685
2686
2687
2688
2689
2690
2691
2692
2693
2694
2695
2696

Appendix 7 IP Declaration

- As per Sections 7.4.4 and 7.6.4 of the SDP, as well as the Intellectual Property Policy, the following pages provide an outline and description of the elements required in the IP Declaration.
- Pages 2 and 3 of this Appendix 7 set forth the information required for submitting an IP Declaration.
- Once the IP Declaration is completed, it should be forwarded to the proper EPCglobal Facilitator along with any and all supporting documentation.
- Failure to provide notification as required by the IP Policy constitutes consent of the Participant to the provisions of 3.1 of the IP Policy, namely, the granting of a royalty-free license.

EPCglobal STANDARDS DEVELOPMENT PROCESS

EPCglobal Patent Statement and Licensing Declaration

2697
2698
2699
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2712
2713
2714
2715
2716
2717
2718
2719
2720
2721
2722
2723
2724
2725
2726
2727
2728
2729
2730
2731
2732
2733
2734
2735
2736
2737
2738
2739
2740
2741
2742
2743
2744
2745
2746
2747
2748
2749
2750

Please return to the Working Group facilitator:

Patent Holder/Organization:

Legal Name: _____

Contact for license application:

Name & Dept.: _____

Address: _____

Tel.: _____

Fax: _____

E-mail: _____

EPCglobal Standard:

Title: _____

Licensing Declaration

The Patent Holder believes that it holds granted patents and/or pending applications, with Necessary Claims, the use of which would be required to implement the above EPCglobal Specification and hereby declares, in accordance with the EPCglobal Intellectual Property Policy (Section 3.3), that:

Subject to the provisions of the IP Policy, the Patent Holder will grant a RAND license under Necessary Claims in order for implementers of the Specification to manufacture, use, import, offer to sell, lease and/or sell implementations of the above EPCglobal Specification.

For each Necessary Claim declared hereunder, please provide the following information:

1. Patent Number/Application Number - Country
2. Inventor(s)
3. Owner/Licensees
4. A detailed description of all "Necessary Claim(s)" and a citation of the relevant section(s) of the EPCglobal Specification covered – please list each claim on a separate line with the relevant section(s) of the EPCglobal Specification.
5. Set forth a description of the basis for the assertion that the subject matter of any cited Necessary Claim is considered necessary to implement the EPCglobal Specification.
6. For unpublished patent applications containing Necessary Claims, provide the filing date and attach a copy of the specification, drawings and prosecution history to the date of such unpublished patent application. No incomplete submissions will be considered to comply with the EPCglobal IP Policy.
7. Set forth the principle licensing terms, including all fees required, the royalty rate, the manner in which royalties are to be calculated and any restrictions on the licensee, in sufficient detail for a prospective implementer to estimate the costs and requirements associated with implementing an EPCglobal Specification, should such licensing be desired by an implementer.

For each patent declared, please provide the following information using the chart below. Please use the space below the chart if additional room is required.

Signature _____

Name of authorized person _____

Title of authorized person _____

Signature Place & Date _____

