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Standards Development Process Specification

V 1.1

EPCglobal STANDARDS DEVELOPMENT PROCESS

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1 OVERVIEW

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

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

1.1 Nature of the Organizational Model

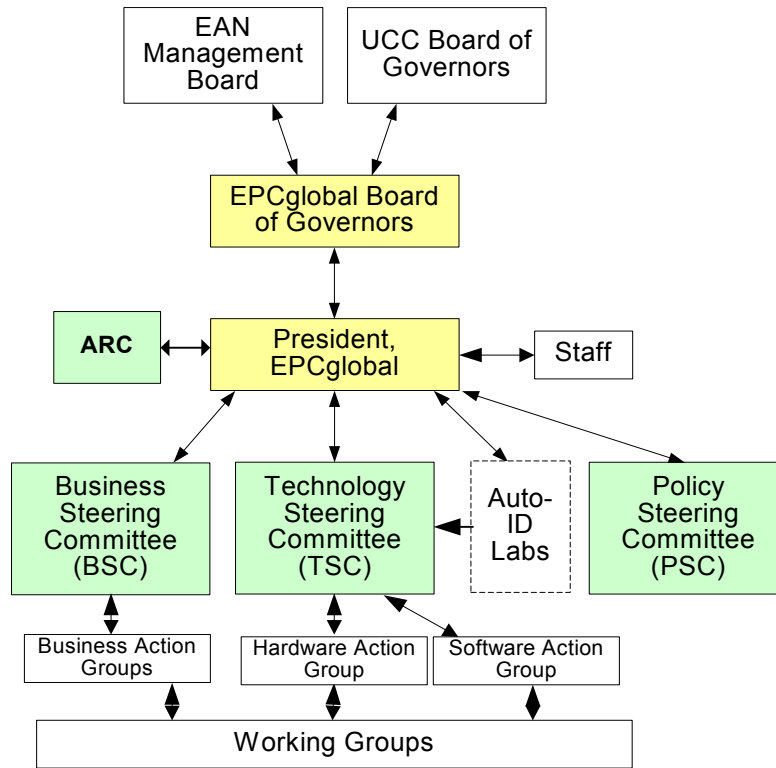
EPCglobal, like its parent organizations, the Uniform Code Council and EAN International, aims to be highly user and participant Action and Working Group driven, while including various “management roles” (i.e. Group Chairs, Steering Committees, EPCglobal staff, and the EPCglobal Board) that are designed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

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

121 2 ORGANIZATIONAL STRUCTURE

122 2.1 Organizational Chart

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126 **EPCglobal Board of Governors**

127 Governing body for EPCglobal standards.

128

129 **President, EPCglobal**

130 Executive leader responsible to the EPCglobal Board of Governors and to the CEOs of the
131 UCC and EAN International.

132

133 **EPCglobal Staff**

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

137

138 **Architecture Review Committee (ARC)**

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

142

143 **Business Steering Committee (BSC)**

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

147

148 **Policy Steering Committee (PSC)**

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

151

152 **Technology Steering Committee (TSC)**

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

155

156 **Action Group**

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

161

162 **Working Group**

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

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168 **Auto-ID Labs**

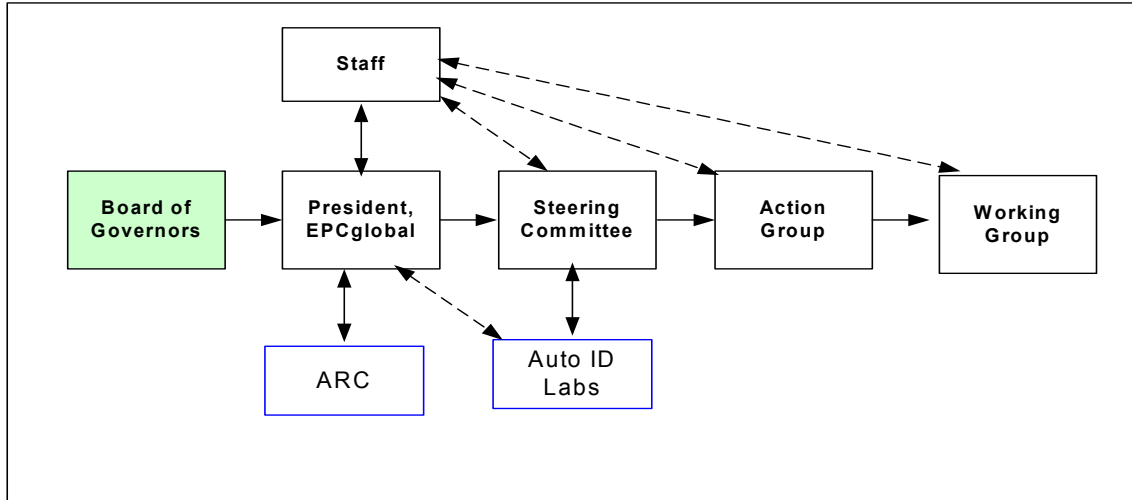
169 Transitioned from Auto-ID Center, academic entity headquartered at MIT chartered to
170 research and develop EPCglobal Network technologies and applications.

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3 GOVERNANCE

3.1 Board Of Governors



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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.

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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 EAN and UCC 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.

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3.1.3 Composition

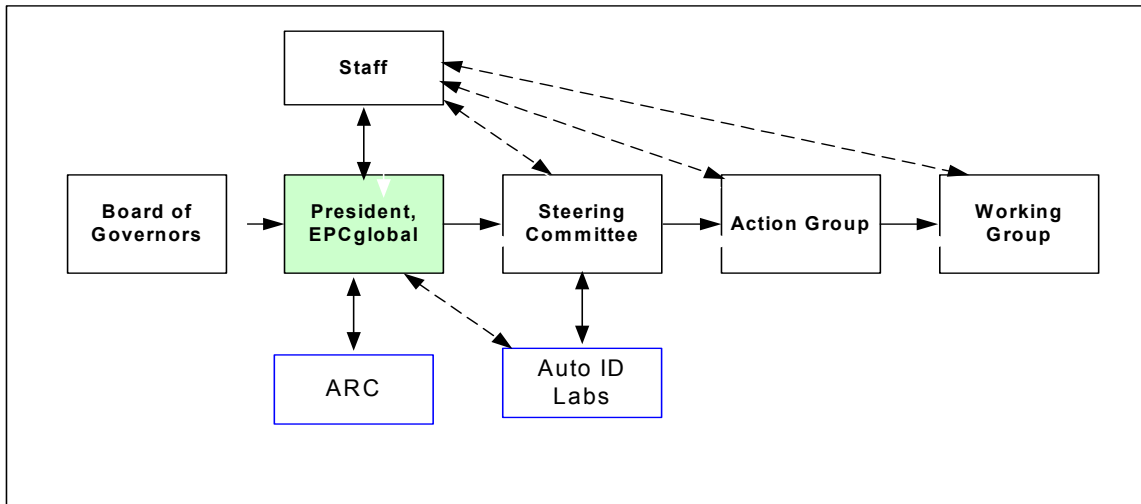
- Board members (other than the President, EPCglobal) will consist of representatives from End User companies as well as EAN Member Organizations.
- Executive members from both UCC and EAN International (through the EAN Management Board and the UCC Board of Governors).
- EPCglobal Board of Governors members (other than the President and EAN 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.
- Corporate Officers are the President, a Chairman and two (2) Vice Chairmen who shall be selected from the members of the Board.
- 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.

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3.1.4 Staff Support Resources

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

3.2 President, EPCglobal



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3.2.1 Roles

- Accountable for key strategic directives determined by the Board of Governors.
- Communicates EPCglobal Board of Governors strategic direction to the organization in terms of priorities and new initiatives.
- Annually reviews Standards Development Process for potential process updates and recommends changes to the EPCglobal Board of Governors as appropriate.

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 228 • Oversees the review of published EPCglobal standards on an annual basis for
229 ongoing use and accuracy.
- 230 • Responsible for coordinating with the Director of the Auto-ID Labs to integrate Auto-
231 ID Labs into the Standards Development Process at appropriate points. This may
232 include expediting the development of certain technologies, and suggesting the need
233 for technical support for the development of Use Cases by the Business Action
234 Groups and further refinement and development supporting the activities of the
235 Technical Action Groups.
- 236 • Liaises with leadership of other standards bodies. This might include the leadership
237 of standards organizations serving a particular vertical sector, or other national or
238 international standards organizations (ex: ANSI MH10 or ISO).
- 239 • Actively consults with, advises and leads at all levels of the EPCglobal standards
240 development and adoption process.
- 241 • Reviews standards requests in terms of alignment with the strategic direction of the
242 EPCglobal Board, community priority, resources, implementation commitments, etc.
243 in the framework of the EPCglobal Standards Development Process.
- 244 • Names new BSC or TSC Action Groups as necessary, including new BSC vertical or
245 horizontal industry Action Groups.
- 246 • Ratifies proposed Charters of Action Groups.
- 247 • Appoints Chair and two other representatives from EPCglobal to Architecture Review
248 Committee.
- 249 • Creates ad hoc Action Groups or advisory groups as appropriate.
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251 **3.2.2 Formation**

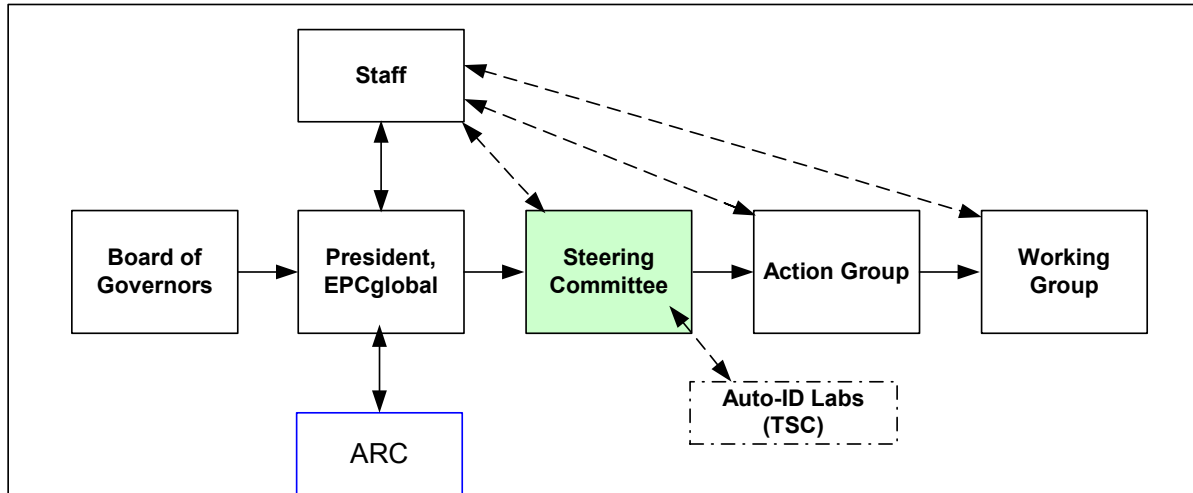
- 252 • The President, EPCglobal is hired by and reports directly to the EPCglobal Board of
253 Governors and to the CEOs of UCC and EAN International.
254

255 **3.2.3 Staff Support Resources**

- 256 • The President, EPCglobal will have staff resources at the EPCglobal Joint Venture
257 level and will also have access to EPCglobal US and other EAN Member
258 Organization EPCglobal resources.

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3.3 Steering Committee



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3.3.1 Role

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All Steering Committees

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- 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.

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Business Steering Committee (BSC)

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- 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 forwarding to President, EPCglobal, who then forwards as appropriate to the Architecture Review Committee (ARC).

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EPCglobal STANDARDS DEVELOPMENT PROCESS

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- Makes recommendations to President, EPCglobal on formation of additional Business Action Groups.

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Technical Steering Committee (TSC)

295

- Initial review of standards requests and functional requirement statements from the ARC (Technical Feasibility Assessment).

296

297

- Ensures that the proposed technical solution is consistent with the EPCglobal Network principles, vision and architecture.

298

299

- Propose standards development activities based on general technology requirements.

300

301

- Assigns technical development tasks to specific TSC Action Groups or Auto-ID Labs.

302

- Advises the President, EPCglobal and the ARC on strategic technical initiatives.

303

- Makes recommendations to President on formation of additional TSC Action Groups.

304

305

Public Policy Steering Committee (PPSC)

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

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3.3.2 Formation

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- Steering Committees are specifically chartered by the EPCglobal Board of Governors.

310

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- The President, EPCglobal will appoint one member of each Steering Committee as Chair of that Steering Committee

312

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3.3.3 Composition

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- All Steering Committees include the Chairs or co-Chairs of the Action Groups under their committee.

316

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- The TSC will also be composed of a representative from Auto-ID Labs and EPCglobal.

318

319

- The BSC will be composed of the co-Chairs of all (existing and future) Business Action Groups plus an EPCglobal representative.

320

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3.3.4 Chair Role

323

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

324

a. Process

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- The Chairs monitor the progress of standards development within their respective Steering Committees and ensure that a due process is followed

326

327

- Liaise and work together with other Steering Committees (and ARC) to resolve cross Action Group issues pertaining to standards or enhancement requests

328

329

- Steering Committee Chairs will operate by Consensus with other members of their Steering Committee.

330

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b. Operation

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- Convene regular meetings and conference call of the Steering Committees

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- The Chairs manage the work structure and work load of their Steering Committee

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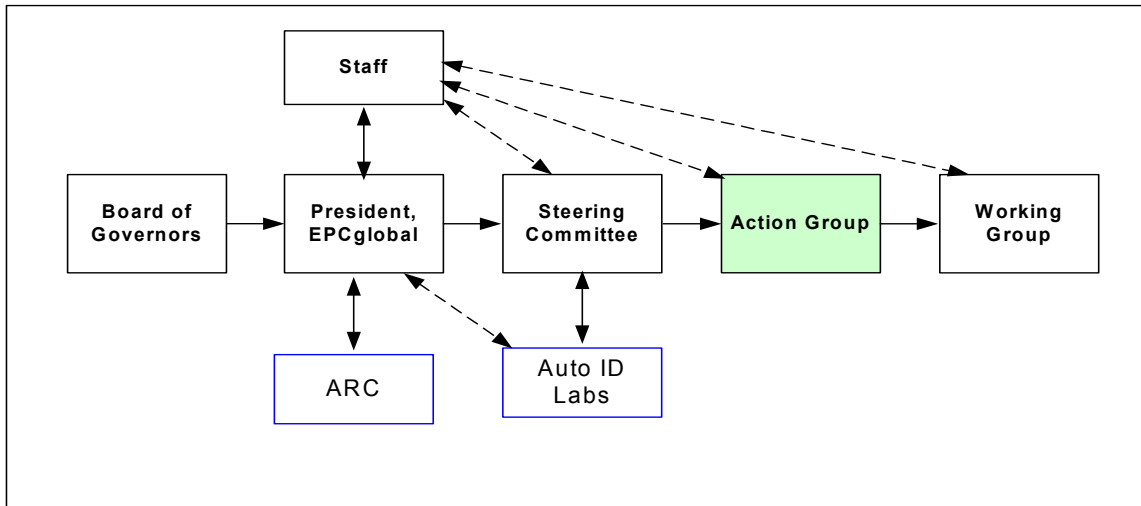
- The Chairs report to President, EPCglobal on progress of standards development of their respective Steering Committees
 - The Chairs will update their respected Action Groups on the work of Steering Committee
 - The Chairs (and other members of the Steering Committee) will respect confidentiality and privacy for subjects that warrant it
- c. Planning
- The Chairs working with EPCglobal and other Steering Committees will plan the workload (either for new standards, enhancement requests or other work) for their Steering Committee
 - The Chairs will champion the workplan to the rest of EPCglobal subscribers

352 **3.3.5 Staff Support Resources**

- 353
- President, EPCglobal and one EPCglobal staff each for the BSC, TSC and PPSC.

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3.4 Action Groups



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3.4.1 Role

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Business Action Group (BAG)

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- Participants agree to comply with the EPCglobal Participation Framework (e.g. the companies participating on BAG Working Groups are required to sign the EPCglobal Opt-In agreement).
- 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.

EPCglobal STANDARDS DEVELOPMENT PROCESS

-
- 384 • Oversight of BAG Working Group(s) to ensure they are on time and within the scope
 - 385 of the Charter developed.
 - 386 • Business Action Groups will operate under the principle of Consensus except for
 - 387 election of Chairs, ratification of Use Cases, and ratification of technical
 - 388 specifications. Only End User companies will have the right to vote in Business
 - 389 Action Groups.
 - 390 • Each End User company is to designate its voting member and register their name
 - 391 with the EPCglobal staff facilitator.
 - 392 • Conduct Business Action Group Chair and co-Chair elections.
 - 393

394 Technical Action Groups

- 395 • Participants agree to comply with the EPCglobal Participation Framework, including
- 396 the EPCglobal IP Policy.
- 397 • Members of Technical Action Group(s) are required to be EPCglobal members in
- 398 good standing.
- 399 • Works in concert with Business Action Groups to assess technical impact of
- 400 business requirements.
- 401 • Coordinate resolution between Technical Action Groups on technical issues that may
- 402 span software and hardware.
- 403 • Ensure that group sessions of Action Groups or specification reviews are adequately
- 404 documented for all written/electronic comments, as well as verbal comments,
- 405 including which Participant made contributions that could be used in a revision to a
- 406 specification. All contributions from Action Groups, or from Participants outside a
- 407 named Working Group must be evaluated by the Working Group for their contribution
- 408 to the specification being reviewed. If the contribution is accepted by the Working
- 409 Group, the contributing Participant must sign a Contribution (Invited Expert)
- 410 Agreement assigning the IP related to that Contribution to the specification in
- 411 question.
- 412 • Creates TAG Working Groups to appropriately deliver technical specifications for
- 413 EPCglobal Network components for business Use Cases and other directives
- 414 forwarded by the TSC.
- 415 • Approve the Charters for each TAG Working Group.
- 416 • Oversight of TAG Working Group(s) to ensure they are on time and within the scope
- 417 of the Charter developed.
- 418 • Technical Action Groups will operate under the principle of Consensus, except where
- 419 voting situations apply i.e., for election of Chairs and ratification of technical
- 420 specifications to be delivered to BSC.
- 421 • Each company is to designate its voting member and register their name with the
- 422 EPCglobal staff facilitator.
- 423 • Conduct Technical Action Group Chair and co-Chair elections.
- 424

425 **3.4.2 Formation (Business and Technical Action Groups)**

- 426 • Action Groups are created and approved through the direction of the President,
- 427 EPCglobal acting on behalf of the EPCglobal Board of Governors.
- 428 • New Action Groups can be proposed to respective Steering Committees for review
- 429 by President, EPCglobal on behalf of the EPCglobal Board of Governors.
- 430 • For a new vertical or horizontal Business Action Group to form, Participants must
- 431 represent a simple majority of the economic value of a particular vertical or horizontal

EPCglobal STANDARDS DEVELOPMENT PROCESS

432 industry (as determined from public data sources), and commit (via CEO or Board) to
433 EPCglobal Network implementations within 12 months of Action Group formation. A
434 sub-set of EPCglobal Subscribers who want to create a new vertical or horizontal
435 Business Action Group will need to develop and present a proposal which will
436 include the economic value and the relative percentage represented by the proposed
437 membership.

438

439 **3.4.3 Composition**

440 Business Action Groups

- 441 • EPCglobal Subscriber organizations (End Users and Solution Partners) may assign
- 442 representatives to any vertical (or horizontal) Action Group that falls within that
- 443 organization's business scope.
- 444 • Subscriber organizations are encouraged to designate their senior EPC Network
- 445 implementation and solution experts as their primary Action Group Representatives.
- 446 This includes senior strategy, supply chain and IT experts, where appropriate.
- 447

448 Technical Action Groups

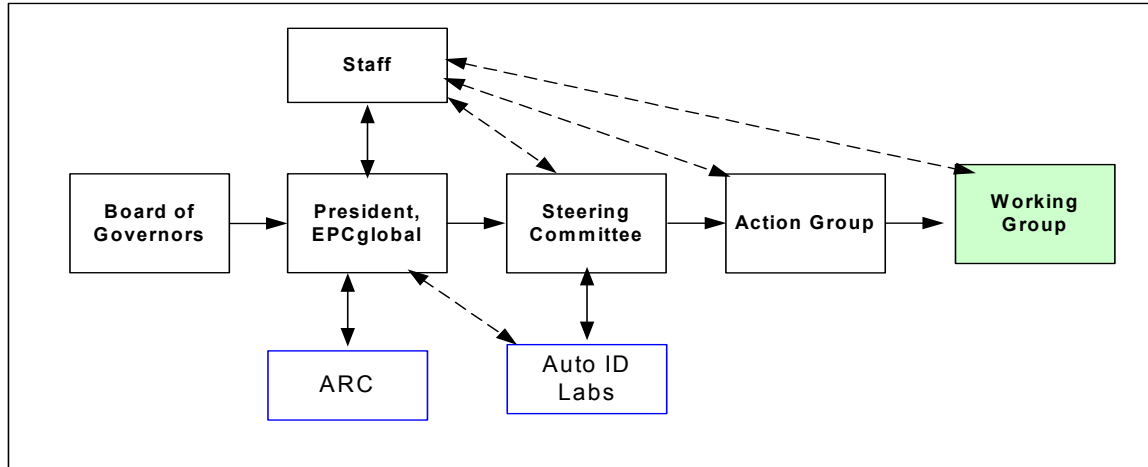
- 449 • For a company to become a member of and participate in Technical Action Groups,
- 450 they must sign the EPCglobal Intellectual Property Policy.
- 451 • EPCglobal Subscribers (End User and Solution Partner) may assign representatives
- 452 to any Technical Action Group that falls within that organization's ability to contribute
- 453 technical expertise.
- 454 • Subscriber organizations are encouraged to designate appropriate technology
- 455 experts who can provide the most positive impact on the development of technical
- 456 standards and technology surrounding the EPCglobal Network.
- 457 • Members of Technical Action Groups must opt into a TAG Working Group before
- 458 participating in activities associated with that Working Group, per the Intellectual
- 459 Property policy.

460 **3.4.4 Staff Support Resources**

- 461 • One EPCglobal staff facilitator for all constituted Action Groups.
- 462 • EPCglobal staff ensures that all deliverables adhere to EPCglobal Standards
- 463 Development Process.
- 464 • EPCglobal staff facilitator is responsible for keeping the "official" list of EPCglobal
- 465 Subscribers, and EPCglobal Subscribers who have signed the IP Policy on the
- 466 EPCglobal website.
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3.5 Working Groups



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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

3.5.1 Role

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- Participants agree to comply with the EPCglobal Participation Framework (e.g. the companies participating on BAG Working Groups are required to sign the EPCglobal Opt-In agreement).
- Members of Working Groups are required to be members in good standing.
- Working Group participants are eligible to participate on decisions (voting or consensus) leading to LCWD declaration only after they have been members 8 weeks prior to such decision.
- 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.
- Pre-Working Groups develop, communicate, and secure ratification of Working Group Charters based on approval of the Business and Technical Action Group co-Chairs. Participation in Pre-Working group is open to all related Action Groups.
- Working Groups will operate under the principle of Consensus.
- Chair or Co-Chairs are responsible that each meeting or conference call must have minutes produced within two weeks of the meeting or call.

500 **3.5.2 Formation**

- 501 • Working Groups are formed by the Action Groups as needed to support the needs of
- 502 the Action Groups.
- 503 • Action Group co-Chairs approve Working Group Charters.

504

505 **3.5.3 Composition**

- 506 • Working Groups shall be composed of EPCglobal Subscribers and EPCglobal staff
- 507 resources.
- 508 • All members of the Working Group must have the requisite expertise to achieve
- 509 Chartered deliverables. A required skills description will be included in each Working
- 510 Group Charter.
- 511 • Members of Working Groups in Action Groups under the TSC and BSC must sign
- 512 specific Working Group Opt-In agreements prior to participation (see Appendix 2).
- 513 • Members of Joint Working Groups must sign specific Working Group Opt-In
- 514 agreements prior to participation (see Appendix 2).
- 515

516 **3.5.4 Leadership**

- 517 • Working Group Chairs or co-Chairs shall be appointed by the Action Group co-
- 518 Chairs with consideration given to expertise, leadership abilities and commitment to
- 519 Consensus, diversity and geography.
- 520 • Pre-WG Working Group (co-) Chairs are responsible for delivering Working Group
- 521 Charters, defining work methods, and directing the administration of the Working
- 522 Group.
- 523 • For Joint Working Group:
- 524 • Joint Working Group Chairs or co-Chairs shall be appointed by the sponsoring
- 525 Action Groups co-Chairs with consideration given to expertise, leadership
- 526 abilities and commitment to consensus, diversity and geography.
- 527 • It is possible for the Working Group to have more than 2 co-chairs (in case where
- 528 there are 3 BAGs there might be 3 co-chairs, one from each BAG)
- 529 • Joint Pre-WG and Working Group (co-) Chairs are responsible for delivering
- 530 Working Group Charters, defining work methods, and directing the administration
- 531 of the Joint Working Group. They are also primary liaisons to their respective
- 532 AGs.
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535 **3.5.5 Staff Support Resources**

- 536 • One EPCglobal staff facilitator for all constituted Working Groups under a particular
- 537 Action Group.
- 538 • EPCglobal staff ensures that all deliverables adhere to EPCglobal guidelines.
- 539 • EPCglobal staff facilitator is responsible for keeping the “official” list of EPCglobal
- 540 Subscribers, EPCglobal Subscribers who have signed the IP Policy, and Subscribers
- 541 who have signed Working Group specific Opt-in agreements on the EPCglobal
- 542 website.
- 543

544 **3.6 Working Group Subcommittees**

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546 **3.6.1 Formation**

547 Subcommittees are formed by Working Groups to support the needs of the Working Group.

548 The Working Group co-Chairs shall define the Subcommittee deliverables and timeline.

549

550 Subcommittees shall automatically expire at the end of their defined timeline, unless granted

551 an explicit extension by the co-Chairs of the parent Working Group. Under no circumstances

552 shall a Subcommittee outlive its parent Working Group.

553

554 **3.6.2 Composition**

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556 Subcommittee members shall be drawn from those members of the parent Working Group

557 who have the expertise to achieve the subcommittee deliverables, and from EPCglobal staff.

558 Subcommittees shall be inclusive rather than exclusive, meaning that Working Groups

559 members who wish to participate and who confirm, that they can devote the necessary time

560 to the Subcommittee shall be accepted.

561 • Subcommittee members shall be EPCglobal™ members in good standing, where
562 “good standing” is defined in Section 4.2 of the EPCglobal™ SDO Process
563 document.

564 • Subcommittee members must sign Opt-In agreements for the parent Working Group
565 (see Section 3.5.3 of the EPCglobal™ SDO Process document) prior to participation.

566 • Subcommittee members shall agree to follow the Code of Conduct defined in Section
567 4.3 of the EPCglobal™ SDO Process document.

568 • All Subcommittee decisions shall be made under the principle of Consensus, defined
569 in Section 4.4.1 of the EPCglobal™ SDO Process document.

570 • All Subcommittee meetings shall follow the format and the requirements of Section
571 4.6 of the EPCglobal™ SDO Process document.

572

573 **3.6.3 Leadership**

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

575

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

578 • If only one or two Subcommittee members are nominated, or if the Subcommittee
579 can reach consensus on a single Chair or two co-Chairs, the Working-Group co-
580 Chairs shall appoint the chosen Subcommittee (co-) Chairs.

581 • If there are more than two nominees, or the Subcommittee members cannot reach
582 consensus, or for any other reason, the Working-Group co-Chairs may call for a
583 vote. The voting population will consist of all Subcommittee members in good
584 standing. The voting procedure shall follow Section 4.4.2.1 of the EPCglobal™ SDO
585 Process document.

586 The Subcommittee (co-) Chairs are responsible for defining the work plan required to meet

587 the timeline and deliverables, and are ultimately responsible for delivering the final work

588 product. The final work product must fall within the scope of the parent Working Group’s

589 Charter.

591 **3.7 Other Participants**

592

593 **3.7.1 Legal Counsel**

- 594 • Attends meetings as needed and provides guidance as needed
- 595 • Review and approve agendas and minutes of all meetings before circulated.
- 596 • Performs regular reviews of patents in applicable markets.
- 597 • Maintains records of all IP disclosure and Working Group Opt-in agreements.
- 598

599 **3.7.2 Architecture Review Committee (ARC)**

600

601 **3.7.2.1 Role**

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

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

- 604 ○ The Architecture Review Committee has responsibility for the creation,
605 documentation and maintenance of the EPCglobal Network Architecture per the
606 strategic direction of the EPCglobal Board of Governors. They are encouraged to
607 work closely with the TSC and BSC to ensure understanding of and alignment to that
608 Architecture. In addition, cost implications to the user of the ARC recommendations
609 must be considered in the design alternatives and presented with any
610 recommendations where appropriate.
 - 611 ▪ Document and build consensus around principles of EPCglobal Network,
612 interpret and clarify these principles when necessary
 - 613 ▪ Develop and maintain a document outlining the EPCglobal Network logical
614 components and layers, identify areas requiring standards, identify interfaces
615 within the EPCglobal network and with outside systems. (Note: Packaging of
616 logical components in physical realizations [implementation definitions] is outside
617 the scope of EPCglobal specifications.)
 - 618 ▪ Identify external technical, process and data standards that support EPCglobal
619 Network
 - 620 ▪ Resolve issues involving general EPCglobal Network architecture brought to the
621 ARC
 - 622 ▪ Coordinate cross-technology architecture development/reapplication within
623 EPCglobal Network Standards and with other standards bodies as appropriate
 - 624 • Maintain the written architecture findings, as necessary.
 - 625 • Ensure that all specifications are consistent with the architecture and
626 compatible with each other.
 - 627 • Act as a consultative body on the EPCglobal Network Architecture, i.e. Board of
628 Governors, Action Groups, other standards bodies
- 629
- 630 ○ ARC also performs a yearly review of the EPCglobal Network Architecture in
631 cooperation with the TSC and BSC for accuracy and completeness and may
632 recommend changes and additions to the EPCglobal Board of Governors. This
633 review is due by September 30.
- 634

635 **2. Participant in the Standards Development Process**

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

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

653
654
655

656 **3.7.2.2 Formation**

657 ARC is a standing committee reporting to the EPCglobal President. The ARC may also
658 serve as a technical resource to the EPCglobal Board of Governors

659
660 ARC is a nine (9) member standing committee appointed for a renewable, three-year term.
661 The term for ARC members should be staggered, such that there is continuity and only
662 three members (one per appointing body) are replaced in any given year.
663 The ARC members are appointed as follows:

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

670 No active Action Group chairs may be appointed to open seats on the ARC.
671

672 Changes in member situations (e.g. a person leaves their company, or changes role, etc)
673 such that continued participation is in question requires resignation by the member holding
674 the seat on the Committee. The company of the resigning member may nominate another
675 staff member for consideration to the opening and so may the resigning member submit a
676 new request for nomination for the open seat on the Committee. The appointment of a
677 replacement for the resigning member will be made in the same manner as the original
678 appointment (by the TSC, BSC, or EPCglobal as appropriate).
679

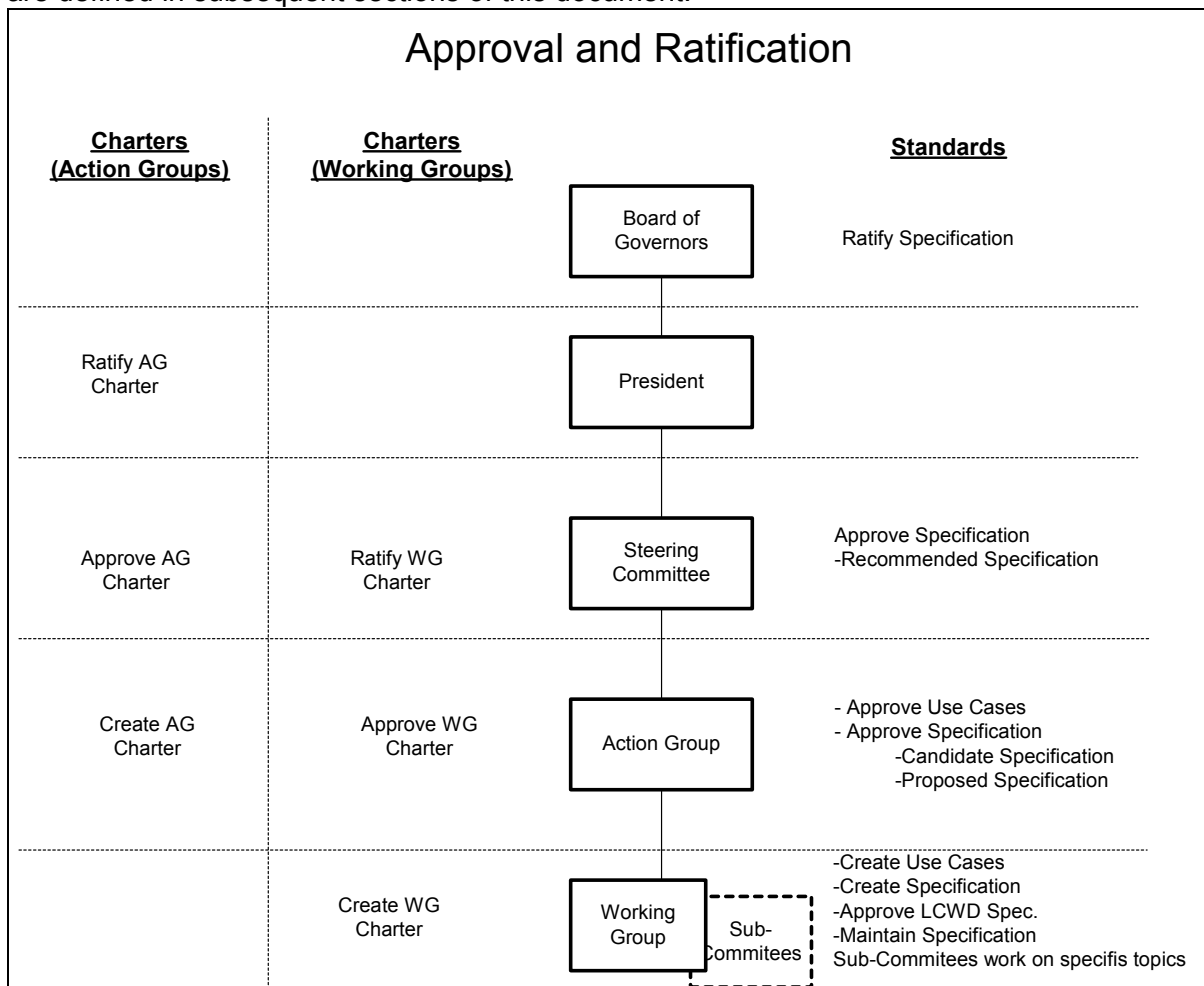
680 **3.7.2.3 Composition**

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 681 The ARC is composed of members from EPCglobal Subscribers and EPCglobal staff with
 682 the following experience:
- 683 • Business or marketing requirements gathering
 - 684 • Technical system design or architecture design
 - 685 • Extensive knowledge of the current state of the EPCglobal Network and technical
 686 specifications
 - 687 • Prior working knowledge of other standards bodies is helpful, but not required.

3.8 Approval and Ratification Process Overview

690 For convenience, the following diagram outlines the roles of the various Participants in the
 691 creation of Working Group Charters and the approval and ratification of technical
 692 specifications and standards. The detailed steps in the Standards Development Process
 693 are defined in subsequent sections of this document.
 694



695
696

697 **4 General Policies for EPCglobal Members/Meetings**

698 **4.1 Anti-Trust Caution**

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

705

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

709

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

718

719 This means:

720

- 721 • Participation must be voluntary, and failure to participate shall not be used to
- 722 penalize any company by denying access to published specifications.
- 723 • There shall be no discussion of prices, allocation of customers or products, boycotts,
- 724 refusals to deal, or market share.
- 725 • If any participant believes the group is drifting toward impermissible discussion, the
- 726 topic shall be tabled until the opinion of counsel can be obtained.
- 727 • Meetings shall be governed by an agenda prepared in advance, and memorialized
- 728 by minutes prepared promptly after the meeting. Both agendas and minutes are to
- 729 be reviewed by counsel before they are circulated.
- 730 • Tests or data collection shall be governed by protocols developed in consultation
- 731 with and monitored by counsel.
- 732 • The recommendations coming out of an EPCglobal Working Group, Action Group,
- 733 Steering Committee or other body are just that. Individual companies remain free to
- 734 make independent, competitive decisions.
- 735 • Any standards developed must be voluntary standards.

736

737 **4.2 Member in Good Standing**

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

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

- 745 • Abiding by the IP Policy and opting into Working Group participation in writing by
746 signing the Opt-In Agreement (see Appendix 2).
- 747 • Attending meetings and teleconference calls of the Working group
- 748 • Providing deliverables or drafts of deliverables in a timely fashion
- 749 • Being familiar with the relevant documents of the Working group, including minutes
750 of past meetings
- 751 • Following and contributing to discussions on relevant mailing list(s)

752

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

- 757 • The individual has missed two or more of the last three conference calls.
- 758 • The individual has missed two or more of the last three face-to-face meetings.
- 759 • The individual has not provided deliverables in a timely fashion twice in sequence.
- 760 • The individual has not followed the conflict of interest policy by disclosing information
761 to the rest of the group.
- 762 • The individual has continued to not follow the Code of Conduct despite attempts to
763 encourage them as noted in the Code of Conduct section.

764

765 Although all participants representing an organization **SHOULD** attend all meetings,
766 attendance by one representative of an organization satisfies the meeting attendance
767 requirement for all representatives of the organization.

768

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

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

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

777

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

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

781

782 **4.3 Code of Conduct**

783 **4.3.1 Principles**

784 To be communicated at all group meetings:

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

- 789 1. Comments on the following subjects may cause offense and are not acceptable,
790 however intended:
- 791 • Race, national identity, national language or nation of origin. All races and
792 nations are equal at EPCglobal;
 - 793 • Age, gender, sex, or sexuality. Men and women of all ages and backgrounds are
794 treated as equals;
 - 795 • Disparaging remarks about companies, types of companies or industries. We
796 welcome all types and sizes of enterprise from all industries.
 - 797 a. EPCglobal is a place where buyers and sellers meet, however:
 - 798 b. Presentations and remarks may not promote or attempt to sell a particular
799 company, proprietary product or product type, implicitly or explicitly;
 - 800 c. Please do not hound potential customers or partners during breaks and
801 social gatherings. These are networking opportunities, not sales calls – if
802 you want to do deals please arrange a private follow-up visit.
- 803 2. EPCglobal depends on a constructive spirit of innovation. You are welcome to be as
804 positive or skeptical as you like about prospects, but you should respect the views
805 and credibility of others, especially those with credentials and training in their field.
806 Do not denigrate individuals or their ideas just because you disagree with them about
807 whether or not something is possible.

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810

4.4 Decision Making Process

811

4.4.1 Consensus

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

814

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

824

825

4.4.2 Voting Procedures

826 There are three different categories of voting process that apply to the EPCglobal Standards
827 Development Process and they are each enumerated below.

828

829

4.4.2.1 Voting in Elections

830

- 831 • Action Groups **SHALL** elect two co-chairs. Co-Chairs of Business Action Groups
832 must be representatives of End-User companies.
- 833 • The voting population will consist of all Action Group members in good standing
834 (Denominator is total votes cast – no abstentions: 2/3 or greater majority of total
835 votes)
- 836 • Chairs and/or co-Chairs are nominated from the membership of each Action Group.
837 Nominees must be members in good standing. The nomination is submitted to the
838 President, EPCglobal with a candidate qualifications and a commitment letter
839 (indicating their organization commitment to time and resources) from the
840 candidate's company. All nomination requests endorsed by a candidate company
841 will be accepted.
- 842 • A two-thirds majority vote is required for a candidate to be elected if no other
843 candidates are vying for open Chair seats.
- 844 • If there are multiple candidates vying for election to an open chair seat the election
845 will be conducted as follows:
 - 846 ○ If the first round voting yields a candidate with a two-thirds majority, that
847 candidate is elected
 - 848 ○ If the first round of voting does not yield a candidate with a two-thirds
849 majority, the two candidates receiving the most votes will participate in a run-
850 off election. The result is decided by simple majority
- 851 • The election of the (co-) Chair may be conducted electronically (confidential eBallot)
852 or at the physical meeting. (Denominator is total votes cast – no abstentions: 2/3 or
greater majority of total votes).

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- Only End User companies may vote to elect co-Chairs of Business Action Groups. The President, EPCglobal will have the right to appoint an interim (co-) Chair following a resignation of a (co-) Chair, to serve out the remainder of the term.
 - Action Group co-Chairs shall serve one-year renewable term and until their successors are elected and qualified. Co-Chairs terms are staggered with elections being held in the first and third quarters.

860 **4.4.2.2 Voting in Steering Committees**

861 Voting decisions at the Steering Committee level are based on a simple majority, given the
862 limited size of each steering committee.
863

864 **4.4.2.3 Voting on Standards**

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

866

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

871

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

872

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875

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

879

880 The voting population shall consist of all Working Group or Action Group members in good
881 standing depending on the level at which voting takes place (Denominator is the total
882 number of votes cast – no abstentions).

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

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

890

891 **Joint WG Voting**

892 (In a scenario to advance LCWD to Candidate Specification)

893

- All involved Action Groups vote concurrently, but separately under the same rules as dictated in the EPCglobal SDP.
- Only one vote from a company is permitted (even though a company may be represented on multiple BAGs or on TAGs. The vote has to be cast by company's primary EPCglobal contact.

894

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- 898 • The voting population **SHALL** consist of members in good standing.
899 • Tabulating Votes
900 a. Each Action Group must achieve a 2/3rds majority.

901

902 Voting privileges are lost when:

- 903 • Member misses two consecutive votes (Abstentions are not missed votes) or
904 • Member misses three consecutive conference calls or
905 • Member misses two consecutive physical meetings

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

908

909 **4.4.3 IP Policy**

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

912

913 **4.5 Appeals**

- 914 • Groups resolve issues through dialog. Individuals who disagree strongly with a
915 decision should register with the Chair any objections (e.g., to a decision made as
916 the result of a vote).
- 917 • When group participants believe that their concerns are not being duly considered by
918 the group, they may ask the appropriate Steering committee to confirm a decision.
- 919 • Any requests to the Steering Committee to confirm a decision must include a
920 summary of the issue (whether of procedural), decision, and rationale for the
921 objections. All counter-arguments, rationales, and decisions must be recorded.
- 922 • If a participant believes due process has not been followed by the Steering
923 Committee, they may ask the EPCglobal Board of Governors to confirm or deny a
924 decision by the Steering Committee. The Board of Governors may assign one
925 member of the Board to act as a case manager for each appeal brought before it, to
926 be responsible for conducting the appeal. The case manager shall report to the full
927 Board at each Board meeting and make recommendations regarding any appeals
928 then pending. The Board shall accept or reject recommendations made by the case
929 manager, either individually or together, as appropriate.

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4.6 Teleconferences and Physical Meetings

4.6.1 Tracking Membership Participation

934 An attendance list will be maintained and published through meeting minutes.
935
936

4.6.2 Agendas and Protocols /Other Documentation

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

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

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

- 942 • Name of group meeting
- 943 • Date of meeting and beginning and ending time
- 944 • List of all attendees
- 945 • Name of minute taker
- 946 • A reflection of the fact that the meeting followed an agenda made available in
947 advance, and attendees were given the antitrust caution
- 948 • A memorialization of any contributions – including oral contributions – to technical
949 specifications.
950

951

952 From a strictly legal standpoint, minutes are best limited to a list of actions taken at the
953 meeting. Often, however, there are business reasons for including something more than a
954 bare recitation of actions. In drafting minutes, remember that minutes are not a transcript.
955 They should focus on what was done, not what was said (aside from recording oral
956 contributions to a specification as noted above). Any questions or concerns should be sent
957 to the EPCglobal General Counsel.

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

960

961 (TBD –eRoom URL)

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

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

967

4.6.3 DO'S - Conference Calls / Physical Meetings

- 969 • Speak English clearly and slowly and encourage others to do so.
- 970 • If you are new to the group or are a new group try to introduce yourself when
971 speaking.
- 972 • Please make sure that your cell phone does not ring.
- 973 • Please be on time. (especially for a teleconference).
- 974 • Sign on the Webex 15 minutes before the session begins.
- 975 • If unable to stay for the duration of the call, please say so during introductions.

- 976 • "2-minute-guide" - Comments from the respective members should not last longer
977 than 2 minutes to ensure that everybody can be heard.
- 978 • When there are new members of a discussion, the facilitator should make an attempt
979 to provide high-level orientation for topics. The orientation should help newcomers
980 understand the scope of the discussion, the decisions that have been taken so far,
981 and the decisions remaining before the group.

982

983 **4.6.4 DONT'S - Conference Calls / Physical Meetings**

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

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5 EPCglobal Standard Development Process

5.1 Overview

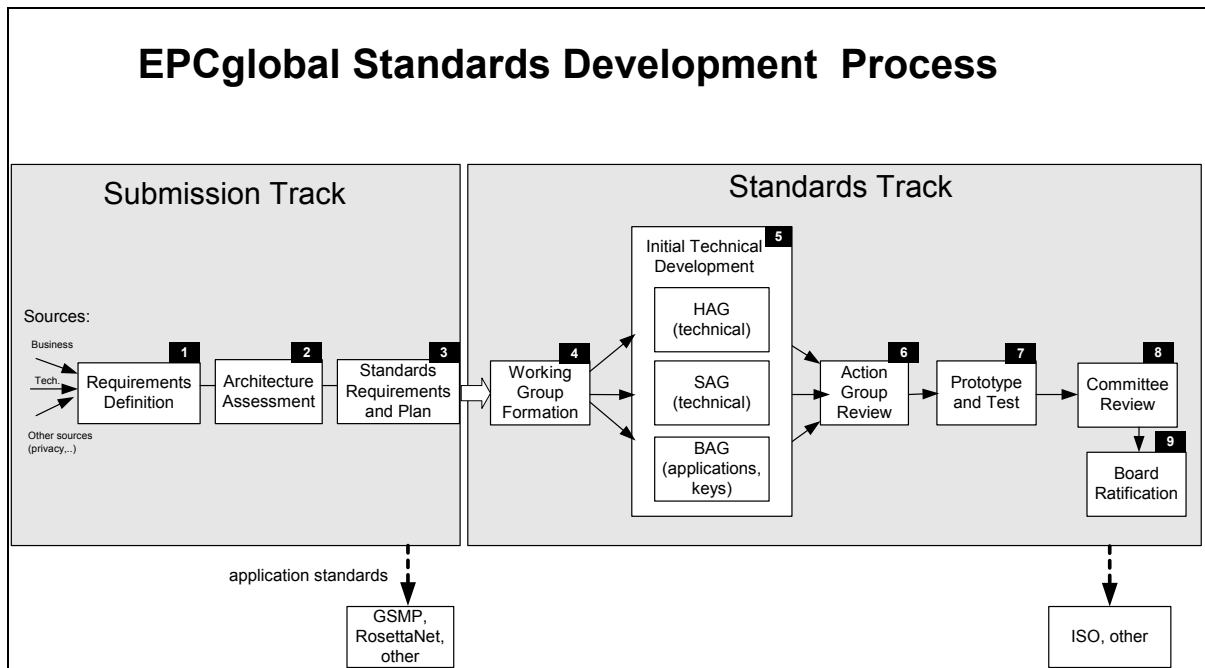
The EPCglobal Standards Development Process has been designed in such a way that all groups' decisions will be consistent with the principles, vision and architecture of the EPCglobal IP Policy. The process consists of two tracks that are outlined in Figure 1:

- 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.



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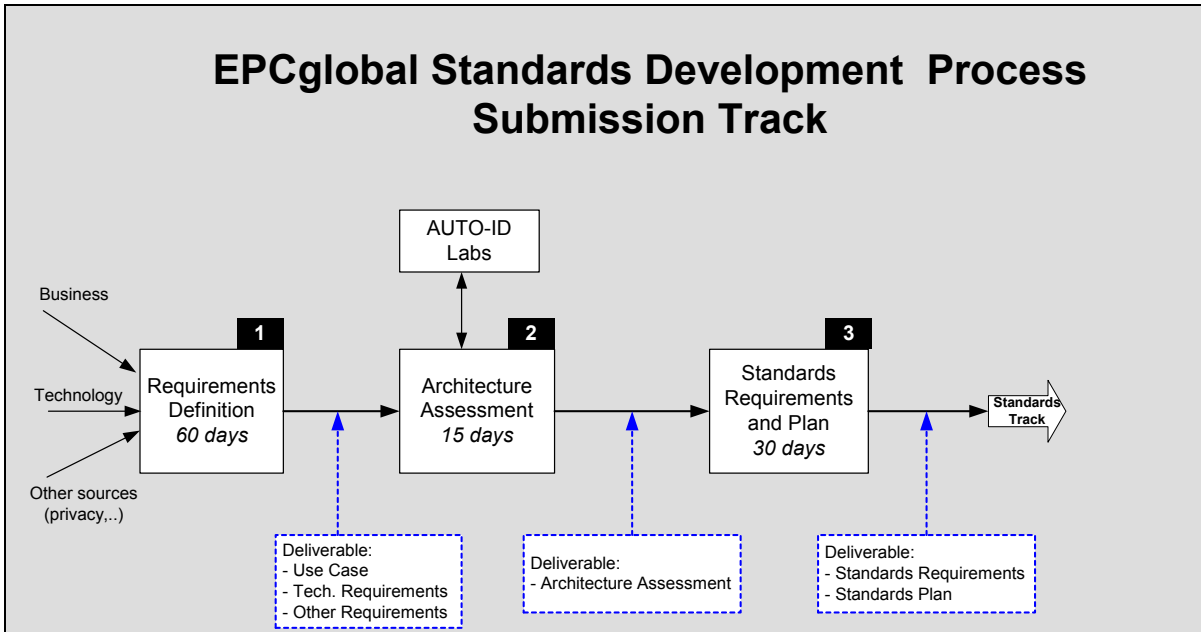
Figure 1

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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.

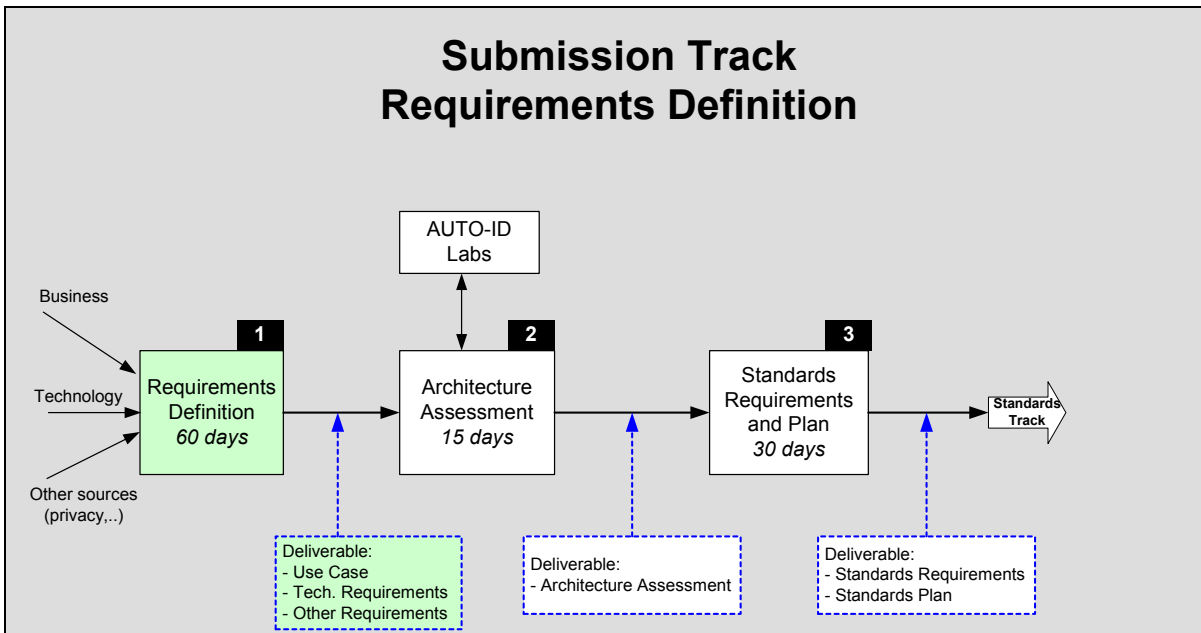


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Figure 2

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6.2 STEP 1: Requirements Definition



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1044

6.2.1 Target Timeframe

Default = 60 days.

1045
1046
1047

6.2.2 Process Owner

1048
1049

Business Request

- BSC with BAG

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1052

Technical Request

- TSC with TAG

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1055

6.2.3 Process

1056
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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.

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- 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.

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EPCglobal STANDARDS DEVELOPMENT PROCESS

1070 Business Action Group

1071 At each BAG meeting, the BAG can assess new business requirements and prioritize
1072 the total portfolio of business requests to be developed based on weighted criteria such
1073 as:

- 1074 • Alignment with Strategic Direction
- 1075 • Commitment to implement
- 1076 • Market Potential
- 1077 • Demonstration of EPCglobal Network component such as EPCIS

1078

1079 Working Group Formation

1080 The requirements work should be conducted by a chartered BAG WG (or a Joint WG) as
1081 explained in section 3.5.

1082

1083

1084 Technical Action Group

1085 At each TAG meeting, the TAG can assess new technical requirements and prioritize the
1086 total portfolio of technical requests to be developed based on industry needs for new
1087 standardized technology.

1088

1089 Action Groups

- 1090 • Action Groups then submit prioritized business and technical requests to BSC or TSC for
1091 submission to President, EPCglobal for approval to develop Use Cases or technical
1092 solutions, including the possible reprioritization of previous requests.

1093

1094 Use Case Development

- 1095 • A BAG Working Group (co-) Chair (acting as Use Case champion) is designated to
1096 work with the technical community to ensure that the Use Case is developed
1097 sufficiently so as to expose the technical requirements.
- 1098 • Create joint BAG and TAG Use Case development team Representatives (to be led
1099 by BAG End User Representative) identified by Business and Technical Action
1100 Group co-Chairs.
- 1101 • Joint Use Case teams form and develop work plan.
- 1102 • Joint Use Case content reviewed and approved by BAG and delivered to BSC to be
1103 passed to the ARC.
- 1104 • Use Cases advanced to the Business Steering Committee must be approved by the
1105 President, EPCglobal before being communicated to the ARC.

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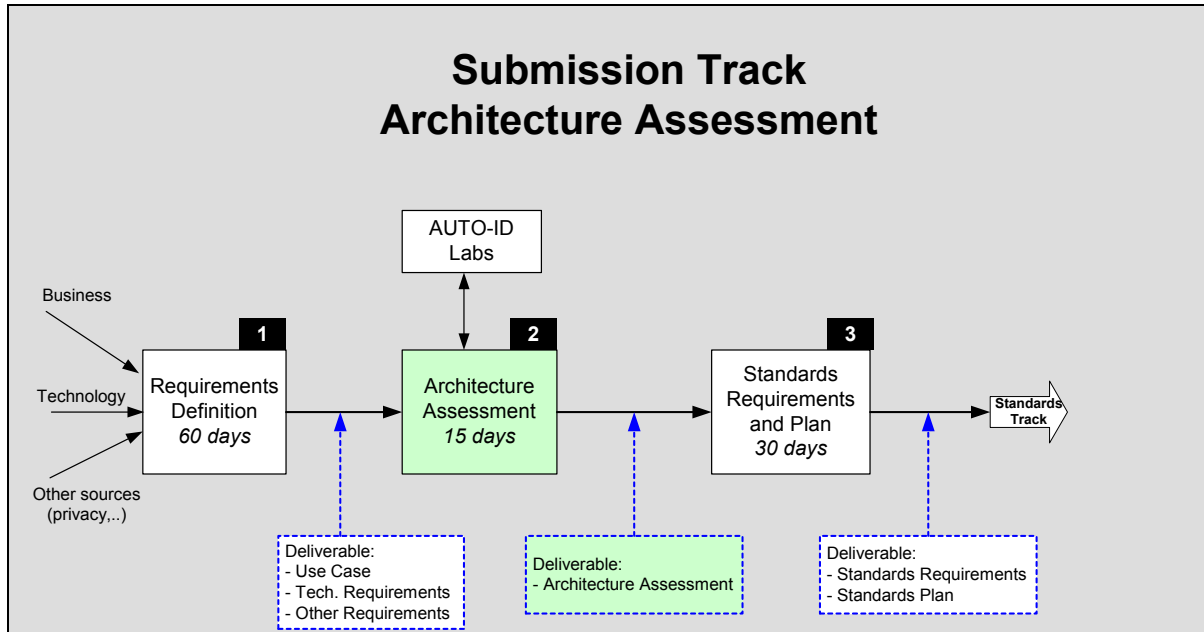
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1108 **6.2.4 Deliverables**

- 1109 • Business requests (prioritized)
- 1110 • Use Case(s)
 - 1111 - Use Case requirements include timeframe goal for publication of technical
 - 1112 specifications to address requirements.
 - 1113 - May also include performance requirements.
- 1114 • Technical requirements
 - 1115 - For SAG or HAG.

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6.3 STEP 2: Architecture Assessment



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6.3.1 Target Timeframe

Default = 15 days.

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6.3.2 Process Owner

The Architecture Review Committee

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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.

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Advise the impact on existing:

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- Supply chain architecture
 - Impact on existing major industry initiatives (registries, data pools, exchanges, etc.)

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- 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.

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- Standards Development Organizations (SDO)
 - Review with Auto-ID Labs for basic research requirements
 - 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.

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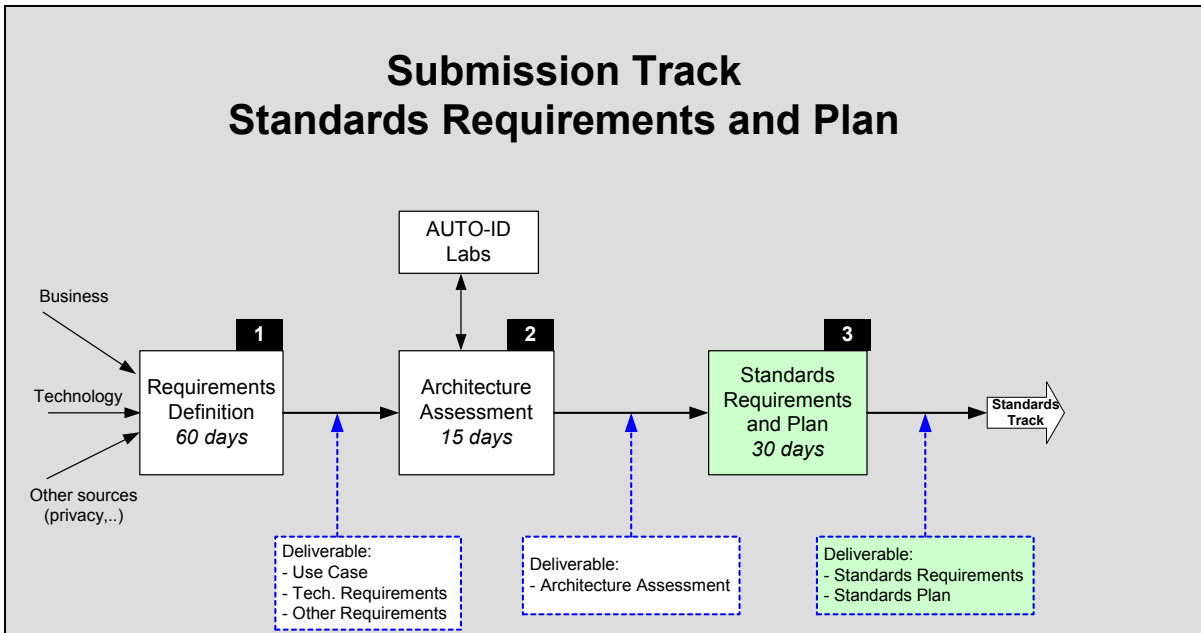
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6.3.4 Deliverables

- Architecture Assessment Report

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6.4 STEP 3: Standards Requirements and Plan



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6.4.1 Target Timeframe

Default = 30 days.

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6.4.2 Process Owner

Architecture Review Committee and Action Group (Business or Technical)

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6.4.3 Process

Architecture Review Committee:

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- 1161 ■ Using the Use Case or technical requirements and the Architecture Assessment Report identify and define areas requiring standardization.
- 1162 ■ Present them as Standards requirements.
- 1163 ■ Specify where they would be incorporated into the EPCglobal Network
- 1164 ■ Propose a technical solution.

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Action Group:

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- 1167 ■ Develop a Plan for the technical solution (including resource requirements and timeline).
- 1168 ■ 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.
- 1169 ■ 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).

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6.4.4 Deliverable(s)

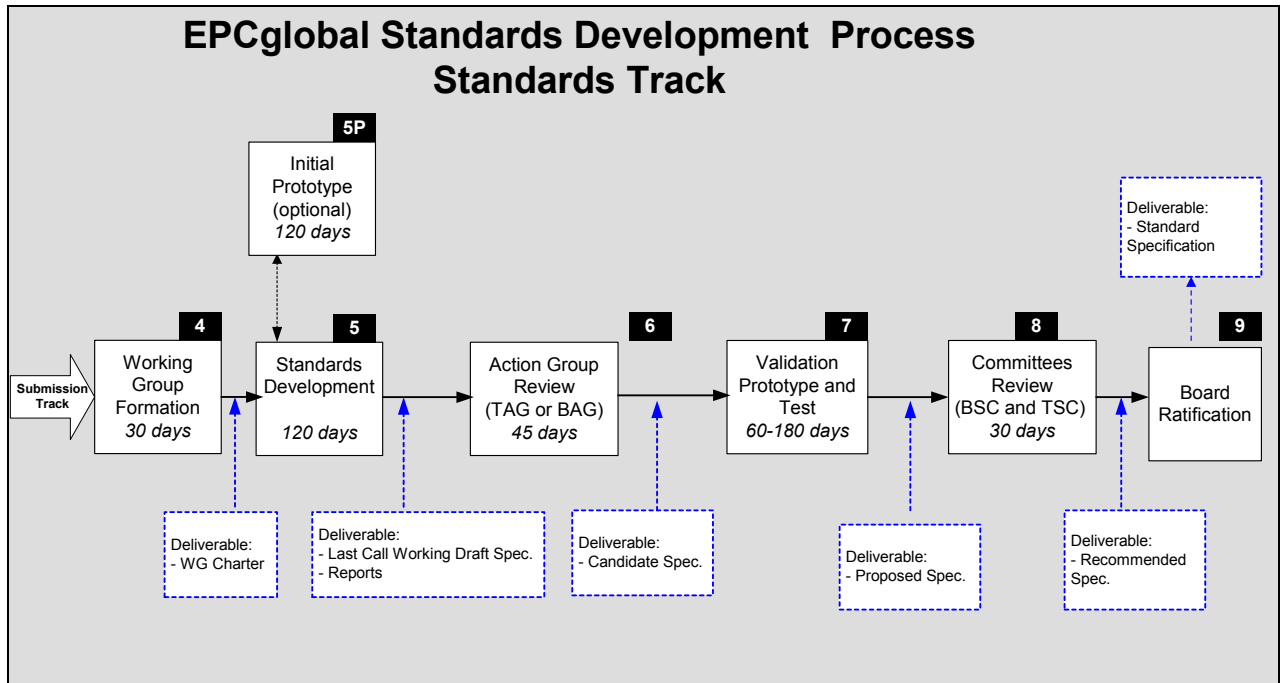
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- 1176 • Standards requirements
- 1177 • Standards Development Plan (for the Standards Track)

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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.

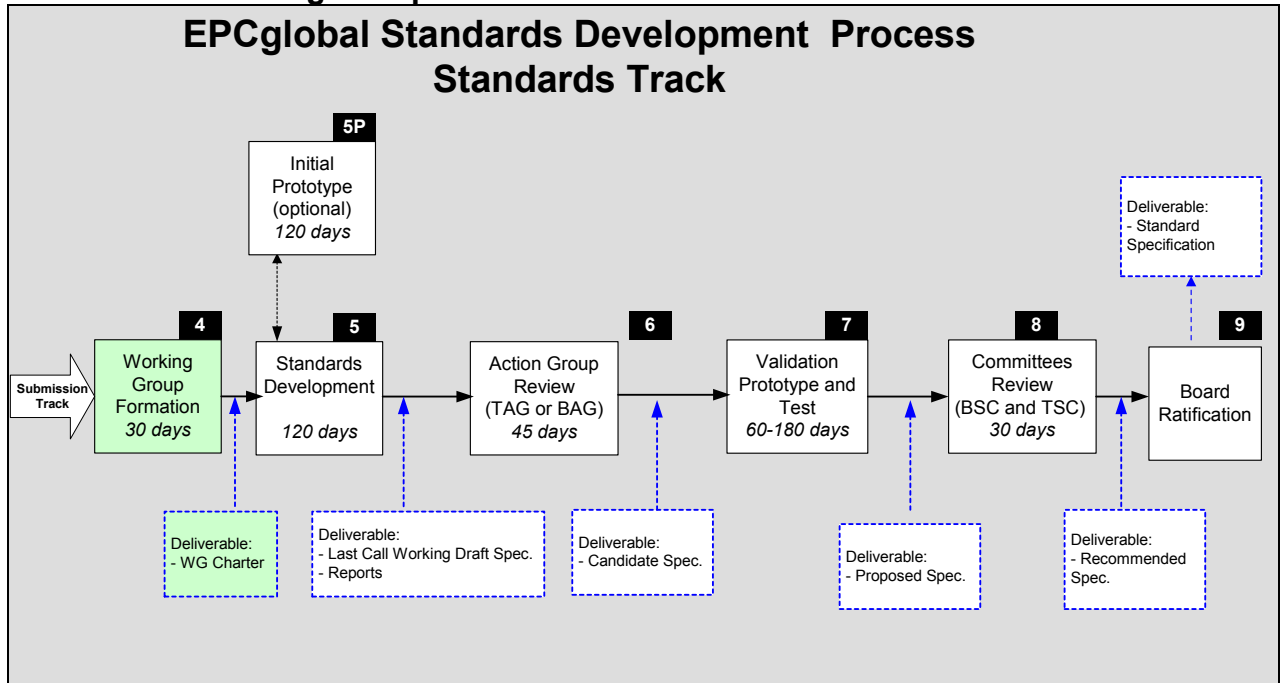


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Figure 3

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7.2 STEP 4: Working Group Formation



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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 meet to craft the mission, scope and deliverables for the Working Group activities and submit the Charter to the EPCglobal Legal Counsel.
- 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.

7.2.5 IP Policy Governance

- EPCglobal Legal Counsel must review and approve all Working Group Charters
- Subscribing companies must specifically opt-in to participate in the Working Group, and comply with the EPCglobal IP Policy.

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EPCglobal STANDARDS DEVELOPMENT PROCESS

- 1223 • Explicit records of each Participant's decision to opt into each Working Group must
1224 be made in writing and must be communicated to EPCglobal Legal Counsel and
1225 becomes part of the permanent record of the Working Group's activities.

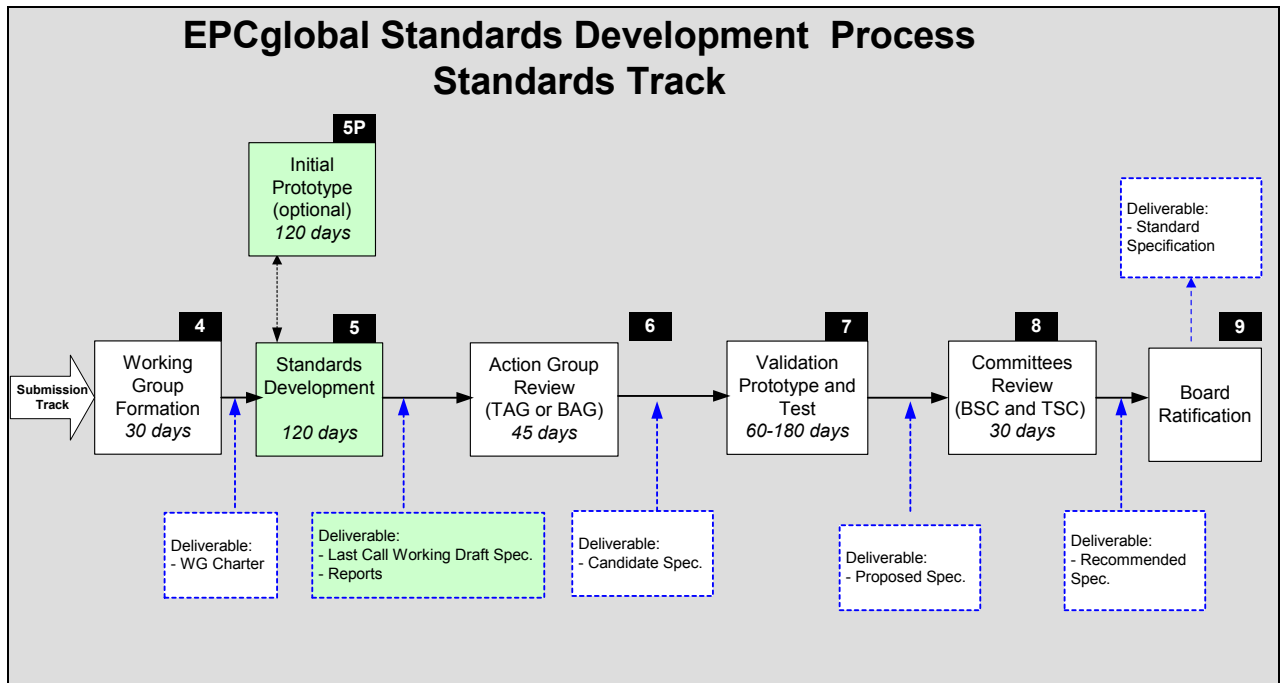
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1227 **7.2.6 Deliverable(s)**

- 1228 • Working Group Charter (Mission and scope) document with timeline.
- 1229 • List of Working Group members.
- 1230 • Signed Opt-in agreement from Working Group members to honor the EPCglobal IP
1231 Policy.

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7.3 STEP 5: Initial Technical Development



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7.3.1 Target Timeframe

Default = 120 days.

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7.3.2 Process Owner

Working Group.

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7.3.3 Process

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- 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.
- During the next 30 days, the resulting IP generated by the technical approach is reviewed for uniqueness and whether or not it refers to Necessary Claims per Section 1.7 of the EPCglobal IP Policy (responsibility of EPCglobal).
- After this review, any IP issues are resolved (either by RAND exception, or by having the questionable IP removed and the spec rewritten).
- 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).

EPCglobal STANDARDS DEVELOPMENT PROCESS

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- 1261 • When the Working Group assesses that this process is complete, they release their
1262 work product for TAG review as the Last Call Working Draft. For a Last Call Working
1263 Draft announcement up to and including publication as a Standard Specification, the
1264 Working Group must:
- 1265 1. Indicate whether the document has been modified substantively since the
1266 previous step. A substantive change (whether deletion, inclusion, or other
1267 modification) is one where someone could reasonably expect that making the
1268 change would invalidate an individual's review or implementation experience.
1269 Other changes (e.g., clarifications, bug fixes, editorial repairs, and minor error
1270 corrections) are minor changes. A Working Group must document changes (both
1271 substantive and minor) between steps.
 - 1272 2. Fulfill the relevant requirements of the Working Group Charter and those of any
1273 accompanying requirements documents, or report which relevant requirements
1274 have not been fulfilled. For relevant requirements that have not been fulfilled, the
1275 Working Group must provide rationale to the satisfaction of the President,
1276 EPCglobal.
 - 1277 3. Indicate which dependencies with other groups the Working Group believes it
1278 has generated or satisfied, and report which dependencies have not been
1279 satisfied.
 - 1280 4. Show evidence of wide review within the Working Group, i.e. posted on website,
1281 e-mail with formal call to review.
 - 1282 5. Formally address all issues raised about the document since the previous step.
1283 In practice, once a Working Group wishes to advance to Candidate Specification
1284 or beyond, the TSC and BSC committees expect positive documentation that
1285 issues have been formally addressed (e.g., in an issues list that shows their
1286 disposition). For the Working Draft stage, less formal documentation generally
1287 suffices (e.g., evidence in an archived mailing list).
 - 1288 6. Indicate any formal objections.
 - 1289 7. If Consensus cannot be reached, the co-Chairs can call for a vote per Section
1290 4.4.
- 1291 If dissenters say they can live with a given decision, this is a sufficient indication
1292 that the group can move on to the next topic, but the inverse is not necessarily
1293 true: dissenters cannot stop a group's work simply by saying that they cannot live
1294 with the decision. When the Chair believes that the legitimate concerns of the
1295 dissenters have received due consideration as far as is possible and reasonable,
1296 then objections must be recorded and the group should move on. A formal
1297 objection should include technical arguments and propose changes that would
1298 remove the dissenter's objection; these proposals may be vague or incomplete.
1299 The Chair must report an objection that includes such information to the BSC and
1300 TSC committees at later review stages. If an objection does not include this
1301 information, the Chair is not required to report it at later review stages. A version
1302 of each formal objection must be publicly available.
- 1303 ▪ Develop certification and compliance testing requirements for the new specification, as
1304 well as early implementation guides. (This step is primarily applicable to the technical
1305 specification).

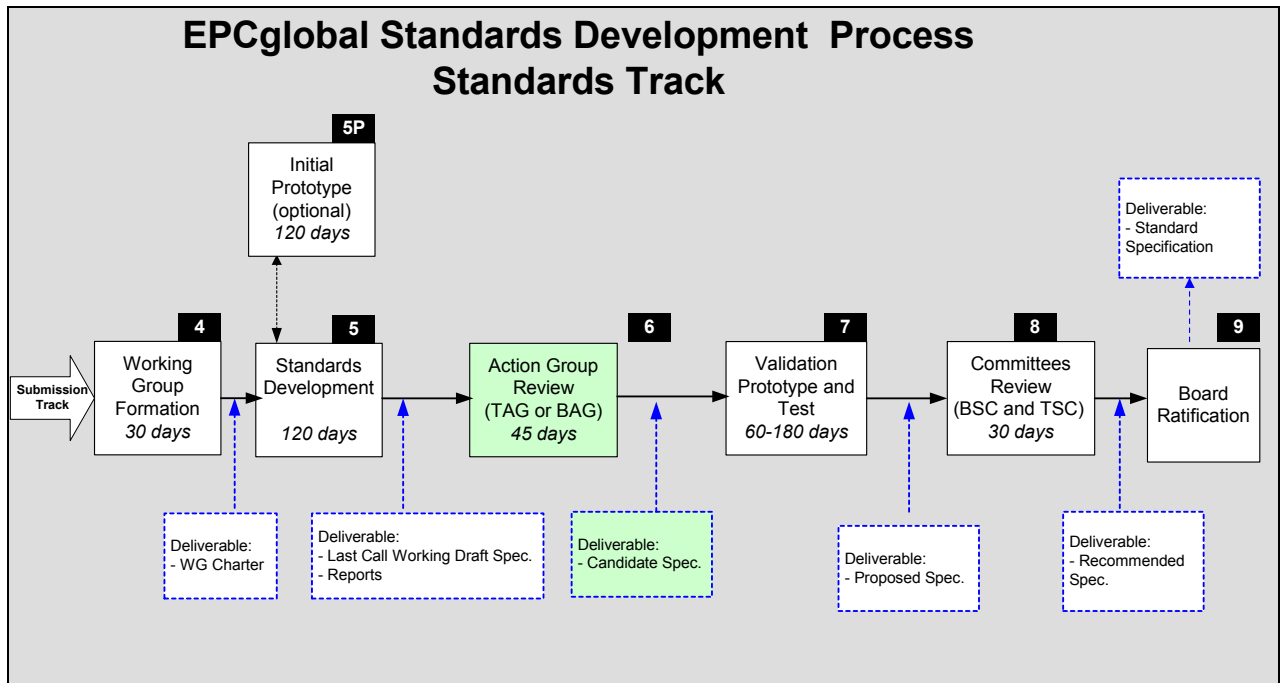
7.3.4 Deliverable(s)

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 1308 ▪ At 60 days – Working Draft,
- 1309 ▪ At 90 days – Working Group Report on IP.
- 1310 ▪ Upon completion – Last Call Working Draft.
- 1311 ▪ Prototyping and Acceptance Test Plan
- 1312 ▪ Certification and compliance requirements.
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7.4 STEP 6: Action Group Review



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7.4.1 Target Timeframe

Default = 45 days.

7.4.2 Process Owner

Working Group, with approval by the appropriate Action Group.

7.4.3 Process

- 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.
- Upon a successful Action Group vote, the Candidate Specification is then posted with the caveat to the EPCglobal website for use by the EPCglobal community.
- The caveat on the Candidate Specification is that it has passed the initial IP review by the Working Group and a technical review, but has not yet been proven through prototype and test (i.e., use at your own risk).
- 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.

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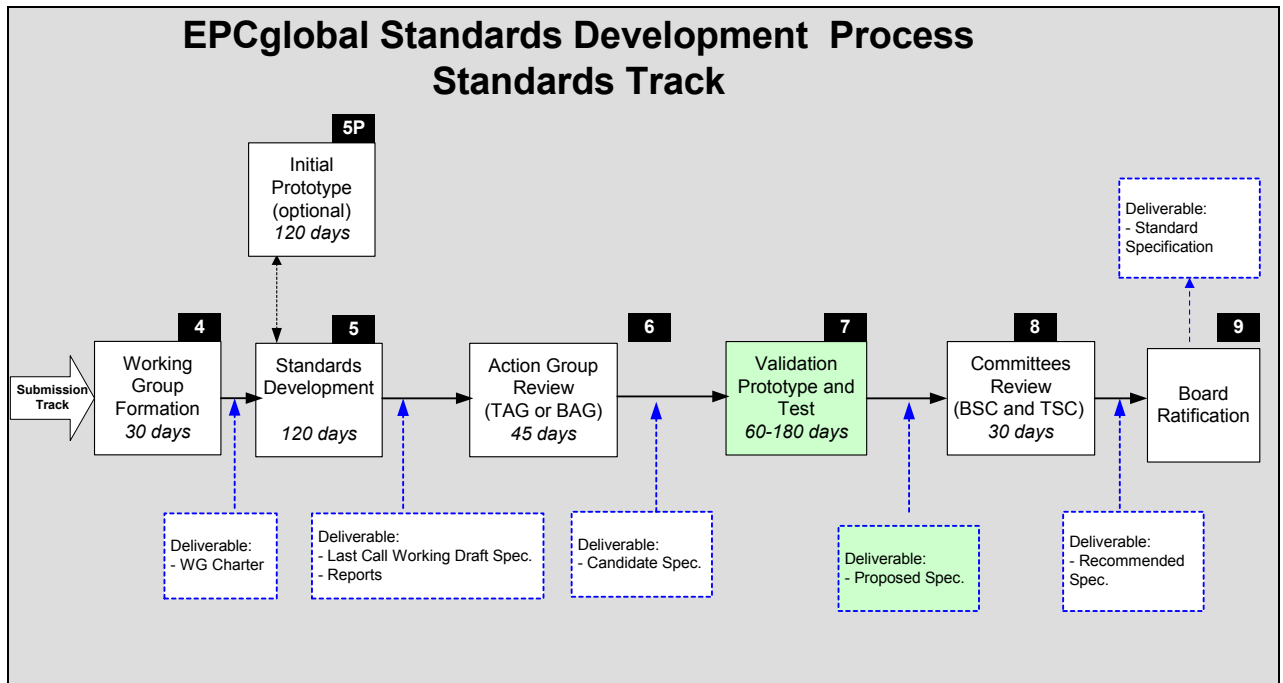
1351 **7.4.4 Deliverable(s)**

1352 ▪ Candidate Specification.

1353 ▪ List of Solution Partners committed to prototype.

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7.5 STEP 7: Validation Prototype and Test



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7.5.1 Target Timeframe

Depends on the specific Working Group work plan (software could be 1 to 6 months, hardware could be 6 months plus).

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7.5.2 Process Owner

- TAG with Solution Providers

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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 reference implementation 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.

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7.5.4 Deliverable(s)

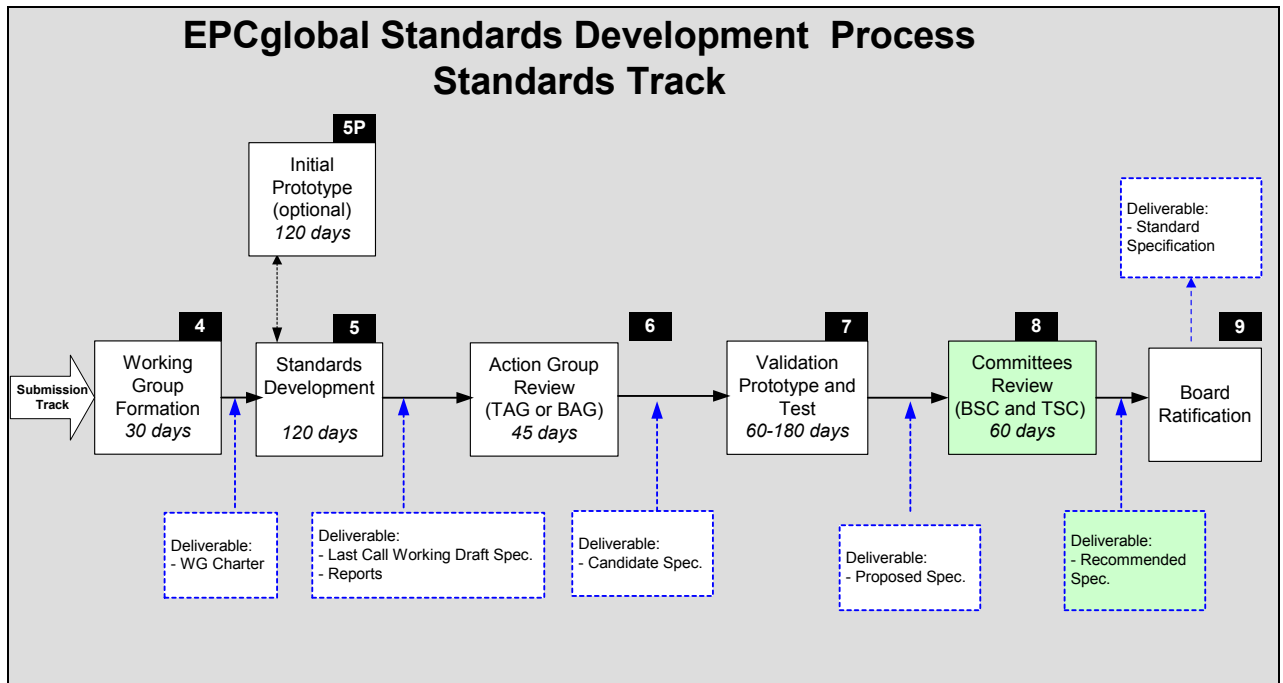
- Proposed Specification

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- 1385 • Prototype and test report.
- 1386 • Implementation guides.
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7.6 STEP 8: Committee Review



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7.6.1 Target Timeframe

Default = 60 days.

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7.6.2 Process Owner

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

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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, certification requirements, and implementation guidelines.
- 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.
- At that point, the Recommended Specification should be published to the EPCglobal website and will be available to non- subscribers (public at large).

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7.6.4 IP Policy Governance

- At the beginning of the Steering Committee Review, all Participants in the Working Group that developed the Candidate Specification must receive notice of the impending review, along with copies of the Candidate Specification.
- All such Working Group Participants have 30 days to notify the EPCglobal Board of Governors if they do not intend to license their “Necessary Claims” covered by the Candidate Specification (see Section 3.3 of the IP Policy) or are aware of any patents or

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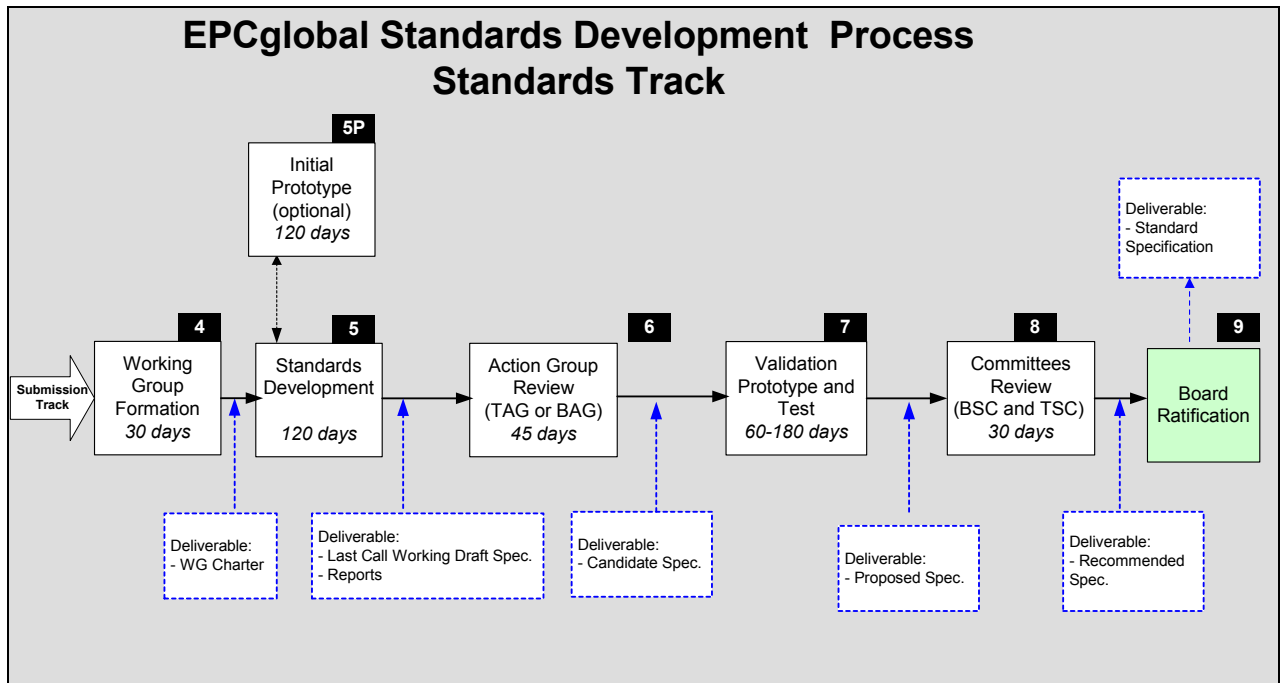
- 1420 intellectual property that may preclude the Board of Governors from ratifying the
1421 specification.
1422 ■ If such notification is received, the TAG must send the Candidate Specification back to
1423 the Working Group to be reworked per Step 5 above.
1424

1425 **7.6.5 Deliverable(s)**

- 1426 • Recommended Specification.
1427 • Revised certification and compliance test criteria (if necessary).
1428 • Recommendation to the Board of Governors for ratification by other standards
1429 bodies.
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7.7 STEP 9: Board of Governors Ratification



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7.7.1 Target Timeframe

1440 30 days.

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7.7.2 Process Owner

1443 President, EPCglobal.

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7.7.3 Process

- 1446 • President, EPCglobal performs due diligence that due process was followed and presents to EPCglobal Board the Recommended Specification for ratification.
- 1447
- 1448 • Board of Governors ratifies based on a 2/3rd's majority vote
- 1449 • Any parties that believe that they were denied due process should register their concerns with the Board of Governors at this time.
- 1450
- 1451 • The technical specification achieves the highest maturity status. It becomes the EPCglobal Standard Specification.
- 1452
- 1453 • 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.
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7.7.4 Deliverable(s)

- 1459 • EPCglobal Standard Specification.
- 1460 • Presentation package for appropriate standards body.
- 1461
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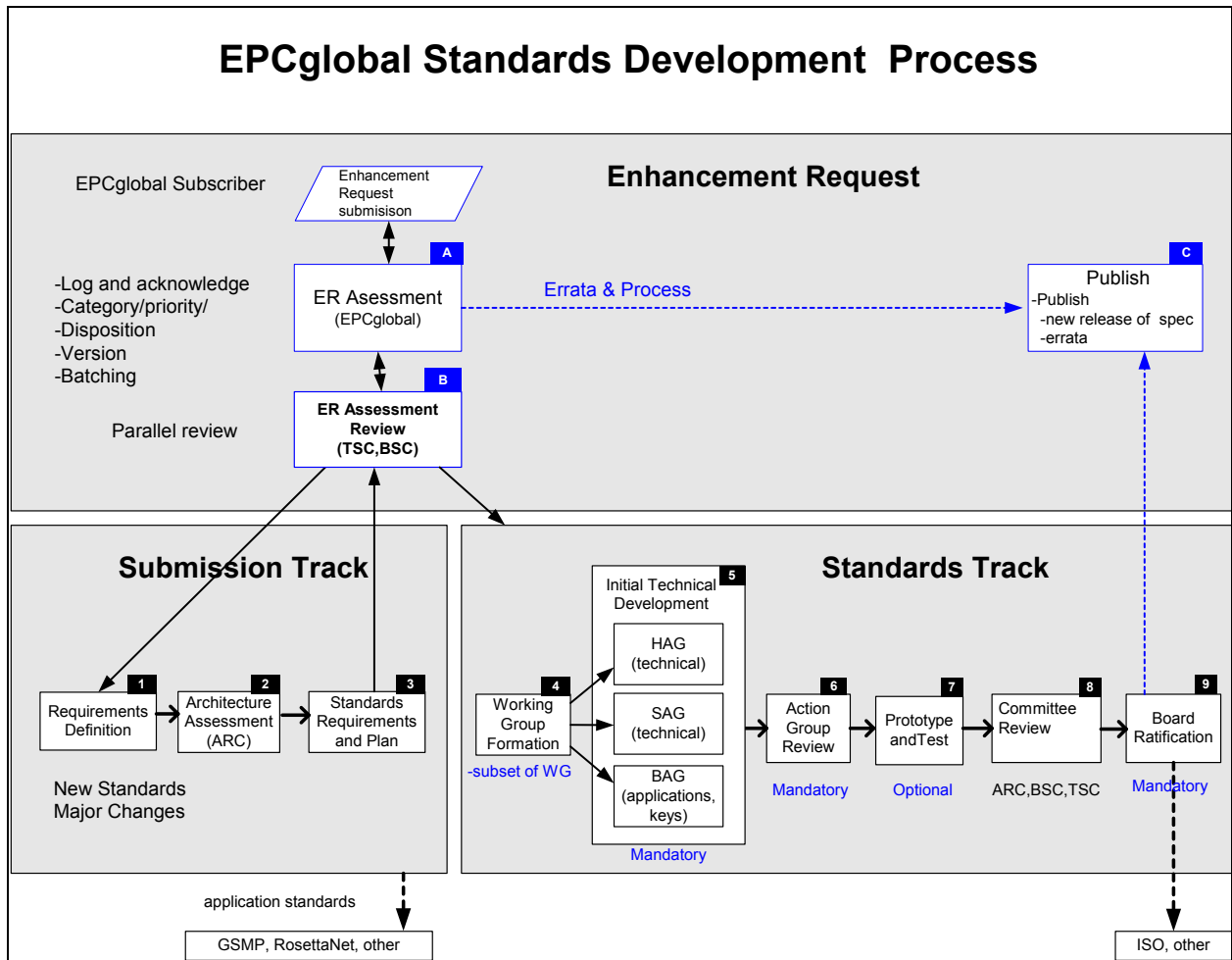
8 Enhancement Request (ER) Process

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 tasks SHALL be followed identically to the requirements of the SDP.



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8.2 Types of Enhancement Requests (ER)

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

1. Errata

These changes include fixing broken links, invalid markup and similar improvements. They also include editorial changes and improved explanation as long as they do not change the technical content of the specification.

The Errata List will be owned by the appropriate WG. EPCglobal will ensure that the list 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 minimum 1 week review period). The Errata List (per each version of the specification) will be created and will be available for downloads to Action Group members.

2. Enhancements

A change 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

Enhancements handles more substantive changes to a standard, and require:

- Review by the community to ensure the technical soundness of the 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 bellow 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

* Under certain circumstances the BSC or TSC may choose to review the Errata.

8.4 Errata Processing

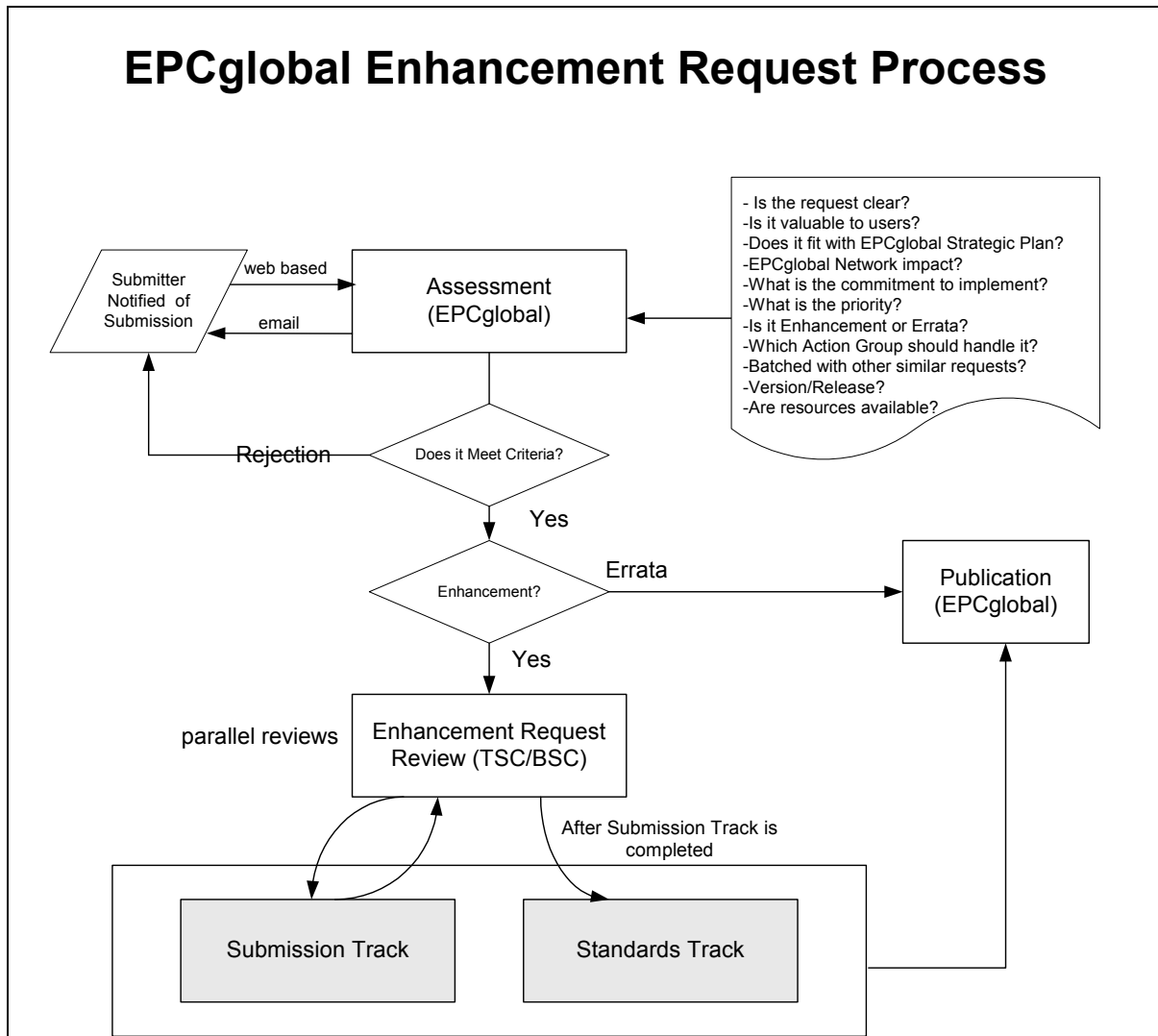
Working Groups **SHALL** track errata on an "errata page." An errata page is a list of enumerated errors, possibly accompanied by corrections. Each EPCglobal Standard Specification **SHALL** either have an Errata Section or provide a link to errata report. A Working Group **SHALL** keep their errata pages up-to-date, as errors are reported by readers and implementers.

1529 EPCglobal will work with the WG responsible for the errata to ensure that a due process is
 1530 followed.

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 1532 When minor changes are made, the specification should get either a new Revision number
 1533 (XYZ 1.2 Technical specification, Second revision) or a new Version number.
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 1535

1536 **8.5 ER Process Flow**

1537 The following figure describes the ER flow. The detail description of each of the steps and
 1538 the flow is described in the following sections.
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An enhancement submission may be in one of the following states: Assessment, Rejection, Withdrawn, Review, Submission Track, Standards Track, and Publication

1547 **8.6 STEP A – Submission**

1548 Any subscriber of the EPCglobal can submit an Enhancement Request, be it an errata or an
1549 Enhancement Request. A submission will be made using electronic (web) forms. A submitter
1550 will be notified (via email) within 10 business days that submission was successful and a
1551 tracking number will be assigned to the request.

1552 At that point the request will published on the EPCglobal secured web site.

1553

1554 When more than one Subscriber Company jointly participates in a Submission request, only
1555 one Member formally sends in the request. That Member **SHALL** copy each of their
1556 respective companies' primary contacts with EPCglobal and each of those Advisory
1557 Committee representatives **SHALL** confirm (by email to EPCglobal) their participation in the
1558 Submission request.

1559 At any time prior to acknowledgment, any Submitter **CAN** withdraw support for a Submission
1560 request. A Submission request is "withdrawn" when no Submitter(s) support it. EPCglobal
1561 will not make statements about withdrawn Submission requests.

1562 Prior to acknowledgment, the Submitter(s) **SHALL NOT, under any circumstances**, refer
1563 to a document as "submitted to the EPCglobal" or "under consideration by EPCglobal" or
1564 any similar phrase either in public or subscriber communication. The Submitter(s) **SHALL**
1565 **NOT** imply in public or Member communication that EPCglobal is working (with the
1566 Submitter(s)) on the material in the Member Submission.

1567 After acknowledgment, the Submitter(s) **SHALL NOT, under any circumstances**, imply
1568 EPCglobal investment in the Member Submission until, and unless, the Enhancement
1569 Request reaches the Standards Track.

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1573 **8.7 STEP B - Assessment**

1574 The tasks in this step will be performed by EPCglobal staff.

1575 They will include:

- 1576 • Validation of the submitted request
 - 1577 ○ All required fields filled in
 - 1578 ○ Clarity of the request
- 1579 • Assessment to determine if the request is valuable to the End Users
- 1580 • Alignment with EPCglobal Strategic Plan
- 1581 • EPCglobal Network impact
- 1582 • Existing Specification impact
- 1583 • Commitment to implement
- 1584 • Assignment of priority
- 1585 • Categorization: Enhancement or Errata
- 1586 • Recommended Action Group to handle the request
- 1587 • Batching of requests
- 1588 • Recommendation on Version/Release
- 1589 • Resources availability
- 1590 • Plan to process the Request through the Standards Track

1591 This may involve creation of a new WG in the Business Action Group, a subgroup of
1592 an existing WG) to work on the ER. An expert(s) on the subject from the TAG
1593 (Technical Action Group may be invited to participate.

1594

1595 If a Submission request fails the validation criteria it will be rejected and the submitter will be
1596 notified with a reason given.

1597 If a Submission request satisfies the validation criteria, the assessed request (or a batch of
1598 them) will be presented to both TSC/BSC for their review and approval (Step B)

1599

1600 **8.8 STEP C - Assessment Review**

1601 The Steering Committees (both TSC and BSC) receive EPCglobal assessed ERs. They
1602 review the Submission (or a batch of them) and EPCglobal recommendations for the course
1603 of action.

1604 The Steering Review Committee has the authority to override EPCglobal recommendations.
1605 For example, it may change priority or even reject the ER.

1606

1607 **8.9 STEP D - Submission Track**

1608 After the Steering Committees Review, an enhancement request enters the Standard
1609 Development Process and it is obliged to follow all steps and produce deliverables as
1610 specified in the SDP.

1611 In Step 3 (Standards Requirement and Plan), a plan for the Standards Track is developed. It
1612 will include necessary steps (see Fig 1) to complete the ER.

1613

1614 **8.10 STEP E - Standards Track**

1615 The enhancements will follow all steps as defined in the SDP. Step 7 (Prototype and Test) is
1616 defined as optional for enhancement requests.

1617 The timing for delivery and reviews should be significantly shorter than when developing a
1618 new specification.

1619 In Step 4, Working Group Formation, activities will involve selecting a team to respond to
1620 enhancement request. It is strongly recommended that an Editor be nominated by the WG
1621 chairs to lead the team.

1622 The team should be selected from subject matter experts in the area of the request.

1623 The team should assess the request(s) and provide estimated completion date.

1624

1625 The documents made available for review may be either a new version of the Specification
1626 with all changes folded in (including current errata) or a list of changes; in either case, the
1627 deltas between the existing Specification and the proposed correction must be highlighted.

1628

1629 **8.11 STEP F - Publish**

1630 Errata publishing will be accomplished in one of the two ways:

- 1631 a. A specification's revision number will be incremented. A link will be created in the
1632 specification to Errata to ensure that that specification has always the right errata
1633 accompanying it. That Errata List will also be available for separate downloads.
- 1634 b. A specification itself may be revised and include errata changes. This may happen if
1635 there are too many items on the Errata list. In that case, the specification **SHALL** clearly
1636 state what Errata List was used.

1637

1638 The Enhancement Requests will be published as part of the Specification.

1639 A specification version number will be revised and will include all the Enhancement
1640 Requests as well as any changes from the current Errata List pertaining to that version. A
1641 specification **SHALL** clearly state what Enhancement Requests and Errata List have been
1642 included in the current revision or release...

1643

1644 The Enhancement Request will enter its final state "Publication" to indicate that it has been
1645 completed.

1646

1647

1648 **8.12 Questions and Answers**

1649

1650 **How frequently should corrections or enhancements be made normative?**

1651 Working Groups should not propose normative corrections too frequently. Perceived instability in
1652 specifications will cause confusion in the public and impede adoption. The need for a very important
1653 correction may be the best trigger for when to request review.

1654 **What appeal process is available?**

- 1655
- Members dissatisfied with a Working Group decision should make their case to the Working
1656 Group first, who may back off from, or modify, the proposed change.
 - If the Working Group and those dissatisfied with the proposed change cannot agree, the
1657 matter is resolved through the appeals as described in sections 4.5
1658

1659 **How frequently should revised Recommendations be published?**

1660 In general, EPCglobal should discourage republication more frequently than approximately every 6
1661 months, and require a rationale when more frequent publication is requested. Similarly, the
1662 Consortium should discourage frequent revision for errata only.
1663 For the intervening period, it's useful to maintain the current organization of Specification + errata
1664 page.
1665

1666 **Should the Working Groups maintain a separate errata list?**

1667 Yes, they definitely should maintain a list of known errata and their corrections.
1668

1669 **Why not just allow items in a separate errata document to be marked normative?**

1670 It is always simpler for implementers and users of specifications to have a single source of
1671 authoritative information than to have two.

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APPENDIX 1 - References/Definitions

Application Standards

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

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

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

BSC Business Steering Committee

Consensus

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.

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).

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.

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.

EPCglobal Reference Architecture

EPCglobal STANDARDS DEVELOPMENT PROCESS

- 1727 Purpose is to clarify where standards should be created or changed to meet new
1728 business or technical requirements, as well as to ensure the coherence and
1729 consistency of the standards set published by EPCglobal. The Reference
1730 Architecture includes a set of principles, guidelines, and strategies governing the
1731 implementation of the EPCglobal Network and related RFID technologies.
- 1732 **EPCglobal Standard Specification**
1733 An EPCglobal Standard is a specification or set of guidelines that, after extensive
1734 Consensus-building, has received the endorsement of EPCglobal members and
1735 the EPCglobal Board. EPCglobal recommends the wide deployment of its
1736 Standards. **Note:** EPCglobal Standards are similar to the Recommendations
1737 published by other organizations such as W3C and ISO.
- 1738 **EPCglobal Website** www.epcglobalinc.org
1739 From this location participants will find all current members of each EPCglobal
1740 Action Group, view all existing working groups, access the EPCglobal e-Rooms,
1741 and reference the latest EPCglobal SDO information.
- 1742
- 1743 **GSMP** Global Standards Management Process.
- 1744
- 1745 **HAG** Hardware Action Group.
- 1746
- 1747 **IP Neutral Environment**
1748 Period of time during the creation of Working Group Charters: Called out in IP
1749 Policy to provide a “safe haven” for early Participants while Charter is being
1750 developed and Participants opt-in to the Working Group
- 1751 **Participant**
1752 An individual or legal entity bound by the EPCglobal IP Policy
- 1753 **Participation Framework**
1754 Set of documents that govern subscription to EPCglobal and participation in the
1755 Standards Development Process. At the time of this writing, the Participation
1756 Framework includes:
1757
 - 1758 ○ EPCglobal IP Policy
 - 1759 ○ IP Policy Opt-In Agreement
 - 1760 ○ EPCglobal Subscriber Agreement
 - 1761 ○ Antitrust Caution
 - 1762 ○ EPCglobal Standards Development Process
- 1763 **PS** Proposed Specification. A Proposed Specification is a mature technical report
1764 that, after wide review for technical soundness and implementability, EPCglobal
1765 has sent to the TSC and BSC committees for final endorsement. Proposed
1766 Specification is the equivalent to Proposed Recommendation in W3C terms.
- 1767
- 1768 **Quorum** Presence of 2/3rds of eligible voting members
- 1769
- 1770 **RAND** Reasonable and Non-Discriminatory.
- 1771
- 1772 **Representative**
1773 The individual(s) authorized by the Participant to represent the Participant in the
1774 activities of a Working Group. Such Representatives shall be specifically
1775 identified upon enrollment in a Working Group.

1776

1777

RF Royalty Free.

1778

1779

SAG Software Action Group.

1780

1781

Solution Partner

1782

This group includes hardware and software companies, consultants, systems integrators, training companies, and trade associations. In general terms, these are the organizations that help the End User community implement the EPC Network and its technologies.

1783

1784

Solution Partner companies join the EPCglobal community by paying an annual Solution

1785

Partner program fee. Solution Partner companies may also license EPC Manager numbers

1786

and register in ONS through the End User subscription fee schedule, in which case they

1787

also belong to the End User group of subscribers.

1788

1789

Standard Per ISO definition, "Standards are documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics, to ensure that materials, products, processes are fit for their purpose".

1790

1791

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1794

Subscriber

1795

An EPCglobal Subscriber is a Participant company who has paid the appropriate subscription fee and has executed a Subscription Agreement with EPCglobal.

1796

1797

1798

Current sponsors of the Auto-ID Center may continue their Action Group participation and attendance at the Auto-ID Labs research meetings at no additional charge according to the following formula:

1799

1800

1801

1802

- Board of Overseers members can participate in Action Groups through December 2005. As a formality, in order to continue their participation, Board of Overseers members must execute a Memo of Agreement with EPCglobal, Inc.

1803

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1806

- Technology Board members can participate in Action Groups through December 2004. In order to continue their participation, Technology Board members must execute a Memo of Agreement with EPCglobal, Inc., as well as the appropriate IP Policy Declaration. Executing these documents ensures that all participants, old and new, are operating under the same expectations of openness and neutrality.

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Auto-ID Center sponsors requiring additional services (EPC Manager numbers, certification services, etc.) during the continued participation period will need to become EPCglobal, Inc. Subscribers according to the appropriate schedule.

1812

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1815

Technical Standards

1816

1817

Purpose: Specifications for network and physical protocols and interfaces.

1818

1819

Examples: Air Interface Protocol Specifications, Savant Functionality and API definitions.

1820

1821

1822

TSC Technical Steering Committee.

1823

1824

Use Case Use Cases are an efficient tool for communicating business requirements. A Use Case is a detailed description of a single activity in a business process. It

1825

EPCglobal STANDARDS DEVELOPMENT PROCESS

1826
1827
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1829

typically would identify data inputs and outputs, performance/timing requirements, handling of error conditions and interfaces with external applications

APPENDIX 2 - EPCglobal Intellectual Property Policy

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

**Please consult Appendix 6
for instructions on how to
obtain the latest copy**

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

1885 it is not possible to avoid such infringement because there is no non-infringing alternative for
1886 implementing the Specification.

1887
1888 1.8 “Contribution” means any submission of concepts, data, suggestions, or revisions to a draft
1889 Specification, whether in written or oral form, made with the intention of inclusion thereof into the
1890 Specification.

1891
1892 1.9 “Affiliate” means any entity that directly or indirectly controls another entity via beneficial
1893 ownership of more than fifty percent of the voting power or equity in another entity (“Control”), or is
1894 controlled by another entity, or is under common Control with another entity, so long as such Control
1895 exists.

1896
1897 1.10 “Working Group” shall mean a body constituted by the Trustee for the purpose of developing a
1898 Specification.

1899 2. GENERAL 1900

1901
1902 2.1 Participant understands, admits and consents to the terms hereof as a condition of our/my
1903 participation in a Working Group of EPCglobal, and in which we intend to participate for the purpose
1904 of establishing a Specification for Certified Compliant Systems. It is our intention that the
1905 Specification is to be made freely available for use in developing Candidate Certified Compliant
1906 Systems and for use in Certified Compliant Systems free of claims of infringement, or subject to
1907 defined licensing terms under Section 3.4 hereof, to the extent that such Certified Compliant Systems
1908 operate in accordance with the Specifications.

1909
1910 2.2 Designation of the Representative(s) by Participant is hereby made by an officer or equivalent
1911 individual having the power to bind the Participant to the terms and conditions hereof.

1912
1913 2.3 Participation in a Working Group shall not constitute an undertaking to make or use any system
1914 or component in accordance with the Specification and a Participant shall not be required to
1915 implement any Specification.

1916
1917 2.4. The Trustee shall ensure that all Participants in a Working Group have committed to this
1918 Declaration as a condition for participation in a Working Group.

1919
1920 2.5 The terms and conditions hereof are intended to be limited to and binding relative to each
1921 Working Group in which the Participant participates.

1922 1923 3. INTELLECTUAL PROPERTY

1924 1925 3.1 Agreement to Grant Licenses.

1926
1927 Subject to Section 2.5, 3.2, 3.3, 3.4 and 4.3 hereof, the Participant and its Affiliates shall not assert,
1928 and shall grant to the extent that it owns or has a right to grant, a nonexclusive, nontransferable, non-
1929 sublicensable, worldwide royalty-free and otherwise reasonable and non-discriminatory license upon
1930 request in, its Necessary Claims to other Participants in the Working Group, and to allow Participants
1931 and others to make, have made, use, import, offer to sell, lease and sell and otherwise distribute
1932 Compliant Portions, provided that such agreement to license shall not extend to any part or function
1933 of a product in which a Compliant Portion is incorporated, which part or function is not itself part of the
1934 Compliant Portion, and further provided that such Participants and others comply with Section 3.2
1935 hereof. Participant and its Affiliates shall not transfer patents having Necessary Claims for the
1936 purpose of circumventing this Section, and any transfer shall be conditioned upon the obligation to
1937 license stated herein. The covenant of non-assertion and license herein shall not extend to any
1938 claims other than Necessary Claims.
1939

EPCglobal STANDARDS DEVELOPMENT PROCESS

1940 With respect to component parts of a Compliant Portion that are otherwise not subject to certification,
1941 but which establish compliance with the Specification, such component parts shall be admitted to be
1942 capable of substantial non-infringing use with respect to Necessary Claims if suitable for use in
1943 connection with a Certified Compliant System, for the purposes of a claim of contributory infringement
1944 or provided under non-infringing intent for a claim of induced infringement. Participant shall license
1945 any intellectual property associated with any testing and compliance certification process in
1946 connection with the Specification on a royalty-free and otherwise reasonable and non-discriminatory
1947 basis for the purpose of conducting compliance certification tests and processes.

1948
1949 3.2 Reciprocity Required.

1950
1951 The Participant's agreement to Section 3.1 and 3.4 shall not be effective as to any party that does not
1952 make the patent license grant of Section 3.1 or 3.4 available on substantially equivalent respective
1953 terms with respect to the same Specification as that requiring a license from the Participant.

1954
1955 3.3 Limited Agreement to Disclose.

1956
1957 In the event that the Participant is unwilling to provide the license of Section 3.1 to a work-in-progress
1958 of the Working Group(s) in which Participant has joined, such Participant agrees to promptly provide
1959 written notification to the Trustee of such Participant's intent not to license. After the Specification is
1960 approved by the Working Group, Participants therein shall be provided with at least 60 days notice
1961 prior to the anticipated date of ratification of the Specification by the Trustee. Notification of intent not
1962 to license shall be given no later than 30 days before the anticipated date of ratification of the
1963 Specification by the Trustee. Such notification shall specifically disclose and identify to the Trustee
1964 the claim(s) believed to be Necessary Claims and which are not subject to license. The Participant
1965 shall also identify any portion of a draft Specification or other work-in-progress, which is not subject to
1966 license. The Trustee shall have the discretion to return the draft Specification to the Working Group
1967 for revision to avoid the identified claim(s), to proceed under the provisions of Section 3.4 hereof, or
1968 to decline to ratify the Specification. Failure to provide such notification of intent shall constitute
1969 consent of the Participant to the provisions of Section 3.1. Provision of notification under this section
1970 shall not operate to revoke licenses granted hereunder to the Participant.

1971
1972 3.4 Reasonable and Non-Discriminatory Licensing

1973
1974 Notwithstanding any contrary provision hereof, the Trustee shall have the option, upon notification
1975 received in accordance with Section 3.3 of determining whether identified Necessary Claims shall be
1976 permitted for inclusion in the Specification. Such option will be granted only in extraordinary
1977 circumstances. In such circumstances, the Participant shall agree to license such Necessary Claims
1978 on reasonable and non-discriminatory (RAND) terms, and the Specification shall identify the
1979 Necessary Claims available for such license. The Trustee may require the Participant affirm that the
1980 Participant is willing to offer a license to its Necessary Claims on RAND terms to all implementers of
1981 the Specification, and to specifically state the terms of such license, including the manner in which
1982 any royalty is to be computed. In no event shall the Trustee approve, or the Participant assert, a
1983 royalty right in any Specification for which the notification of intent of Section 3.3 was not provided by
1984 the Participant. The Trustee shall have the right to seek a determination of the validity of any claims
1985 identified under the terms of Section 3.3, and approval of RAND licensing terms shall not constitute
1986 an admission by Trustee that such claims are valid or infringed by practice of the Specification.
1987 Under no circumstances shall the Trustee be obligated to exercise its discretion under this Section.
1988 Participants shall enjoy the benefit of any license obtained by the Trustee from a non-Participant
1989 granting rights in a patent having Necessary Claims.

1990
1991 3.5 No Other License

1992

EPCglobal STANDARDS DEVELOPMENT PROCESS

1993 The Participant and its Affiliates retain the independent right to grant or withhold a nonexclusive
1994 license or sublicense of patents containing Necessary Claims for use other than in connection with
1995 the license granted in Section 3.1.
1996
1997 No patent license, immunity or other right is granted under this Declaration by any Participant, its
1998 Affiliates, or any other party to any other Participant, its Affiliates, or any other party either directly or
1999 by implication, estoppel or otherwise, other than the agreements to grant licenses expressly set forth
2000 herein. All rights not affected by this Declaration are expressly reserved by the Participant.
2001
2002 3.6 Transfer of Necessary Claims to Third Parties.
2003
2004 Any transfer by Participant to a third party of a patent having Necessary Claims shall include, in the
2005 transfer agreement, a provision that the transfer is subject to existing obligations of the transferor.
2006
2007 3.7 Contributions Otherwise Subject to Copyright
2008
2009 By making a Contribution of copyrightable material, including without limitation drawings, compilations
2010 of data, software, or text, the Participant shall grant to any party a worldwide, non-exclusive, royalty-
2011 free license to copy, publish, distribute and make derivative works that are based on or incorporate all
2012 or part of the Contribution, for use (a) in developing and publishing the Specification and related
2013 materials for which such Contribution was made; (b) in developing and implementing a Candidate
2014 Certified Compliant System or a Certified Compliant System; and (c) by other standards development
2015 organizations, such as ISO, solely for the purpose of adopting the same or a substantially related
2016 Specification. Such license shall be revocable with respect to any party, which fails to make the
2017 license of this Section or Section 3.1 available.
2018
2019 4.0 Termination
2020
2021 4.1 Termination By Participant
2022
2023 Unless terminated as provided in this Section, this Declaration shall remain in full force and effect.
2024
2025 The Participant may withdraw from Participation by terminating this Declaration at any time upon the
2026 giving of written notice to the Trustee. If the Participant participates in multiple Working Groups, such
2027 notice shall indicate which Working Groups are covered by such notice. Upon termination, licenses
2028 granted by other Participants under Sections 3.1 and 3.4 shall remain in full force and effect as to the
2029 terminating Participant only as to Specifications that have been approved and ratified prior to the date
2030 of termination.
2031
2032 4.2 Termination by Trustee.
2033
2034 Trustee may terminate this Declaration on written notice, if Participant breaches its obligations under
2035 this Declaration, provided Trustee shall first give Participant written notice and thirty (30) days
2036 opportunity to cure the breach. After the effective date of termination, Participant shall not be subject
2037 to any agreement to grant a license of its Necessary Claims, except as provided in Section 4.3 .
2038 Participants are encouraged to utilize alternative dispute resolution for disputes arising hereunder.
2039 The Trustee may terminate this agreement upon the Participant commencing litigation alleging direct
2040 or indirect infringement on the basis of a Necessary Claim asserted against a Compliant Portion,
2041 unless such litigation is consistent with the provisions of this Policy. Any such Trustee-initiated
2042 termination shall indicate whether the termination applies to Participant's Participation in all or only
2043 certain Working Groups.
2044
2045
2046 4.3 Survival of Agreement to Grant License
2047

EPCglobal STANDARDS DEVELOPMENT PROCESS

2048 Notwithstanding termination under Section 4.1 and 4.2, and except as otherwise provided herein,
2049 Participant's agreement to grant licenses as provided in Section 3.1, 3.4 and 3.7 shall remain in full
2050 force and effect:

2051

2052 (i) for subject matter included in a draft Specification more than sixty (60) days before the date of
2053 Participant's termination, for which the Participant had not given notification under Section 3.3, even if
2054 the Specification is approved by the Trustee after the date of Participant's termination; and (ii) for any
2055 Contribution made by the terminating Participant to the Specification prior to the effective date of its
2056 termination. No license grant shall survive termination for Contributions not incorporated into, or
2057 withdrawn from, the Specification under Section 3.3 or 3.4.

2058

2059

2060 5. REPRESENTATION. THE PARTICIPANT REPRESENTS THAT ITS REPRESENTATIVES TO
2061 THE WORKING GROUP SHALL NOT SUBMIT A CONTRIBUTION THAT ITS REPRESENTATIVES
2062 KNOW VIOLATES THE COPYRIGHT OR TRADE SECRET RIGHTS OF ANY OTHER
2063 PARTICIPANT OR THIRD PARTY.

2064

2065 6. OTHER PROVISIONS

2066

2067 6.1 No Transfer

2068

2069 Neither the Participant nor the Trustee may transfer, assign or sublicense any of its rights or
2070 obligations of participation under this Declaration without the prior written consent of the other party.
2071 Such consent shall not be unreasonably withheld.

2072

2073 6.2 The Participant designates the Representative identified below for the purpose of receiving notice
2074 under this Declaration. The Participant may change the designated Representative by written notice
2075 to Trustee.

2076

2077 6.3 No Joint Venture

2078

2079 Nothing contained in this Declaration and no action taken by the Participant shall be deemed to
2080 render the Participant or its Affiliates an employee, agent or representative of Trustee or any other
2081 Participant or their Affiliates, or shall be deemed to create a partnership, joint venture or syndicate
2082 among or between any of the Participants or their Affiliates or Trustee.

2083

2084 6.4 Governing Law

2085

2086 This Declaration shall be governed by and construed under, and the legal relations among the parties
2087 hereto shall be determined in accordance with, the laws of the State of Delaware, excluding
2088 conflict-of-law principles that would cause the application of the laws of any other jurisdiction. This
2089 Declaration may be asserted against the Participant as a binding admission in defense of a claim of
2090 infringement in any jurisdiction.

2091

2092 6.5 Integration

2093

2094 This Declaration supersedes and replaces any and all prior representations, agreements and
2095 understandings relating to the participation in the Working Group, including without limitation any prior
2096 version of this Declaration. The terms of this Declaration cannot be amended without express
2097 consent of the Participant to any such revision.

2098

2099 6.6 Authority

2100

EPCglobal STANDARDS DEVELOPMENT PROCESS

2101 The Participant represents and warrants that it is authorized to enter into this Declaration. The
2102 undersigned person represents and warrants that he/she is authorized to sign this Declaration on
2103 behalf of the Participant.
2104

2105 6.7 Specific Software Code Shall Not be Referenced in Specifications

2106
2107 EPCglobal Specifications shall not include software object code or source code in any required
2108 portion of the Specification. Further, the use of particular software code shall not be a requirement for
2109 conformance to the Specification. Specifications may refer to software code that demonstrates a
2110 reference implementation of the Specification as an optional portion of the Specification.
2111

2112
2113 Agreed by:

2114
2115 Participant Name:

2116
2117 Address:

2118
2119 Officer Name:

2120
2121 Title:

2122
2123 Signature:

2124
2125 Date:

2126

2127 **APPENDIX 3 - Working Group Opt-In Agreement**
2128 EPCglobal, Inc.
2129 _____ Action Group
2130 _____ Working Group
2131 Participation Commitment (Opt-In)
2132

**Please consult Appendix 6
for instructions on how to
obtain the latest copy**

2133 *By signing below*, the undersigned acknowledges and certifies as follows:
2134

- 2135 1. He/she is authorized to sign this Participation Commitment on his/her own behalf and on
2136 behalf of the entity indicated below.
- 2137 2. He/she and his/her company desires to participate in the activities of the Working Group
2138 named above.
- 2139 3. He/she has reviewed the Working Group Charter attached hereto as Exhibit 1 and
2140 understands the nature and scope of the work to be undertaken by the Working Group.
- 2141 4. To participate in this Working Group, it is necessary to execute the EPCglobal Intellectual
2142 Property Policy (IP Policy) which provides, *inter alia*, that Participant and its Affiliates shall
2143 grant a royalty-free and otherwise reasonable and non-discriminatory license to any
2144 Necessary Claims owned or controlled by Participant or its Affiliates that may be embodied in
2145 the work of the Working Group (See §3.1 of the IP Policy). If Participant is unwilling to grant
2146 such a license, it shall disclose this fact at least 30 days before a specification is finalized
2147 (See §3.3 of the IP Policy). Participant or a duly authorized member of Participant's company
2148 has executed the IP Policy and delivered same to EPCglobal. In the event of any difference
2149 between the provisions of the IP Policy and this, or any other document, the IP Policy shall
2150 control.

2151
2152
2153 _____
2154 Signature

2155
2156
2157 _____
2158 Print Name

2159
2160
2161 _____
2162 Company Name

2163
2164
2165 _____, 200_
2166
2167 Date
2168

EPCglobal STANDARDS DEVELOPMENT PROCESS

2169 Working Group Charter Template
2170 Chairs:
2171 Objective:
2172 Work Method (email, teleconference, webinar, face-to-face, etc.):
2173 Member Skill Profile:
2174 Work Plan with Milestones:
2175 Deliverables:
2176 Working Group Members:
2177

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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. Co-Chair selection 0.2. Charter Creation 0.3. Charter Approval 0.4. Call for Participation	0.1 Action Group 0.2 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

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EPCglobal STANDARDS DEVELOPMENT PROCESS

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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 4.2. Charter Creation 4.3. Charter Approval 4.4. Call for Participation	4.1 Action Group 4.2 WG Co-Chairs 4.3 Action Group & Technical Steering Committee 4.4 WG Co-Chairs & EPCglobal Staff	
5. Development of Specification 5.1. Development 5.2. Last Call Working Draft complete 5.3. Intellectual Property Review	5.1 Working Group 5.2 Working Group 5.3 Working Group	Last Call Working Draft
6. Action Group Review 6.1. Review & Comments 6.2. Comment Resolution 6.3. Certification & Compliance requirements 6.4. Validation Test Plan 6.5. Prototype participants selection	6.1 Action Group 6.2 Working Group 6.3 Working Group 6.4 Working Group 6.5 Working Group	Candidate Specification
7. Validation, Prototype & Test 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	7.1 Working Group 7.2 Working Group 7.3 Working Group 7.4 Working Group 7.5 Action Group	Proposed Specification
8. Committees Review (Business (BSC) & Technical (TSC)) 8.1. Working Group Notification 8.2. Board notification of "Necessary Claims" 8.3. Specification review 8.4. Decision to move to step 5 or 9	8.1 EPCglobal Staff 8.2 Working Group Participants 8.3 BSC and TSC 8.4 Action Group	Recommended Specification
9. Board Ratification 9.1. Due diligence 9.2. Board presentation 9.3. Board Ratification 9.4. Presentation package for other standards bodies 9.5. Presentation of Ratified Standard to other standards bodies	9.1 EPCglobal Inc. President 9.2 EPCglobal Inc. President 9.3 EPCglobal Inc. Board 9.4 Working Group 9.5 EPCglobal Staff	EPCglobal Standard Specification

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2204 **APPENDIX 5 – Forms and Templates**

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2207 The following forms and templates are available on EPCglobal Inc Subscriber Community
2208 eRoom.

2209 http://eroom.uc-council.org/eRoom/facility/EPCglobalCommunity/0_2753a

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2211 1 Working Group Charter Template

2212 2 Use Case Templates

2213 3 Enhancement Request Form (will be phased out once the ER Process is automated)

2214 4 Agenda and minutes templates

2215 5 Invited Experts Document

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