WAP Work Processes

Approved Version 13-December-2000

Wireless Application Protocol

Technical Activities Work Processes

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1 Introduction

The following document describes processes that define and organise work within the WAP Forum™. These include the processes for initiating new activities, formation of groups, event organisation and specification publication.

This document covers the following WAP Forum™ processes:

- Contribution of input documents
- Proposal and initiation of new activities (work items)
- Working group processes

1.1 Organisation

The WAP Forum™ is organised into the following functional areas:

- The **Board of Directors** – the structure of the Board is specified in the Memorandum and Articles of Association (http://www.wapforum.org/who/wapartic.doc). The Board creates working groups, approves their charter, and approves specifications for publication..
- The **Specification Committee** – an extension of the Board of Directors which has been chartered to perform the project management responsibilities on behalf of the Board and in support of technical activities performed by the Architecture Group and other technical working and interest groups. The Specification Committee, on behalf of the full Board manages procedural and review issues, such as recommendation of final specifications for Board approval, the document publication process and the creation of new working groups. This committee may be made up of Board members and other individuals appointed by the Board of Directors.
- **Architecture Group** – a Specification Working Group responsible for the overall technical architecture of the WAP Forum™ technology.
- **Specification Working Groups** – technical groups chartered to define detailed architectures and draft technical specifications.
- **Expert Working Groups** – technical groups chartered to investigate new areas of technology, address industry and market viewpoints and provide domain-specific knowledge not directly tied to a single specification effort.

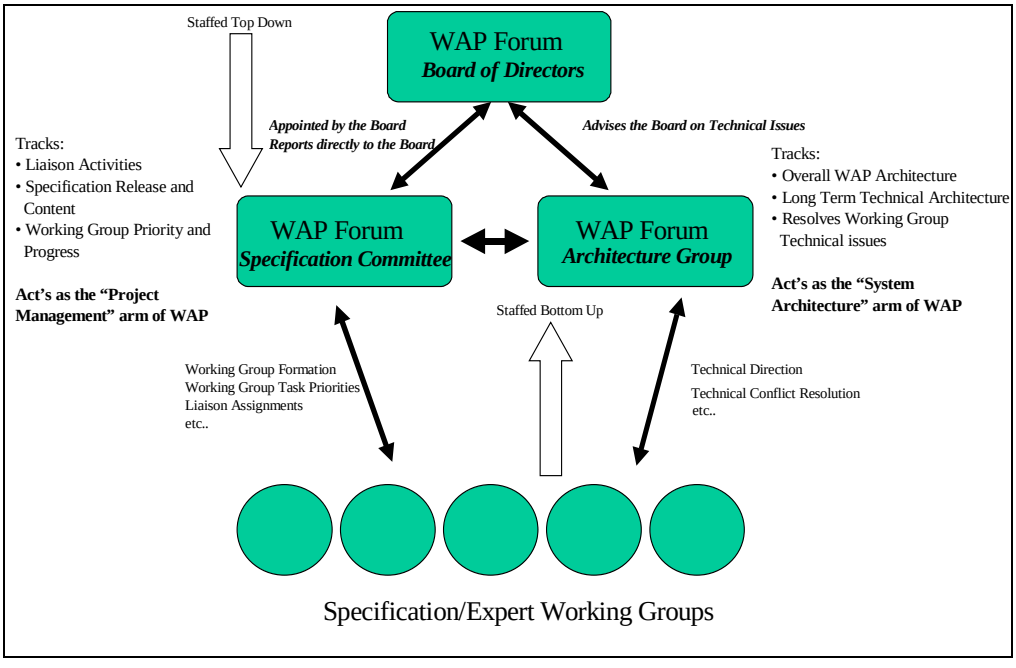

Figure 1: Overview of the WAP Organisation

See Section 9 for definition of Roles and Responsibilities.

1.2 Normative Reference

[RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997. URL: http://www.ietf.org/rfc/rfc2119.txt

[ISO8601] "Data elements and interchange formats - Information interchange - Representation of dates and times", International Organization For Standardization (ISO), 15-June-1988

"Data elements and interchange formats - Information interchange - Representation of dates and times, Technical Corrigendum 1", International Organization For Standardization (ISO) –Technical Committee ISO/TC 154, 01-May-1991

1.3 Terminology

This document uses the following terminology:

- Activity – a generic term for an item of work, however informally organised, that occurs within the WAP Forum™. Examples include workshops, technical research, specification drafting, email discussions, etc.
- Forum – the context within which activities occur, e.g. email lists, a working group, a workshop, etc.
- Activity proposal – a proposal for an activity, i.e. an item of work. Approved activities may be assigned to an existing Forum, or may result in the creation of a new Forum.
- Working group – a forum or group officially chartered by the WAP Board of Directors. A working group has a chair, explicit deliverables and is afforded assistance by the WAP Forum™ staff.

1.4 Definitions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described by [RFC2119].

1.5 Glossary, Abbreviations

Activity Proposal	– A proposal for an activity, i.e. an item of work. Approved activities may be assigned to an existing Forum, or may result in the creation of a new Forum.
Activity	– A generic term for an item of work, however informally organised, that occurs within the WAP Forum™.
Architecture Consistency Working Group	– A Board of Directors chartered group responsible for the overall system architecture for WAP Forum™ Specifications.
Board of Directors	– The governing body of the WAP Forum™.
BOD	– See “Board of Directors”
CCR	– See “Class Conformance Requirements”
Change Request	– An unofficial proposed change to a Specification.
Class Conformance Requirements	– Define the list of features that are mandatory and optional for support by an implementation for conformance as a certain class of device in a WAP conformance release.
CR	– See “Change Request”
DID	– See “Document Identifier”
Document Identifier	– The Document Identifier is a unique identifier that remains with the document through all stages of development.
Document Secretary	– The Document Secretary is responsible for the management or DIDs, and release of documents to e-Voting.
Draft Specification	– A technical document under consideration for inclusion in the WAP Forum™ Specification Suite, and under active development by a WAP Forum™ Specification Working Group

EWG	– See “Expert Working Group”
Expert Working Group	– A group chartered to accomplish a specific task on immature technology, industry or market issued, or provide expert advise.
FAQ	– Frequently Asked Questions – a document that answers frequently asked questions on a particular topic.
IOT	– Interoperability Testing
Member Company	– A full member of the WAP Forum™.
Proposal (Base Contribution)	– An initial contribution or proposal for a technical document, or an amendment to an existing specification
Proposed Specification	– A technical document under consideration for inclusion in the WAP Forum™ Specification Suite and under active review and validation by the WAP Forum™ membership.
Prototype Specification	– A technical document under consideration for inclusion in the WAP Forum™ Specification Suite, which has reached a point where the WAP Forum™ Specification Working Group feels it is theoretically complete, but requires public review and/or prototype implementation to validate the contents of the specification
SCD	– See “Specification Change Document”
SCR	– See “Static Conformance Requirements”
SIN	– See “Specification Information Note”
Specification Change Document	– A draft of proposed change to a Specification.
Specification Committee	– A Board of Directors chartered committee that is responsible for the overall administration of the Specification Development process.
Specification Information Note	– An Approved change against a previously published WAP Specification. SINs are used to fix bugs or otherwise revise an existing Specification in the Approved status.
Specification Working Group	– A group chartered to create one or more technical specifications.
Specification	– A specification document, containing technical or procedural information. Specifications have a status, such as draft or proposed, indicating their level of maturity and acceptance by the WAP membership as a valid document
Static Conformance Requirements	– Define the list of features that are mandatory and optional for support by an implementation for conformance to a given specification.
SWG	– See “Specification Working Group”
Test Assertions	– For a given section of a specification, declarations are made regarding mandatory and optional requirements, and their testability. These declarations are then used in conformance testing.
Test Suite Development	– After a Specification has been voted to Proposed, development on test suites will begin.
WAP Conformance Release	– A rolled up set of WAP specifications that implementations can demonstrate conformance to. Different classes of devices are defined within a conformance release for implementations to claim conformance to. After the Specification has been approved, and the test suite completed, the features enabled by the Specification will be included in the WAP conformance definition (CCR), and will result in a new WAP version number (e.g., WAP X.x).
WG	– See “Working Group”
Working Group	– A forum or group officially chartered by the WAP Board of Directors. A working group has a chair, explicit deliverables and is afforded assistance by the WAP Forum™ staff.

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2 Document Status

This document is available online in the following formats:

- PDF format at http://www.wapforum.org/.

2.1 Document History

Document ID	Board Approval Date
WAPproc_2-Apr-2000	2000.04.02
WAP-181-TAWP	2000.12.13

2.2 Changes in this version

This version of the document is a major revision. See the diff-marked version of the document for changes.

2.3 Copyright Notice

2.4 Errata

Known problems associated with this document are published at http://www.wapforum.org/.

2.5 Comments

Comments regarding this document can be submitted to the WAP Forum™ at wap-spec@mail.wapforum.org.

2.6 Acknowledgements

This document and the process it contains was inspired by many other successful organisations and process documents. Sources of inspiration include processes and organisational characteristics of the following exemplary organisations (in no particular order):

- The World Wide Web Consortium (W3C)
- The Internet Engineering Task Force (IETF)
- The European Telecommunication Standardisation Institute (ETSI)
- The Institute of Electrical and Electronics Engineers (IEEE)

2.7 Document Approval Process

The Board of Directors is responsible for approving any amendments to this document. The Specification Committee SHALL provide proposed amendments to this document to the General Membership and the Board of Directors for a minimum period of thirty (30) days, after which the comment period will be closed.

At the completion of the comment period, the Board of Directors either approves this document, or returns comments back to the Specification Committee for resolution.

The Specification Committee SHALL provide the Board of Directors with a report detailing the resolution of any comments that were received with the ballots. When completed, the Specification Committee SHALL post this document on the Specification Committee's web page, and notify the membership on the wap-all mailing list.

3 Contributions

Any party may contribute to the WAP Forum™ work and processes, even if that party is not a member. Contributions take the form of *input documents*. Input documents are typically used to communicate ideas, technical critique, requirements and other information to WAP Forum™ working groups. Contributions may be submitted to the WAP Forum™ by mailing the contribution to INPUT-PAPERS@mail.wapforum.org.

Input documents SHOULD address the following issues:

2. Contribution topic, for example, a new area of work, new requirements, changes to an existing specification, etc.
3. Executive Summary of the contribution.
4. Contribution category:
   - Addition of a new feature
   - Description of new requirements
   - Proposed functional modification of an existing specification
   - Proposed editorial modification of an existing specification
   - Bug report
   - Other
5. Body of the contribution
6. Reasons for the contribution and a statement explaining the importance or urgency of this input
7. Any known intellectual property or legal issues surrounding this contribution

The WAP Forum™ strives for a flexible approach to accepting input papers from members and non-members.

If the input paper is submitted two weeks before a meeting it SHALL be on the agenda of the appropriate group. If the paper is submitted later, it SHALL be added to the agenda as time permits. The meeting schedule can be found at http://www.wapforum.org/new/sched.htm.

All input papers MUST be submitted in a format that clearly identifies the author of the document, including company affiliation. To reduce confusion, no input paper may use the WAP specification format. It is RECOMMENDED that all input papers be submitted in text, HTML or Adobe PDF format.

Input document copyright ownership SHALL remain with the owner of the copyright prior to submission, and it is RECOMMENDED that all documents be clearly marked with a copyright. All input documents submitted by members will be considered WAP Confidential unless explicitly marked as public information. All input documents submitted by non-members will be considered public information. WAP Working Groups MUST treat all input documents as if they contain proprietary information, i.e., contain encumbered IPR.

For more information on membership rules relating to intellectual property, see the WAP Forum™ membership agreement at http://www.wapforum.org/.

4 Activities

WAP Forum™ activities are any authorised and endorsed work, event or process that is carried out under the auspices of the WAP Forum™. All activities SHALL be approved by the WAP Forum™ Board of Directors. Example activities include:

- Adding new network bearer support to WDP
- Defining a new content format, or changing a currently defined format
- Defining new APIs, such as new WMLScript libraries
- Creating a new network protocol or extending a current WAP protocol
- Holding a workshop

An activity can be carried out in a wide variety of forums, including informally organised groups, mailing lists for the discussion of shared interests, Expert Working Groups and Specification Working Groups (to name a few possibilities).

4.1 Activity Initiation Process

The initiation of a new activity includes the creation of an *activity proposal* that details the proposed charter, requirements and motivation for the activity. The new activity SHALL be authorised if the proposal is accepted by the Board of Directors, based on a recommendation from the Specification Committee. If the Specification Committee believes that the activity proposal has repercussions on the WAP architecture, the Architecture Group SHALL be consulted during the decision making process.

An accepted activity results in the implementation of the activity proposal. For example, the implementation MAY include:

- Amendments to the charter of an existing forum, e.g. the extension of a working group's deliverables
- Creation of a new forum, e.g. an email list for the discussion of a particular topic
- A workshop or one-time event

Activity proposals may be submitted to the Specification Committee at any time, however only those received four (4) weeks prior to the next Board sponsored meeting SHALL be evaluated for that upcoming meeting. The Specification Committee SHALL acknowledge the request, perform an evaluation of the request, and notify the requestor of its recommendation to recommend approval to the Board of Directors, or provide comments for resolution. If the Activity proposal recommends the formulation of a new Working Group, a Proposed Scope and Charter MUST accompany the Activity proposal. If the Activity proposal recommends the change in scope of a Working Group, then an amended Scope and Charter MUST accompany the Activity proposal.

The Board may initiate an activity at its discretion. In general however, activity proposals are reviewed and evaluated by the Specification Committee and submitted to the Board for approval according to the following process:

1. During the first two-weeks of this period the Specification Committee SHALL provide an initial review of the activity proposal to ensure the proposal is well formatted and inline with the WAP Forum™ direction.
2. If the Specification Committee initially accepts the activity proposal it SHALL be posted on a generally accessible web site (http://www1.wapforum.org/member/speccomm/index.htm) for a period of one month and a notification SHALL be sent to the wap-all mailing list. This period allows the general membership to review, comment, and express interest. If the activity proposal recommends the formation of a working group then, nominations for the position of chairman SHALL be accepted during this period.
3. Members interested in chairing the group MUST submit a resume that details their qualifications for the position. Resumes are to be submitted to the Specification Committee for review (see Section 5.3). Two weeks prior to the next Board sponsored meeting the review and comment period SHALL be closed. At this time the chair nomination period SHALL also be closed.
4. During this time the Specification Committee SHALL re-review the activity proposal, general membership comments, and nominations for the position of chairman.
   - If, based on interest, comments from the membership at large, and general recommendation of the activity proposal, the Specification Committee agrees that the activity should be formed, the proposal SHALL be forwarded to the Board for approval. If the activity requires a chairman, the Specification Committee

SHALL interview qualified candidates for the chairman position as well. These candidates will be selected from resumes of the interested members received during the open review period and initial activity proposal submission.

5. The activity proposal, along with the list of recommendations for chairman SHALL be forwarded to the Board for final approval.

The following diagram defines the document process of evaluating draft activity proposals by the Board of Directors:

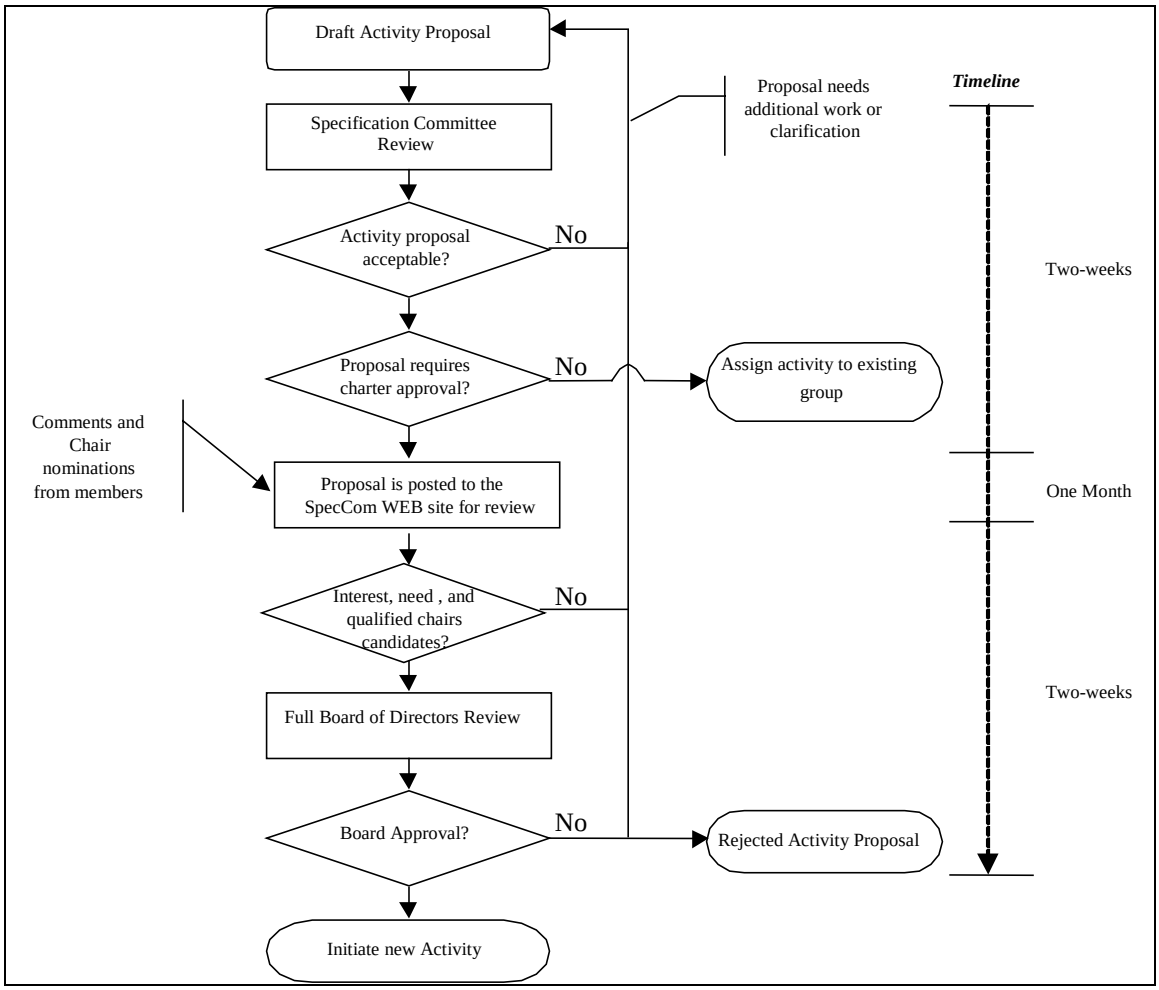

Figure 2: Activity Initiation Process

The Specification Committee has the responsibility of reviewing all activity proposals for clarity, completeness and consistency. If an activity proposal is not sufficiently clear and complete, or the activity proposal is not consistent with the WAP architecture or charters of the existing WAP Forum™ groups, the Specification Committee SHALL return the proposal with change requests and directions to the submitters. If the charter of a pre-existing working group covers the activity proposal, the Specification Committee SHALL assign the activity to that working group.

The Specification Committee MUST provide a means for the re-submission of proposals. If no such means can be provided to the submitter(s), the Specification Committee MUST forward the proposal to the WAP Forum™ Board of Directors and may optionally attach a recommendation for or against approval. If the Board of Directors rejects an activity proposal, it SHALL NOT be considered further by the WAP Forum™.

Once an activity has been accepted, the activity proposal information MUST be published on the WAP Forum™ public Web site as an activity statement. If the activity has been assigned to an existing working group, work MAY begin at the next meeting of the working group. If a new working group is chartered to carry out an activity, the first formal meeting of

that group may occur, at the earliest, four weeks after the Board of Directors approves the activity proposal. The proposed meeting date MUST be indicated in the activity proposal.[1] Ad Hoc organisational meetings of the new working group may occur during the four (4) week period before the first formal meeting.

In cases of dispute or disagreement over the Specification Committee recommendation, members may raise an objection directly to the Board of Directors. In cases of unresolved disagreement, the final decision SHALL BE the responsibility of the Board of Directors.

4.2 Activity Proposals Format

The issues discussed in the activity proposal depend on the nature of the activity. The activity proposal SHOULD address the following questions as appropriate to the proposal:

1. What market requirements are addressed by the proposed activity?
   - Who or what group wants this (providers, users, etc.)? What community will benefit from this activity?
   - Who or what currently exists in the market?
   - Is the market mature/growing/developing a niche?
   - What competing technologies exist? What competing organisations exist?
2. What WAP Forum™ and member company resources will be consumed (technical and administrative)?
3. What is the scope of the work?
4. What are the initial timetables for the activity? Is there a window of opportunity that cannot be missed?
5. What intellectual property (for example, an implementation) MUST be available for licensing and is this intellectual property available for a reasonable fee and in a non-discriminatory manner?
6. How might a potential recommendation interact and overlap with pre-existing standards and standards bodies?
7. Recommendations? What organisations are likely to be affected by potential overlap?
8. Is this activity likely to fall within the dominion of an existing group? Should new groups be created? How should they be co-ordinated?
9. A recommendation/nominee for the chairman of the new group, also a resume detailing the qualifications of the nominee for the position MUST be attached.

The activity proposal MUST include the deliverables foreseen for the proposed activity. If this activity proposal involves the creation or modification of a working group charter, a provisional charter may be attached to the activity proposal.

A template can be found on the WAP Forum™ web site at http://www1.wapforum.org/member/speccomm/DocSec/documents.html.

4.3 Assignment of an Activity to an Existing Working Group

The submitters of an activity proposal may recommend that the activity be assigned to an existing working group. The Board of Directors will judge whether the Group is appropriate for pursuing the work item in question. The Board of Directors may delegate this responsibility to a sub-committee of the Board, typically the Specification Committee. The Board of Directors or its sub-committee MUST approve the activity proposal before an existing group may pursue the new work item. If it is decided that an existing group will pursue a new work item outside the scope of its existing charter, the group's charter MUST be amended accordingly.

[1] The intention of this statement is to insure fairness in participation.

5 Working Group Processes

5.1 Working Groups

When the WAP Forum™ decides to pursue technical work in an activity area, it forms a Working Group to carry out this task. The Board of Directors may assign new activities to existing working groups or they may charter a new group to carry out the activity. The WAP Forum™ contains three types of technical working groups: Expert Working Groups, Specification Working Groups and Special Interest Groups. In all cases, the Board of Directors charters a group after the successful conclusion of the activity creation process

Expert and Specification Working Groups have a chair that is appointed by the Board of Directors. The chair is responsible for co-ordinating work within that group, and represents the group to the Board of Directors. All working groups have a well-defined charter, outlining their responsibilities, deliverables and domain of work. A working group charter template can be found on the WAP Forum™ web site at
http://www1.wapforum.org/member/speccomm/DocSec/documents.html

5.1.1 Expert Working Groups (EWG)

Expert Working Groups may be chartered to accomplish one of several goals:

- Explore areas of technology not mature enough for a Specification Working Group
- Address industry or market issues and report to Specification Working Groups
- Provide expert advice, perspective, functional requirements, and information to Specification Working Groups

Expert Working Groups SHALL NOT develop specifications.

The WAP Forum™ Board of Directors may charter an Expert Working Group after the activity creation process is completed. An Expert Working Group has the following characteristics:

- Responsible for a particular *domain of expertise*. Examples include groups addressing specific industry segments, market requirements, telecommunication standards, energy management and other cross-functional areas.
- Communicates domain and market-specific requirements to Specification Working Groups. Work will include survey and input papers, comments and specification review for consumption by the Specification Working Groups.
- Will be disbanded due to lack of participation or activity, charter expiration or the completion of chartered goals.
- Holds regularly scheduled meetings, with active work toward the goals and deliverables defined in the charter.
- Supported by the WAP Forum™ staff, e.g. mailing list management, meeting co-ordination, etc.

5.1.2 Specification Working Groups (SWG)

Specification Working Groups are chartered to create one or more technical specifications. Specification Working Groups will normally be formed around a functional area, e.g. protocol development. Specification Working Groups are chartered to deliver a specific set of technical specifications as defined in the group's charter.

The WAP Forum™ Board of Directors may charter a Specification Working Group after the activity creation process is completed. A Specification Working Group has the following characteristics:

- Responsible for drafting technical documents in a specific technical domain, e.g. the development of new network bearer interfaces.
- Responsible for promotion of all Working Group’s and Sub-Working Group’s output.
- Will be disbanded due to lack of participation or activity, charter expiration or the completion of chartered goals.
- Regularly scheduled meetings, with active work according to the schedule and toward the goals and deliverables defined in the charter.
- Supported by the WAP Forum™ staff, e.g. mailing list management, meeting co-ordination, etc.

5.1.2.1 Working Group Sub-Committees

Working Groups may create a variety of sub-committees to further their charter. In all cases, these sub-committees MUST observe the same charter, rules of conduct and due process as a Working Group (e.g., minutes MUST be taken, meetings MUST be announced to the membership, etc.). A sub-committee may be formally chartered by its WG to perform a specific task, as long as the charter is within the bounds of the Working Group's approved charter (see Section 5.2). A chartered sub-committee is known as a Drafting Committee.

In no case may a Working Group sub-committee perform a task or make a decision that requires the full Working Group (e.g., moving a Specification to Proposed status).

The structure and organisation of Working Group sub-committees is at the discretion of the Working Group chair.

5.1.3 Special Interest Group (SIG)

A SIG is an informally structured group chartered to discuss and debate technical issues in a particular domain. The WAP Forum™ Board of Directors may charter a Special Interest Group after the activity creation process is completed. A Special Interest Group has the following characteristics:

- Informally structured
- Charter specifies area of interest, but no specific deliverables are required to form a SIG
- Holds regularly scheduled meetings, with active discussion of the interest area
- Supported by the WAP Forum™ staff, e.g. mailing list management, meeting co-ordination, etc.

5.2 Group Charters

Charters are used by the WAP Forum™ as the primary method for the allocation of work that is authorised by the Board of Directors. Charters contain the responsibilities, deliverables and domain of work that the group is intending to perform. The following sections contain specific information about the Charter process within the WAP Forum™.

5.2.1 Chair Responsibilities

The Chair is responsible for ensuring that the working group has a well-defined charter and meets the intended purpose of the activity proposal as approved by the Board of Directors. A charter template can be found at http://www1.wapforum.org/member/speccomm/DocSec/documents.html and should be used for the generation of the charter.

5.2.2 Charter Submission and Approval Process

After a group has generated a charter it MUST be submitted to the Specification Committee (at wap-spec@mail.wapforum.org) for review and approval. The Specification Committee will review the charter and ensure that it meets the intended purpose of the approved activity proposal. After the Specification Committee approves the Charter it is then forwarded to the Board of Directors for final approval. Only after the Board of Directors approves the Charter may the working group being operating under the terms of the submitted charter. The Specification Committee will inform the group of the Board of Directors decision.

If a group is a Sub-Committee of a Working Group the Charter MUST first be reviewed and approved by the “parent” group before submission to the Specification Committee.

5.2.3 Public Availability of Group Charters

The WAP Forum™ Board of Directors has determined that all charters MUST be available for public viewing. This approach will enable better co-ordination with other organisations and give a better view to the general public on what the WAP Forum™ is currently working toward. Charters should be given the proper amount of effort knowing that they will be available for public viewing. Once a Charter has been approved the WAP Forum™ staff may modify it to ensure that

all charters have a consistent format. The WAP Forum™ staff during this process will make no content modifications to the Charter.

5.2.4 Amending Charters

Proposals for the modification of a Group's charter will follow the same submission, review and approval process as new Activity Proposals (see section 4.1). The proposal for a charter modification MUST include an activity proposal outlining the motivation for the change, and a draft charter documenting the proposed amendments. The Group may not begin operation under the terms of the draft charter without approval from the Specification Committee.

A group charter may be amended such that details (e.g. deliverables or goals) are elaborated or adjusted to meet the goals of a new activity within the spirit of the original working group charter. The Board of Directors MUST approve any proposal for charter amendments, and MUST consider whether the proposed amendment reflects the spirit of the working group's original purpose.

5.2.5 Yearly Review of Charters

Once the Board of Directors has approved a Charter it is valid for one year. Yearly updates are required of all Charters to ensure that they properly reflect the activities of the group. The group is responsible for ensuring that the Charters are updated and submitted prior to the expiration of the current charter. The updated Charter MUST then be submitted to the specification committee and follow the processes defined in section 5.2.2 Charter Submission and Approval Process.

5.3 Working Group Chair Selection

The Board may appoint any WAP Forum™ member to the position of chairman at its discretion. In general however, the Board SHALL appoint a chairman based on the list of nominees provided by the Specification.

To ensure effective leadership and direction, the chairman of a working group SHOULD possess the appropriate technical qualifications. Specifically, the chair SHOULD have the appropriate qualifications in the area to be addressed by the working group.

To assist in the selection of qualified candidates, nominations for chairman will be open to the general membership for a period of one month. During this period it is expected that interested candidates will submit their resumes to the Specification Committee for review.

After the open nomination period has expired, the Specification Committee SHALL evaluate the candidates and forward its' to the Board (along with the activity proposal) for approval. If there are no qualified candidates the Board SHALL appoint a chair at it discretion, however initial consideration will be given to the recommendation included in the activity proposal. The Specification Committee has prepared a Working Group Chair Nomination Process FAQ (http://www1.wapforum.org/member/FAQ/ChairNomProcess.html) to assist with the nomination process

Working Group chairs serve for a maximum of a two-year term, but may be re-elected for any number of terms. It is the responsibility of the Working Group Chair, in co-ordination with the Specification Committee's Chair Nomination Secretary, to manage the election term. The Specification Committee Chair Nomination Secretary will notify the Working Group Chair of its' intent to either re-confirm the existing Chair, or to open nominations for a new Chair. The Specification Committee has prepared a Working Group Chair Selection Criteria FAQ (http://www1.wapforum.org/member/FAQ/ChairSelectionCriteria.html), to assist with the nomination criteria.

The Board of Directors or Specification Committee may open nominations for chair selection at any time, including but not limited to the resignation or inappropriate behaviour of an existing chair, significant re-chartering of the WG, and other relevant events.

5.4 Working Group Termination

The Board of Directors may terminate any working group if:

- Groups pursuing the activity fail to meet the deliverables established in their charters.

- This may be the result of insufficient interest or lack of need to continue the investigation in the area outlined in the charter
- There are insufficient resources to maintain the activity, according to priorities established by the Board of Directors.
- The Working Group has completed all tasks related to the work outlined in its' charter, and has formally requested termination.
- The Charter has expired.

5.5 Meeting Procedures

5.5.1 Meeting Announcements

To ensure that all WAP Forum™ members have access to Working Group meetings, all meetings MUST be scheduled and pre-announced. All meeting announcements MUST include an agenda. Meeting logistics MUST be published as soon, as is possible.

The notification of an upcoming meeting and call for agenda items MUST occur on a WAP Forum™ mailing list, on the WAP web site, and if possible in an earlier face-to-face meeting. The notification MUST be sent to the mailing list associated with the Working Group that is conducting meeting. Notifications MUST be sent with sufficient notice to allow all interested Working Group members sufficient time to organise their attendance:

- Teleconference – a minimum of one week notice.
- Face-to-face meeting – a minimum of one month notice.

In the event that the venue for a scheduled meeting must be changed, the Working Group MUST notify the participants via the Group's mailing list and on the WAP web site. If any of the regular participants objects to the new location, the meeting SHALL be rescheduled.

5.5.2 Meeting Minutes

Detailed and accurate minutes of all working group meetings and events SHALL be published in a timely manner. Meeting minutes SHALL be made available within two (2) weeks on the Working Groups' mailing list and in the members-only section of the WAP Forum™ web site within four (4) weeks.

5.5.3 IPR Call

The Working Group chair MUST perform a call for IPR (Intellectual Property Rights) declarations prior to the beginning of any WAP Forum™ meeting as defined in the *WAP Forum™ IPR Procedural Guidelines* (http://www1.wapforum.org/member/134510.doc). The Chair of the Working Group or Committee SHALL ask the following:

"Is there knowledge of patents, the use of which may be essential to the specification(s) being considered?"

Any responses SHALL be noted in the Meeting Minutes, and the declaring company SHALL be reminded to register their declaration with the WAP Forum™ executive office.

5.5.4 Working Group Voting Rules

Working groups are expected to strive for consensus and SHOULD base their decisions on solid technical reasoning. When there is no reasonable means of achieving consensus, the chairman of a working group may call an administrative vote to resolve an issue. Additionally, administrative voting MAY be used during the specification promotion process, up to and including promotion to the Prototype specification stage. Administrative voting or Material voting (the working group chair may decide which to use) MUST be used for the promotion to proposed status.

Reference section 7.3 for details on the voting process.

5.6 Working Group Status Reports

It is the responsibility of each working group chair to publish a detailed status report of all working group activities every three months (January, April, July and October). This status report MUST be sent to the Specification Committee and the Architecture Group. This status report SHALL be made available to the WAP Forum™ membership on the member's web site.

The status report MUST include information about working group activities from the previous three months:

- Progress against current milestones and schedule
- Meetings, workshops and activities held
- Documents published (include all documents, including drafts, output papers, etc.)
- Input documents or work proposals received from outside parties
- New technical initiatives launched
- Major open issues or problems

6 WAP Document Process

The WAP Release Process comprises Specification creation, test suite development and conformance processes. There are three major stages to the process:

- **Specification Development** – technical specifications are developed by WAP Specification Working Groups. The process for this is detailed in section 7.
- **Test Suite Development** – after a Specification has been voted to Proposed, development on test suites will begin.
- **Conformance** – after the Specification has been approved, the features enabled by the Specification will be included in the WAP conformance definition (CCR), and will result in a new WAP version number (e.g., WAP X.x).

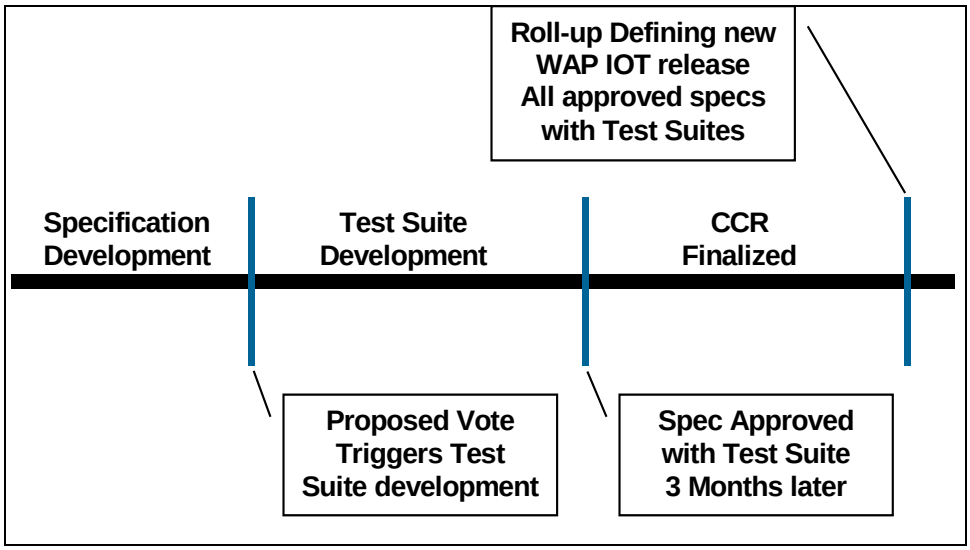

Figure 3: WAP Release Process

7 WAP Document Lifecycle

The following section describes the WAP procedures for document management. The primary goal of WAP is the consensus driven creation of technical specifications with high quality and known interoperability. A well-defined document process is essential to this goal.

There are three classes of WAP documents:

- **Specification-track documents** - documents that are part of the official WAP Specification lifecycle, and which specify a technical or procedural area of importance to WAP. Specification-track documents include Specifications, Specification Information Notes (SIN), Specification Change Documents (SCD) and Change Requests (CR) (see section 7.2.1).
- **Input Documents** - contributions and informal documents submitted to WAP to communicate ideas, opinions or commentary. Input documents are not part of the document lifecycle, and will not become specifications. For more information on input documents, see section 3.
- **Output Documents** – documents that are produced as part of the WAP process, but which are not on the specification track (see section 7.3) May include white papers, process documents, etc. This *Technical Activities Work Process* document is an example of an output document.

These three classes of documents are treated separately in this document.

7.1 General Document Procedures

The Specification Committee manages all document processes and specification development. The Specification Committee will appoint a *Document Secretary* to manage the details of the document lifecycle.

7.1.1 Canonical Document Identifiers (DID)

All WAP Specifications, SCDsand SINs MUST have a unique document identifier (DID). The document identifier will remain with the document for its entire lifespan, through all documents stages (e.g., all revisions of a document, from draft through approved, have the same DID). Other WAP documents may optionally be assigned a DID, and this is encouraged if the document is expected to be referenced from other documents.

Documents other than SCDs and SINs are referenced using identifiers of the form (items in quotes are literals):

"WAP-" *DIDnum* "-" *RegName*

DIDnum is a unique integer number assigned by the Document Secretary and *RegName* is a short registered name that is unique to the document family (e.g. WML, WSP, WDP, etc.).

SCDs and SINs are referenced using the form:

"WAP-" *SpecDIDnum* "_" *SinDIDNum* "-" *RegName*

SpecDIDnum is the document identifier of the Specification the SCD changes, and *SinDIDNum* is the SCD or SINs own document identifier. For example:

WAP-32-WML	Specification DID
WAP-32_219-WML	SIN DID against the above specification

Document identifiers are assigned by the Document Secretary, and document editors are encouraged to request a DID early in the drafting of a new document, and MUST have a DID assigned before a document is promoted to *Proposed*. Instructions for requesting a DID can be found on the Document Secretary's web site, at http://www1.wapforum.org/member/speccomm/DocSec/documents.html.

No Specification-track (see section 7.1.3) document may leave the Draft State without an assigned DID.

A new document identifier is assigned in the following circumstances:

- An entirely new Specification is being drafted, or a new version of an existing Approved Specification is created.

Revisions to a Draft Specification and Specification promotions to a new state MUST NOT change the document identifier.

7.1.2 Document File Name

All WAP documents MUST use a single naming convention, to facilitate easier document lifecycle management. The document file name has the form (items in quotes are literals):

DID "-" *DocVersion* "-" *DocState* "." *ext*

Where:

- *DID* is the Document Identifier (see section 7.1.1); and
- *DocVersion* is an ISO8601 formatted data specifying the document version, e.g., 20000414 indicates 14-April-2000, and
- *DocState* is a single letter indicator of the document's approval state, where:
  - `a` indicates Approved,
  - `p` indicates Proposed,
  - `t` indicates Prototype,
  - `o` indicates Obsolete, and
  - `d` indicates Draft.
- *ext* is the document type extension, e.g., `doc` for Microsoft Word, `pdf` for Adobe Acrobat, etc.

For example, `WAP-391-WML-20000329-p.doc` is a legal document file name, indicating the 29-March-2000 version of the WML specification, document ID `WAP-391`, with Document State of Proposed. `WAP-320_999-WTP-20000916-a.pdf` is an Approved SIN with a DID of `WTP-320_999` against the Specification with DID `WTP-320`.

7.1.3 Document Confidentiality

The WAP Forum™ has rigorous confidentiality rules to protect member intellectual property. All WAP documents, working-group drafts, Specifications, SCDs and SINs are considered member confidential, and MUST NOT be published without the consent of the WAP Forum™ Board of Directors. Informal Notes MUST NOT be published without approval of the Specifications Committee.

Each member of the WAP Forum has agreed to protect confidential information. All technical working documents, including initial and continuing drafts of all proposals leading to Specifications; input papers; change requests; activity proposals written for internal WAP Forum review; and non-published white papers, are considered confidential and may not be disclosed in any manner to any non-member of the WAP Forum, unless there has been prior explicit Board approval or unless such documents have been published on the public area of the WAP Forum Web site.

The following text MUST appear on all technical working documents, including initial and continuing drafts of all proposals leading to Specifications; input papers; change requests; activity proposals written for internal WAP Forum review; and non-published white papers:

> "This document is considered confidential and may not be disclosed in any manner to any non-member of the WAP Forum, unless there has been prior explicit Board approval."

7.1.4 Document Intellectual Property

All WAP Specifications, SCDs, SINs, and other documents are copyrighted by the WAP Forum™, and may only be used in a manner consistent with the WAP Forum™ member and licensing agreements. All documents MUST contain WAP Forum™ copyright and any other intellectual property statements defined by the Document Secretary.

7.1.5 Document Creation

All WAP documents are created in Microsoft Word97, or newer version, and published in Adobe Portable Document Format (PDF) (Version 4). Initial Approved documents MUST NOT contain change tracking information or Word

versioning. SINs against an Approved Document MUST contain change tracking, to indicate the deltas from the Initial Approved document. Documents in Draft, Prototype or Proposed state MUST be made available in a clean format (no change tracking information) as well as in a format displaying changes made to the most recent version on the working group's web page.

7.2 Specification-Track Document Procedures

7.2.1 Specification Document Types

There are four types of documents involved in the Specification-track:

- **Specification** – a specification document, containing technical or procedural information. Specifications have a status, such as draft or proposed, indicating their level of maturity and acceptance by the WAP membership as a valid document (see section 7.2.2.1 for more information on Specification states).
- **Change Request (CR)** – an unofficial proposed change to a Specification. CRs have no official status, and may be submitted by any person or organisation to the Specification Working Group responsible for a particular WAP Specification.
- **Specification Change Document (SCD)** – a draft of proposed change to a Specification. Only the Specification Working Group responsible for the particular Specification may produce SCDs against that Specification. An SCD is written against a specific version of a Specification. If an SCD is approved (see section 7.2.2.1), it will be incorporated into a Proposed Specification or become an Approved SIN.
- **Specification Implementation Note (SIN)** – an Approved change against a previously published WAP Specification. SINs are used to fix bugs or otherwise revise an existing Specification in the Approved status (see section 7.2.2.1 for more information on Specification states). A SIN applies to a specific version of a Specification.

7.2.2 Specification Evolution

7.2.2.1 Specification States

The document lifecycle consists of five stages. Every version of a WAP Forum™ Specification will pass through at least four of these stages before being included in the WAP Forum™ Specification Suite:

1. **Proposal (Base Contribution)** – an initial contribution or proposal for a technical document, or an amendment to an existing specification. Proposals have a finite lifetime, and SHALL automatically expire if they are not acted upon in six (6) months. Anyone can submit a proposal, and they are expected to typically emerge from the working group processes or from the input document process.
   Proposals are not part of the WAP Forum™ Specification Suite. A vendor MUST NOT claim compliance with a proposal. Proposals MUST NOT be referenced by other specifications.
2. **Draft Specification** – a technical document under consideration for inclusion in the WAP Forum™ Specification Suite, and under active development by a WAP Forum™ Specification Working Group. Draft specifications are immature technical specifications, and will be subject to change as further development and validation occurs. Draft Specifications have a finite lifetime, and will expire if they are not acted upon in six (6) months.
   Draft Specifications are not part of the WAP Forum™ Specification Suite. A vendor SHALL NOT claim compliance with a draft specification. Draft specifications may be cross-referenced by other documents as long as the reference clearly indicates the document status.
3. **Prototype Specification** – a technical document under consideration for inclusion in the WAP Forum™ Specification Suite, which has reached a point where the WAP Forum™ Specification Working Group feels it is theoretically complete, but requires public review and/or prototype implementation to validate the contents of the specification. Prototype specifications SHALL NOT be considered complete or stable. The Prototype specification stage is entered optionally, at the discretion of the originating Specification Working Group (or delegated sub-working group), and may be used as a method of gaining feedback, validation, implementation, and/or operational experience. Prototype Specifications have a finite lifetime, and SHALL expire if they are not acted upon within six (6) months. This document stage is particularly useful for the validation of extremely complex specifications.

Prototype specifications are not part of the WAP Forum™ Specification Suite. A vendor SHALL NOT claim compliance with a Prototype specification. Prototype specifications may be cross-referenced by other documents as long as the reference clearly indicates the document status.

4. **Proposed Specification** – a technical document under consideration for inclusion in the WAP Forum™ Specification Suite and under active review and validation by the WAP Forum™ membership. The originating Specification Working Group MUST consider the Proposed Specifications stable and complete. Implementation and/or operational experience are NOT REQUIRED to designate a Proposed Specification, but such experience will weigh heavily in such designation. Proposed Specifications have a finite lifetime, and will expire if they are not acted upon within six (6) months.
   Proposed Specifications are not part of the WAP Forum™ Specification Suite. A vendor SHALL NOT claim compliance with a proposed specification. Proposed Specifications may be cross-referenced by other documents as long as the reference clearly indicates the document status.
5. **Approved Specification** – a WAP Forum™-approved technical specification, which is part of the overall WAP Forum™ Specification Suite. Before adoption as part of the overall WAP Forum™ Specification Suite, implementation and/or operational experience MUST validate all specifications. A WAP Forum™ Specification is considered a mature and viable technical solution to a well-defined and pressing technical or operational problem.
6. **Obsolete Specification** – an unused, expired, abandoned, decommissioned, or obsolete documents. A Draft, Prototype or Proposed specification may be moved to the Obsolete State at the decision of its parent Working Group.

7.2.2.2 Specification Process Flow

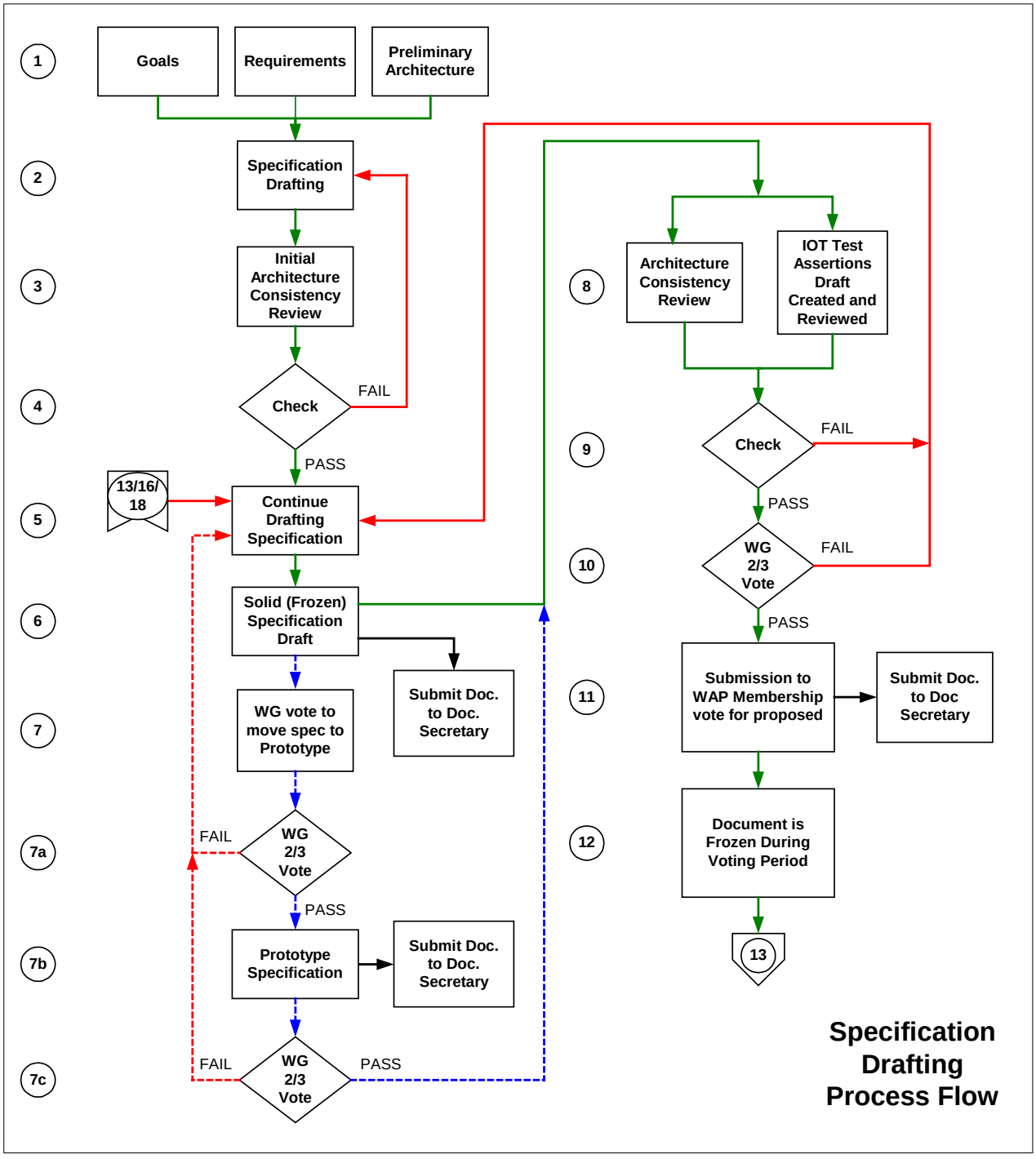

Figure 4: Specification Drafting Process Flow

1. The Goals, Requirements, and Preliminary Architecture documents are developed.
2. The Specification Working Group (SWG) (or a Drafting Committee, if so chartered) creates a draft document from the input.

3. If the draft is for a new specification or a *Class 0* or *Class 1* change to an existing specification, the SWG SHOULD submit the draft document to the Architecture Consistency Working Group for Preliminary Review. This is done in parallel with the draft development.
4. If the draft does not pass the Architecture Consistency Working Group's process the process starts again at Step 2.
5. Drafting of the Specification continues.
6. The SWG or DC reaches consensus that a draft is Solid (Frozen).
   - If necessary, a two week review period is started before the next step.
   - If this is a new specification, the SWG applies for DIDs.
   - The Document Secretary assigns the DID with an expiration date of six (6) months.
   - A copy of the document MUST be submitted to the Document Secretary for archival every time this step is exited.
   - If this document is a candidate for *Proposed*, the process continues at Step 8.
7. The SWG takes a vote to promote the document from *Draft* to *Prototype*.
   - The SWG SHALL clearly document the voting process in its' Minutes of Meetings and MUST also be posted on the group's mailing list and web site.

   a) A 2/3 YES vote is REQUIRED to promote the document.
      - Not passed -
        - The issues that prevented its' promotion are resolved by the SWG and the process starts again at Step 5.

   b) Passed -
      - A copy of the document MUST be submitted to the Document Secretary for archival.
      - The document is posted for comment on the web site.

   c) The SWG takes a vote to promote the document from *Prototype* to *Proposed*.
      - The SWG SHALL clearly document the voting process in its' Minutes of Meetings and MUST also be posted on the group's mailing list and web site.
      - A 2/3 YES vote is REQUIRED to promote the document.
        - Passed -
          - The process continues at Step 8.
        - Not passed -
          - The issues that prevented its' promotion are resolved by the SWG and the process starts again at Step 5.
8. The document is submitted to:
   a) The Architecture Consistency Working Group for review.
   b) To the WAP Interoperability Group (WIG) for creation of the IOT Test Assertions Draft.
9. The results of the Architecture Consistency and IOT Test Assertions Draft are reviewed by the SWG.
   - Issues requiring rework in the documents are returned to *Draft* status and issues are resolved and the process starts again at Step 5.
     - The SWG SHALL notify WIG to stop work on the IOT Test Assertions Draft.
   - When all issues are resolved, the SWG SHALL notify the Specification Committee of its' intention to promote the document to *Proposed*.
     - SWG forwards approval from Architecture Consistency.
     - SWG forwards approval from WIG that Test Assertions Draft is stable.
     - Completion of the review of both documents MUST be completed before going to the next step.
10. The SWG takes a vote to promote the document from *Draft* to *Proposed*.
    - The SWG SHALL clearly document the voting process in its' Minutes of Meetings and MUST also be posted on the group's mailing list and web site.
    - A 2/3 YES vote is REQUIRED to promote the document
      - If it did not passed, the issues that prevented its' promotion are resolved by the SWG and the process starts again at Step 5.
11. Document is submitted to WAP Forum™ Membership for vote to *Proposed*, via the eVoting System.
    - A copy of the document MUST be submitted to the Document Secretary for archival.
    - Voting period is two weeks.
12. The document is editorially frozen during the voting period.

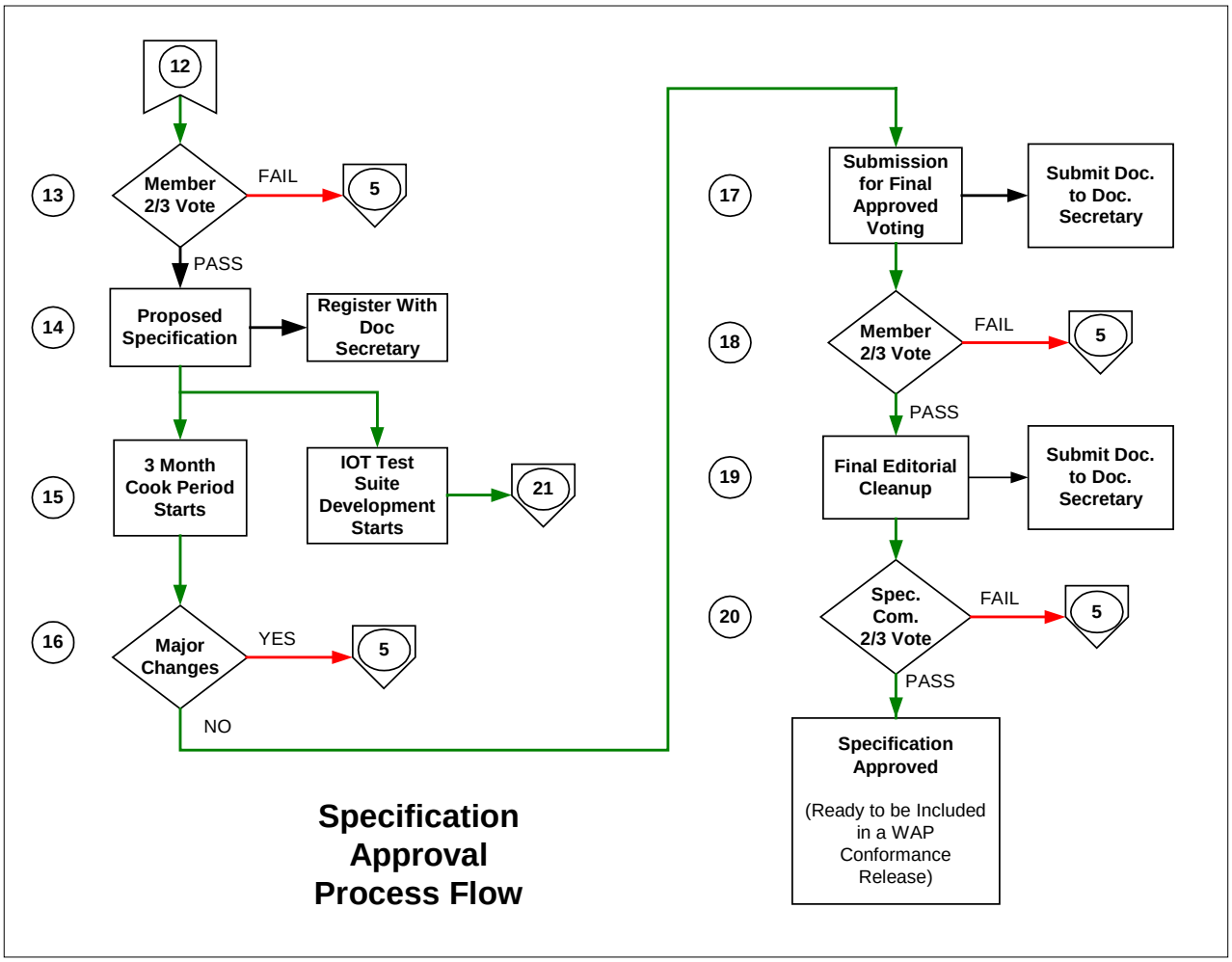

Figure 5: Specification Approval Process Flow

13. A 2/3 YES Material vote is REQUIRED to promote the document
    - Not passed -
      - The issues that prevented its' promotion are resolved by the SWG and re-enters process at Step 5.
    - The SWG SHALL clearly document the voting process in its' Minutes of Meetings and MUST also be posted on the group's mailing list.
    - All Normative references must be resolved (see Section 7.2.9).

14. a) The document is promoted to *Proposed* Status, and the document's *DocState* is updated.
    b) The document is submitted to the Document Secretary for Registration and archival.
    - The document is posted on the web site and is now a "public" document.

15. a) The *Proposed* document begins its' three month public review
    b) The IOT ß-Test suite development starts.
      - Conformance process continues at Step 21.

16. During the public review period, all comments MUST be reviewed and dealt with.
    - If major changes (*Class 1*) or discrepancies are noted (see Section 7.2.3.1):
      - Items are resolved.
      - Re-enter the process at Step 5.
    - *Class 2* and *Class 3* changes can be made to the document in the form of an SCD (see Section 7.2.3.1).

17. a) The *Proposed* document's three month review period ends (see Section 8.3)
    - Editorial cleanup of the document is completed.
      - Any *Class 2* or *Class 3* SCDs in the proposed state are incorporated into the specification.

- If any changes are made, the document's *DocVersion* MUST be updated.

b) The document MUST be submitted to the Document Secretary for archival.
- The Document Secretary issues a "Last call" to the wap-all mailing list.
- The document is submitted for a Material vote to *Approved*.

18. The result of the vote to *Approved* is reviewed.
- If the ballot is approved:
  - Minor editorials are incorporated into the document and submitted to the Document Secretary.
- If the ballot fails:
  - The document is returned to the SWG for resolution.
  - If major changes (*Class 1*) or discrepancies are noted (see Section 7.2.3.1):
    - Items are resolved.
    - Re-enter the process at Step 5.
  - *Class 2* and *Class 3* changes can be made to the document in the form of an SCD (see Section 7.2.3.1).
- The SWG SHALL clearly document the voting process in its' Minutes of Meetings and MUST also be posted on the group's mailing list.

19. The editorial comments in the Specification are resolved.
- The *Approved* Specification MUST be submitted to the Document Secretary for archival.

20. The Specification Committee approves the new specification for inclusion in the WAP Specification Suite by a two-thirds majority vote.
- The *Approved* Specification is ready to be included in the next Conformance Release.

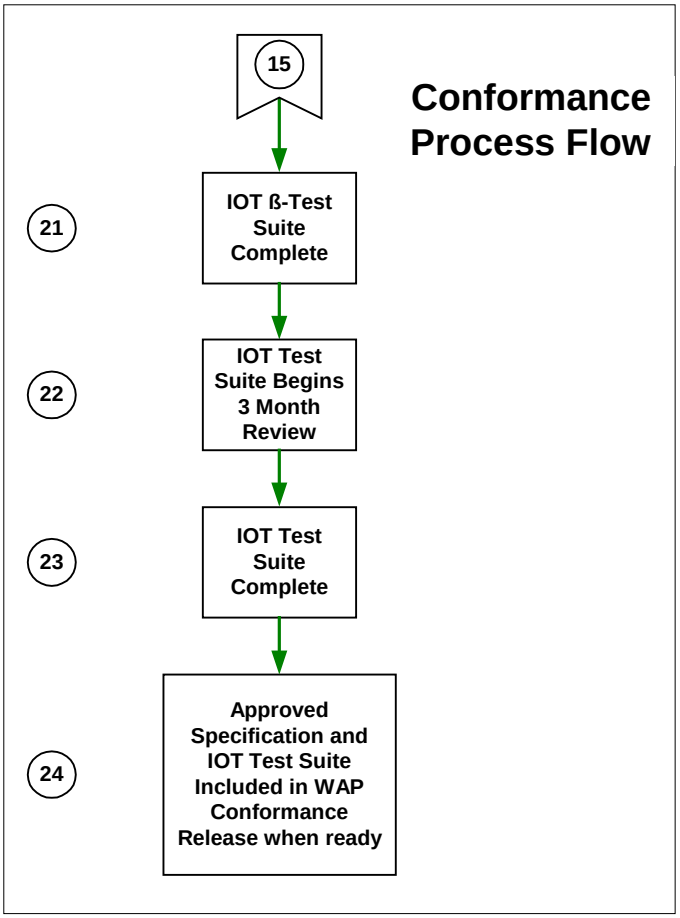

Figure 6: Conformance Process Flow

21. The IOT ß-Test Suite is completed.
22. The IOT Test Suite begins a three (3) month Validation Period.

23. The IOT Test Suite is completed.
    - WIG SHALL notify the Document Secretary that the IOT Test Suite is completed.
24. The IOT Test Suite, along with the *Approved* Specification are officially listed for inclusion in the next Conformance Release.

7.2.2.3 Specification Review

A particular specification moves through the document lifecycle in the following manner – (reference section 8 for details on the voting processes described in this section):

1. All working documents SHALL expire and be removed by the SWG if there is no active work on the document within six (6) months of the initiation of the project. When a document is removed, the SWG SHALL notify the Document Secretary.
2. A Draft Specification is an ongoing work-in-progress in a Specification Working Group. The Specification Editor will create multiple revisions of a Draft Specification, and it is expected that the document will undergo frequent and significant change. Each revision of a Draft Specification will be uniquely identified and made available for review by all members of the Specification Working Group. A Draft Specification may be promoted to either a Prototype Specification or Proposed Specification based on the completeness, stability, and/or complexity of the Draft Specification.
3. A Draft Specification may be promoted to a Prototype Specification when the originating WAP Specification Working Group (or delegated sub-working group) authoring the specification feels the document requires public review, feedback, validation, implementation, and/or operational experience, but does not feel the specification is stable and complete (e.g. ready for promotion to Proposed Specification). The originating WAP Specification Working Group (or delegated sub-group of the Specification Working Group) may promote a Draft Specification to Prototype Specification by a 2/3 majority vote.

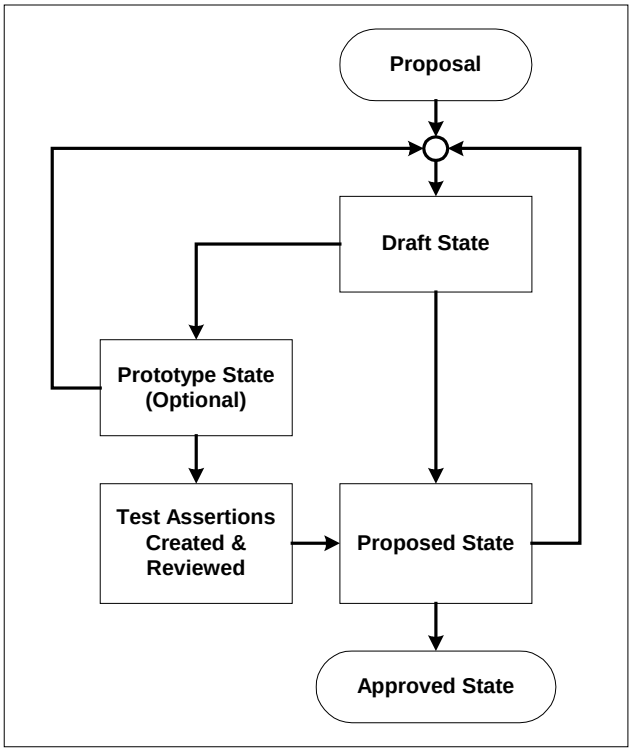

Figure 7: Document State Changes

4. A Draft Specification (or Prototype Specification) is promoted to a Proposed Specification when the Specification Working Group authoring the specification considers the document suitable for promotion and approves the promotion via a ballot requiring a two-thirds majority vote. If a Draft Specification (or Prototype

Specification) has not been revised or promoted to Proposed Specification status within six months of its latest revision, it will expire and be removed from further consideration. A Draft (or Prototype) specification MUST meet the following criteria before it can be submitted for a vote to Proposed status:

a) All dependencies to other specifications have been identified and resolved with the working groups responsible for the dependent specification,

b) The specification has undergone and passed a review by the WAP Forum™ Architecture Group to ensure consistency with the overall WAP Architecture,

c) The WAP Interoperability Working Group has completed the development of the IOT ß-Test Assertions

d) Document has been registered with the Document Secretary, i.e., a Document Identifier (DID) has been assigned.

5. A specification MUST remain as a Proposed Specification for a minimum of 3 months. This minimum period of time is intended to ensure adequate public review, without severely impacting the timeliness of the specification.
6. Proposed Specifications requiring extensive modifications and/or enhancements (see section 7.2.1) may be demoted to Draft or Proposal status by the Working Group responsible for the Specification or by the Specifications Committee (simple majority vote, reference section 7.3).
7. A Proposed Specification is promoted to an Approved Specification when:

a) The WAP Forum™ membership decides to nominate the specification for inclusion in the next WAP Specification Suite via a material vote (reference section 8.2), and

b) The WAP Specification Working Group has resolved comments received (no less than fourteen (14) days), and

c) The Specifications Committee issues a Last Call to inform WAP members of the impending action. The last call process MUST be fourteen (14) days in length (from time of notification) to ensure adequate time for comments, and

d) The WAP Specification Working Group owning the particular specification agrees, by consensus, that the document is complete and ready for inclusion in the WAP Specification Suite, and

e) The Specification Committee approves the new specification for inclusion in the WAP Specification Suite by a two-thirds majority vote.

8. All changes in document status and all major revisions of a document MUST be available to all WAP members, and announced on WAP member mailing lists.
9. Procedures for changes, additions or deletions to an Approved Specification are documented in Section 7.2.3.

The following table summarises the different Specification stages.

	Proposal	**Draft Specification**	**Prototype Specification**[2]	**Proposed Specification**	**Approved Specification**
Expiration Period	6 months	6 months	6 months	N/A	N/A
Promotion Process (to next stage)	Simple majority vote of the authoring working group and the Specifications Committee	Two-thirds majority approval via Material vote by Membership for promotion to *Proposed* Specification. Two-thirds majority vote by authoring working group	Two-thirds majority approval via Material vote by Membership for promotion to *Proposed* Specification. Two-thirds majority vote by authoring working group	Two-thirds majority vote by the authoring working group for promotion to *Approved*. Two-thirds majority approval via the Material vote for	N/A

[2] The Prototype Specification stage is OPTIONAL.

	Proposal	Draft Specification	Prototype Specification[2]	Proposed Specification	Approved Specification
		for promotion to *Proposed* (or *Prototype*) Specification. (See section 8)	for promotion to *Proposed* Specification. (See section 8)	promotion to Approved Specification. (See section 8)	
Minimum Period before promotion	N/A	N/A	N/A	3 months	N/A
Demotion Process	None - simply expires	None - simply expires	None - simply expires	Specification Committee or Working Group may demote to Draft, Prototype (based on the previous status of the document) or Proposal status (simple majority vote)	N/A

Table 1: Specification Stages

7.2.2.4 Specification Demotion

Proposed Specifications requiring extensive modifications and/or enhancements may be demoted to Draft or Proposal status by the Working Group responsible for the Specification or by the Specifications Committee (simple majority vote, reference section 7.2.2.1).

7.2.3 Specification Changes: CRs, SCDs and SINs

Technical documents are subject to change for a variety of reasons, including bug fixes, feature enhancements and functional modifications. The WAP Forum™ Process defines a change process for Specifications that are in the Proposed or Approved State. Specifications in the Draft or Prototype State are not subject to this process, and may be changed in a manner deemed reasonable by their authoring Specification Working Group.

Anyone may submit a Change Request (CR) to the Specification Working Group responsible for a particular WAP Specification by emailing to the address specified by the Working Group on its' web page. The Specification Working Group is responsible for the review and subsequent processing of the CR in a timely manner, and according to the processes outlined in this document.

CRs, SCDs and SINs will be published in a manner consistent with the publication of other WAP Specifications. For example, SINs will be published as marked up text of the Approved Specification.

7.2.3.1 Change Classification

To facilitate effective change management, the WAP Forum™ defines four levels of Specification changes:

- **Class 0: New Functionality**

A *Class 0* change adds new functionality to a specification. The SCD/SIN Process (see section 7.2.3) can not be used for *Class 0*. A new version of the document is to be drafted and a new DID needs to be assigned.

- **Class 1: Major Change or market effecting change**

  A *Class 1* change adds no new functionality to a specification, breaks backward compatibility, or is a major change to the specification as a result of a bug, etc.

- **Class 2: Bug Fixes**

  A *Class 2* change adds no new functionality, but does correct technical issues related to the current specification. This SHOULD NOT include significant changes to the form, fit, or functionality.

- **Class 3: Clerical Corrections**

  A *Class 3* change corrects spelling errors, typographical errors, and other minor clerical errors in the specifications.

Specification Working Groups will need to apply these change classifications to the document change procedures, to determine the particular process used to incorporate a change. If the Specification Working Group is unable to agree on the classification of a particular Specification change, the Specification Committee SHALL be consulted.

Change classification MUST be documented in the CR. A CR SHALL only contain changes corresponding to one class of change classification.

7.2.3.2 Change Procedures

A Specification modification or change starts with a Change Request, documenting a suggested or proposed change. The CR may be filed against a Specification in any state. This process applies specifically to CR filed against a Proposed or Approved Specification. Refer to Figure 8 for a diagram of this process. Note: this section does not apply to *Class 0*.

1. One or more CRs are submitted, or other input is provided to the WG, indicating that a change is required to a Specification.
2. The Specification Working Group holding responsibility for a Specification MUST review and classify the proposed change, per the classification scheme described in section 7.2.3.1. If the change is invalid or immaterial, it is discarded.
3. If the specification is in draft state, then the changes are incorporated into the document directly. If the Specification is in the Proposed State, the CR may be processed by either demoting the Specification back to Draft status (for additional technical work), or an SCD may be drafted against the Proposed Specification. If the Specification is in the Approved State, the Specification Working Group MUST start an SCD. In all cases, a *Class 1* change against a Proposed Specification MUST result in the demotion of the Specification to Draft or Proposal state, unless an exception is approved by the Specification Committee (2/3 majority vote) or the Board of Directors.
4. A draft SCD is revised until the working group is satisfied with the result.
5. The Specification Working Group MUST vote to move the SCD forward with a 2/3 majority vote. The SCD MUST be registered with the Document Secretary, and MUST have a DID. In addition, all *Class 1* SCDs MUST also have the approval of the Architecture Consistency Committee, Specification Committee approval (2/3 majority vote) or the Board of Directors approval.
6. *Class 2* or *Class 3* SCDs may move forward with the Specification Working Group approval, and do not need Specification Committee or Board of Directors approval.
7. The Draft SCD is submitted for vote to the Proposed State.
   - If the SCD is a *Class 1*, the Test Assertions also have to be reviewed for consistency.
8. SCDs are processed differently depending on the Specification they are written against.
9. SCD either becomes a Proposed SIN or is integrated into the Proposed Specification, based on the status of the Specification and voting period:
   - Proposed Specification, not in Last Call – if the Specification is in the Proposed State, and not currently in the Last Call voting period, the SCD is incorporated into the Proposed Specification directly.

10. Approved, or Proposed in Last Call vote – if the Specification is Approved or a Proposed specification in the Last Call voting period, the SCD becomes a Proposed SIN.
11. A membership vote is held to validate the changes. This will either occur as part of the standard specification voting for changes made to a Proposed Specification, or the SIN will be directly approved. The Proposed SCD is submitted for a member vote, using the WAP e-Voting system. The voting period is determined by the classification of the change:
    - *Class 1*: requires standard Specification approval period of three months (see section 7.2.2.2). This period may be reduced in extraordinary circumstances by a 2/3 majority decision of the Specification Committee, or with Board approval.
    - *Class 2* or *Class 3*: requires the standard minimum voting period of two weeks.
12. The process culminates in an Approved Specification or an Approved SIN.

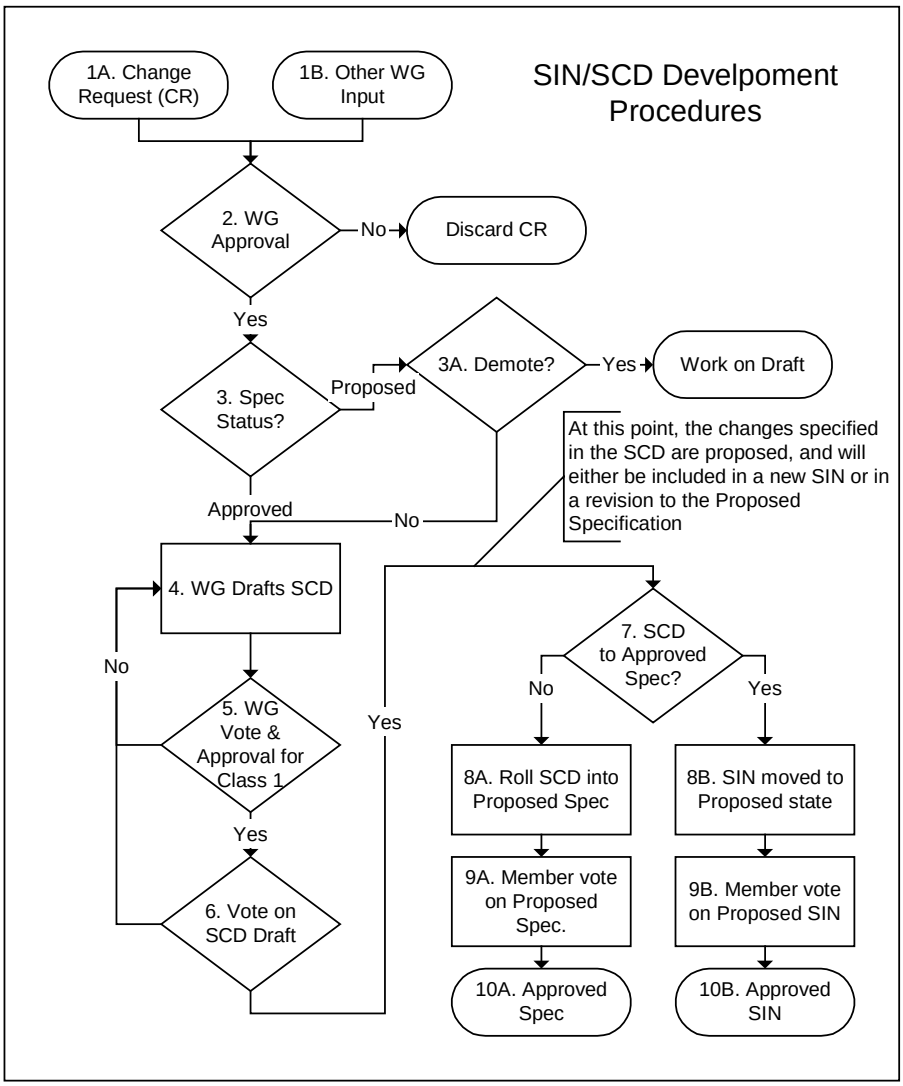

Figure 8: Specification Change Process

7.2.4 Specification-track Document History

Every document MUST contain a list of all Approved Specifications and SINs for the current document revision. This allows a reader to determine what SINs have been incorporated into the current document baseline.

Document: Wireless Markup Language (WML)
Document Identifier: WAP-43
Base Specification Approval Date: September, 1999
SINs Incorporated in this baseline document:

SIN Approval Date	SIN Document Identifier
May, 2000	WAP-43_209
August, 2000	WAP-43_210
September, 2000	WAP-43_378

Table 2: Specification-track Document History

It is the document editor's responsibility to track major revisions and to ensure that the history is accurate and current.

7.2.5 Specification-track Change History

Every document MUST contain a list of all SCDs and editorial changes for the current document revision. This allows a reader to determine what changes have been incorporated into the current document baseline.

An example of a Change History is:

Incorporated SCDs:

Change Request	Title	Comments
WAP-169_100-WTA-20000601-p	Changes necessary for whatever	Adds text to support whatever.

Editorial Changes:

Section	Change
11.1 Document Prologue	Changed “1.2” to “1.3” in example prologue.
All	Extraneous page breaks have been removed.

Table 3: Document Change History Example

A template can be found on the WAP Forum™ web site at
http://www1.wapforum.org/member/speccomm/DocSec/documents.html.

7.2.6 Specification-track Document Family Tracking

A document family is a collection of documents, each identified by a DID, that make up a single related group of technical documentation. For example, the current WML specification, past approved revisions of the WML specification, and all Approved SINs comprise a document family.

To facilitate the management of the WAP Forum™ specification suite, and to ensure that the WAP interoperability and conformance efforts have an accurate description of all technical specifications, the Specification Committee will create and maintain a document known as the WAP Specification Summary (WSS). The WSS will contain:

- Definition of Specification families, e.g., Wireless Markup Language, and all current and historical documents contained in this family. This will include both Approved Specifications and Approved SINs.
- A mapping between WAP Conformance release numbers, e.g., June2000, and specific documents. This provides a summary of each release.

It is the responsibility of Specification editors to notify the Specification Committee of any changes required to this document. The most current WSS will be made available on the Document Secretary web site at
http://www1.wapforum.org/member/speccomm/DocSec/documents.html.

7.2.6.1 Specification Family Definition

The format of each Specification family definition will appear as follows:

Name: Wireless Markup Language (WML)
Current: WAP-79, WAP-79_100, and WAP-79_395
History:

Date	Document IDs
June, 1999	WAP-32
September, 1999	WAP-32, WAP-32_37
December, 1999	WAP-79
March, 2000	WAP-79, WAP-79_100, WAP-79_395

Table 4: Specification Family Definition

7.2.6.2 Conformance Release Definition

The format of each Conformance Release summary will appear as follows:

Date	Release Name	CCR ID
June, 1999	WAP 1.1	WAP-63
February, 2000	WAP 1.2	WAP-59
June, 2000	WAP June2000	WAP-xx

Table 5: Conformance Release Definition

7.2.7 Specification Baselines

For the purposes of clarity and legibility, it is periodically necessary to incorporate all SINs into a new Specification baseline, i.e.; a single document containing all changes to a Specification described in the Approved SINs.

It is the responsibility of a Specification editor to create a Specification baseline whenever:

- A new Specification version is created (e.g., a new draft is started). This MUST be completed before the Specification can leave the Draft state; or,
- The editor determines that a baseline is required; or,
- There are five (5) or more SINs approved against the Specification; or,
- The Specification Committee requests that a baseline be created.

Specification baselines do not require an approval process, as they are simply a reformulation of previously Approved documents (i.e., an editorial process). Editorial errors introduced as part of the baseline process MUST be fixed by the editor in a timely manner, and do not require a new CR or SCD.

7.2.8 Inter-Specification References

All inter-specification references MUST be made using the name of the Specification family (e.g., WML). Examples of correctly formed reference are:

[RFC2616] “Hypertext Transfer Protocol – HTTP/1.1”, R. Fielding, et al. June 1999, URL:http://www.ietf.org/rfc/rfc2616.txt

[WML] "Wireless Markup Language Specification, Version 1.3", WAP Forum™, Ltd., 19-Feb-2000, WAP-191-WML-20000219-a, URL: http://www.wapforum.org/

[XML] "Extensible Markup Language (XML)", W3C Recommendation 10-February-1998, REC-xml-19980210", T. Bray, et al, February 10, 1998. URL: http://www.w3.org/TR/REC-xml

All inter-document dependencies will be fully enumerated in the CCR for a given WAP Forum™ release.

7.2.9 Normative References

For Intra-WAP Specification Dependencies:

- All Normative references must have passed Arch Consistency review prior to the vote to *Proposed*.
- Prior to moving a specification to *Proposed* all normative references MUST be in a *Proposed (Prototype)* state or higher, i.e., be available for public review.
- Prior to allowing a specification to be voted to *Approved*, all normative references MUST be in a Proposed state or higher.
- Prior to allowing a Specification into a conformance release all normative references MUST be *Approved*.

For non-WAP Specification Dependencies, the SWG MUST ensure that all external references are made to specifications at least as mature, stable and publicly available as the referencing specification. If the SWG needs advise regarding the applicability of an external specification, it should consult with the Architecture Consistency Working Group.

7.3 Output Document Procedures

There are three types of Output documents:

- **Member-sanctioned** – output documents created by a WAP working group, and approved by the WAP Forum™ membership. These documents are created in the same manner as a Specification, with the exception that they do not impact the WAP conformance or interoperability processes and are not part of the WAP Forum™ technical specifications.
- **Board-sanctioned** – an output document that has been created by a WG or Board committee, and which has been sanctioned by the Board of Directors or one of its delegate sub-committees. Process documents and WG charters are the most common examples of Board-sanctioned documents (this document is an example of a Board-sanctioned document).
- **Informal Note** – a document containing unofficial output of a WAP working group. Informal Notes have no official status, are not ratified or endorsed by the WAP membership, and ONLY represent the views of a particular working group.

7.3.1 Member-Sanctioned Document Lifecycle

Member-sanctioned documents are created using the same process as Specification-track documents. In particular, member-sanctioned documents MUST be developed using the document lifecycle and approval procedures, MUST have a DID, and MUST follow any other procedures specified in section 7.2.

The Member-sanctioned document MUST clearly state on the cover page the status of the document, e.g., *Draft*, *Proposed*, *Prototype*, or *Approved*.

A *Draft*, *Prototype*, or *Proposed* Member-sanctioned document MUST contain the following disclaimer on the cover page:

> "This document is not a WAP Forum™ specification. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the WAP Forum™ specifications."

An *Approved* Member-sanctioned document MUST contain the following disclaimer on the cover page:

> "A list of errata and updates to this document is available from the WAP Forum™ Web site, http://www.wapforum.org/, in the form of SIN and SCD documents, which are also subject to revision or removal without notice."

A *Draft, Prototype*, or *Proposed* Member-sanctioned document MUST contain the following notice on the inside cover page:

> "You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. You may not use this document in any other manner without the prior written permission of the WAP Forum™. The WAP Forum™ authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services offered by you.
>
> The WAP Forum™ assumes no responsibility for errors or omissions in this document. In no event shall the WAP Forum™ be liable for any special, indirect or consequential damages or any damages whatsoever arising out of or in connection with the use of this information.
>
> This document is not a WAP Forum™ specification, is not endorsed by the WAP Forum™ and is informative only. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the WAP Forum™ specifications."

An *Approved* Member-sanctioned document MUST contain the following notice on the inside cover page:

> "You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. You may not use this document in any other manner without the prior written permission of the WAP Forum™. The WAP Forum™ authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services offered by you.
>
> The WAP Forum™ assumes no responsibility for errors or omissions in this document. In no event shall the WAP Forum™ be liable for any special, indirect or consequential damages or any damages whatsoever arising out of or in connection with the use of this information."

7.3.2 Board-Sanctioned Document Lifecycle

Board-sanctioned documents are created on an as-needed basis, and are approved by the Board. In general, Board-sanctioned documents will be published on the WAP Forum™ web site, and will be clearly marked with their document state (see section 7.2.2.1).

The Board-sanctioned document MUST clearly state on the cover page the status of the document, e.g., *Draft*, or *Approved*.

The Board-sanctioned document MUST contain the following disclaimer on the cover page:

> "This document is not a WAP Forum™ specification. A list of errata and updates to this document is available from the WAP Forum™ Web site, http://www.wapforum.org/, in the form of SIN and SCD documents, which are also subject to revision or removal without notice."

A Board-sanctioned document MUST contain the following notice on the inside cover page:

> "You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. You may not use this document in any other manner without the prior written permission of the WAP Forum™. The WAP Forum™ authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services offered by you.
>
> The WAP Forum™ assumes no responsibility for errors or omissions in this document. In no event shall the WAP Forum™ be liable for any special, indirect or consequential damages or any damages whatsoever arising out of or in connection with the use of this information.

This document is not a WAP Forum™ specification. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the WAP Forum™ specifications."

7.3.3 Informal Note Document Life Cycle

Informal Note documents represent the output of an officially chartered WAP Forum™ working group. Informal Notes have no official WAP Forum™ status, and are not ratified or endorsed by the Forum. Informal Notes are intended as a means by which a Working Group can publish information that may be of interest to the public, but which is not appropriate for the formal Specification process.

The publication of an Informal Note requires the following process:

- The authoring Working Group (or Working Groups) MUST approve the Informal Note with a 2/3 majority roll call in an official WG meeting. The results of this vote MUST be submitted to the Specification Committee.
- The Specification Committee MUST approve the publication of the document. The Specification Committee MAY reject the publication of the Informal Note if it is inappropriate (e.g., violates WAP Forum™ member confidentiality rules).
- The Informal note MUST contain the following disclaimer on the cover page:
  "This document is not a WAP Forum™ specification. This document is not endorsed by the WAP Forum™ and is informative only. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the WAP Forum™ specifications."

An Informal Note MUST NOT document anything that would normally be part of a WAP Specification, IOT or Conformance document.

8 Voting Rules

The WAP Forum™ defines two processes for managing voting within the working groups and the WAP Forum™ in general. These are administrative voting and material voting. Each process is tailored for the magnitude and potential impact related to the outcome of the vote. For example, administrative voting is used primarily within working groups as a tool for the chairs to resolve disputes, manage document promotion through the Proposed Specification status, etc. Material voting is used to ensure a formal voting process is enacted for decisions that impact the Forum as a whole, such as the promotion of a specification from Proposed to Approved status.

Regardless of the type of vote (material or administrative) members voting privileges are as follows:

- There is one vote per company per Member Company or organisation.
- Member companies/organisations that have one or more individuals in the group are considered to have *company voting privileges* (i.e. one vote*)* in the group.

None of these voting privileges or rights supersede those documented in the WAP Forum™ Memorandum and Articles of Association (http://www.wapforum.org/who/wapartic.doc).

8.1 Administrative Voting

Administrative voting is primarily used within specification working groups and is generally enacted at the discretion of the chair.

Each member company present at the time of the vote will be offered the ability to cast a vote on the issue. Votes MAY be cast FOR or AGAINST the issue, or the Member Company MAY chose to ABSTAIN. A resolution is considered passed if the total number of FOR votes meets the passing criteria (i.e. two-thirds majority as required by the process, in the case of a specification promotion, or simple majority in the case of an issue resolution) of the all votes cast either FOR or AGAINST. ABSTAIN votes are not counted.

A simple majority reached when the total number of votes cast FOR an initiative is greater than 50% of the total vote's cast either FOR or AGAINST.

The selection of the voting method (secret ballot, open ballot or e -Voting) is at the discretion of the working group chair, and the working group chair is responsible to ensure that only eligible votes are recorded and counted. When the administrative voting process is used the chair MUST document the vote.

8.1.1 Applicability of Administrative Voting

Administrative voting MAY be used in the following cases:

- Resolution of disputes when consensus cannot be reached
- Demotion of a specification from a *Proposed* to *Draft*
- Promotion of a specification from *Draft* to *Prototype*

Administrative vote MUST be used in the following cases:

- Promotion of a specification from *Draft* to a candidate for a material vote to *Proposed*
- Promotion of a specification from *Prototype* to a candidate for a material vote to *Proposed*

Administrative votes for promotion of specifications to *Proposed* status MUST be held:

- In SWG or DC when the rules of notice to call such a vote are met (see section 5.5.1),

8.1.2 Appealing an Administrative Vote

If a member feels the administrative vote was not fairly conducted or is otherwise invalid they MAY appeal to the decision to the Specification Committee in writing. The appeal MUST provide a specific statement of the issue that is in question. The Specification Committee will have thirty (30) days to respond to the appeal. The decision of the Specification Committee regarding the appeal is authoritative in the case of administrative votes. Members SHALL have a period of two-weeks from the time results are posted to appeal an Administrative vote.

8.2 Material Voting

Material voting is reserved for major decisions that will impact the WAP Forum™ list of approved specifications. Specifically the material voting process will be enacted during the promotion of a specification or SIN to the *Approved* status. This will ensure visibility of the specification or SIN to all members of the WAP Forum™.

A resolution is considered passed if the total number of FOR votes is equal to or greater than two-thirds of the all votes cast either FOR or AGAINST. ABSTAIN votes are not counted.

8.2.1 Material Voting Of A Document From *Draft* To *Proposed*

The Specification Committee SHALL post the *Candidate Proposed document*, i.e., after an approved administrative vote to promote the document, on the document registry web site (http://www.wapforum.org/what/technical.htm) for a period of fourteen (14) days after which the *comment period* will be closed. During the *comment period*, each member company SHALL have the opportunity to review the document and register their vote FOR, AGAINST, or ABSTAIN, and any comments regarding the document directly on the web site. At the end of the fourteen (14) day period all FOR and AGAINST votes will be tallied. The Working Group evaluates the comments received and the editor prepares an updated version of the document, the *Proposed* document.

8.2.2 Material Voting Of A Document From *Proposed* To *Approved*

The Specification Committee SHALL post proposed specifications on the document registry web site (http://www.wapforum.org/what/technical.htm) for a minimum period of sixty two (62) days after which the *comment period* will be closed. During the *comment period* each member company SHALL have the opportunity to review the document and submit comments and register their vote (FOR, AGAINST, or ABSTAIN), in addition to submitting any comments regarding the document directly on the web site.

A *quiet period* of not less than fourteen (14) days then begins where no additional comments will be accepted. During this period the Working Group evaluates the comments received and the editor prepares an updated version of the document, the *last call* document.

A *final call* notice is then issued, and the final fourteen (14) days of the voting period is started. During the *last call* process each member company SHALL have the opportunity to review the *last call* document and register their vote FOR, AGAINST, or ABSTAIN, and any comments regarding the document directly on the web site. Votes from the comment period carry over and a company may change their vote as many times as necessary, but only the last vote cast before the close of the last call will be included in the final tally. At the end of the ninety (90) day period all FOR and AGAINST votes will be tallied and the results posted.

8.2.3 Material Voting Notification

As a courtesy, all members will be notified via email to the wap-all mailing list when:

- a document has been initially posted,
- the *comment period* has ended, and
- the *last call* has started.

It is, however, the responsibility of each member to ensure they regularly visit the document registry.

8.2.4 Applicability of Material Voting

Material voting MUST be used in the following cases:

- Promotion of a specification from *Draft* to *Proposed*
- Promotion of a specification from *Prototype* to *Proposed*
- Promotion of a specification from *Proposed* to *Approved*

8.2.5 Appealing a Material Vote

Material votes MAY be appealed to the Specification Committee in writing. The appeal MUST provide a specific statement of the issue that is in question. The Specification Committee will have thirty (30) days to respond to the appeal. The decision of the Specification Committee MAY be appealed to the Board. The decision of the Board regarding the appeal is authoritative and final in the case of material votes. Members will have thirty (30) days from the time results are posted to appeal a Material vote.

8.3 e-Voting

The WAP Forum™ provides an e-Voting system for use with certain Administrative and Material votes (see sections 8.1 and 8.2 respectively). The purpose of the e-Voting system is to ease the management of formal voting and to give all member companies the opportunity to vote with ease. Votes using the e-Voting system are anonymous to the General Membership. A member company is, however, free to add its name in the provided comment to overcome anonymity. No other ways to unveil an anonymous vote are provided.

The e-Voting system has the following attributes:

- it implements the voting procedures for administrative and material votes
- it prompts the initiator of the vote to register the documents on the web site
- it sends email notices via wap-all to all members of the WAP Forum™ stating the voting initiative is being initiated, that the comment period has ended, and a reminder of the voting closure.
- it allows members to vote on-line, and to change their vote right up to the last moment.
- it collects comments during the voting period and
  - sends them to the Chair and Editor of the documents anonymously
  - permits a member company to review its own votes and comments non-anonymously
  - permits all member companies to review comments anonymously.
- it collects and issues the final votes.
- it provides member companies with the ability to manage their voters and votes.

8.3.1 e-Voting - Registration And Delegate Maintenance.

When a new member joins the WAP Forum™, the member company’s contact representative will be registered to as the authorised voter. Subsequent management of a companies delegates and voters is the responsibility of the member company using the facilities provided by the e-Voting system.

A WAP Forum™ member company has three categories of participant in the e-Voting system, namely 'registered delegates' (hereafter referred to as delegates), 'registered voters' (hereafter referred to as voters) and non-voters. All categories can review the status of votes and comments. All delegates and voters can vote, but only delegates can add new delegates and voters. The initial member company's contact representative is responsible for the initial addition of voters and other delegates for his or her company.

An additional privileged user is the WAP Forum™ Executive Director, who has responsibility for the initial provisioning of a member companies voting rights and subsequent removal of such rights as and when a member leaves the WAP Forum™ or ceases for some other reason to be eligible. The Executive Director registers the initial registered delegate, i.e. the named contact person for that member company. The initial registered delegate will then receive a welcome message in the form of an email.

All registration of delegates, whether the initial contact person or subsequent delegates, and voters requires the entry of a suitable email address. This email address is used for access control in the same way individual member access to the web site is achieved. A default password is sent to the delegate or voter upon registration at this registered email address. Additional registration details are member company name and the name of the delegate or voter. Delegates and voters can subsequently manage their passwords and delegates can manage the registration details of delegates and voters.

A list of all registered delegates sorted by Member Company will be made available in the members' only area of the WAP Forum™ web site that does not require registration within the e-Voting system to permit access.

8.3.2 e-Voting - The Voting Process

The e-Voting system implements the current WAP Forum™ voting procedures specified in this document using email notification and web based access. Email is used to inform member companies of votes taking place while the web based access is used for all other matters pertaining to the vote, e.g. voting, reviewing vote status, results etc.

While email is used to alert member companies of forthcoming votes, it is the member companies to regularly check the web site for votes in progress (http://www1.wapforum.org/member/OverallStatus.asp).

The e-Voting process is as follows:

- Documents to be balloted are forwarded to the Document Secretary by the Working Group Chair or Editor.
- Upon receipt of the document for ballot the Specification Committee Document Secretary will post new documents which are balloted on the WAP Forum™ web site. This will include the starting date and ending date of the voting period, and the voting majority required for each balloted item (i.e. 2/3 or simple majority). This is achieved on the Document Secretary's Add Initiative page.
  - This will generate a notice via email to the wap-all mailing list indicating that the web site is updated and ready for voting. This officially opens the voting period.
- A warning notice of the closing date of a vote will be given via email to the wap-all mailing list:
  - not less than twenty eight (28) days for votes involving promotion of specifications to *Approved* status
  - fourteen (14) days otherwise
- Member Company registered delegates and voters may access the voting page by entering their registered email address and password on a validation screen. Any page inside the e-Voting system requires this login authentication prior to access, except the *'Overall Status'*, *'Anonymous Comments'* and *'View all Delegates'* pages.
- The registered delegate and voter can register the vote using the voting status page as YES, NO, or ABSTAIN. The member may also enter comments regarding the vote in a comment field, except in the closing 14 days of a vote to Approved status. These options are on the Voting page.
- When the delegate or voter submits the voting form the following information will be logged:
  - email address of the voting member
  - member company
  - vote for each initiative (initiatives not voted are counted as ABSTAIN, Abstains are not registered as voted - i.e. the member name is logged as NOT VOTED).
- Registered delegates and voters can view their current voting status by logging into the voting status page. This also required email/password login. On this screen members can:
  - Change their vote for any initiative that is still open
  - View the current status of their voting.
  - View the history of the vote which includes
    - The current status and who cast the vote
    - Any previous votes for the initiative, and which delegate cast the vote. These options are available on the 'Registered Delegate' or 'Registered Voter' home page

When a delegate changes a vote, a new vote is logged for the initiative. This replaces the previous vote for that company (i.e. if two people from the same company vote on the same issue - only the second/later vote will be counted). Although there is no direct management of who can vote or change votes, as a courtesy to the Member Company an email will be sent to the contact person, the original voting member, and the new voting member indicating the change. No email will be sent if the person changing the vote is the same as the original voter.

To allow the chair and editors to review the voting status and address any potential comments a report is generated and sent to the chairs and editors of each initiative via email. This report includes:

- Name of each company that has voted to date.
- Email address of the person casting the vote.
- The vote that was cast.
- Any comments entered associated with each vote.

As new votes are entered the overall status is automatically updated and posted on the overall status page. All members can view the overall vote status page. This page has links to the initiative documents, anonymous comments and a link to vote. At the end of the voting period an overall report is generated and sent to the Specification Committee for review. This report will include:

- The total vote count for each initiative and an indication of pass or fail based on the voting majority – and include the total count of YES, NO, and ABSTAIN votes for each balloted item
- A detailed history log of each initiative, detailing the voting by Member Company for each balloted item – including the final vote (YES, NO, ABSTAIN), the number of times the vote was changed, and any comments entered.

8.4 Pictorial Representation Of E-Voting Process For An Administrative Vote

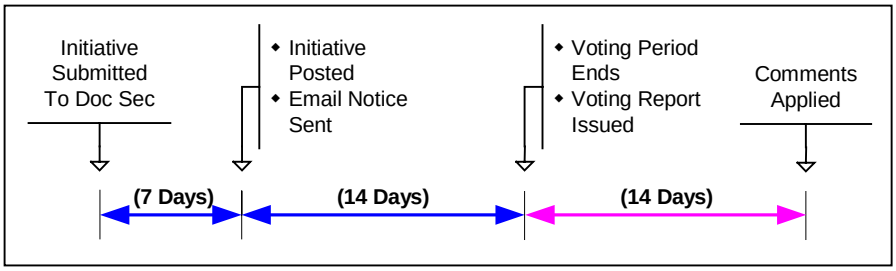

Figure 9: Pictorial Representation of e-Voting Process for an Administrative Vote

8.5 Pictorial Representation Of E-Voting Process For Specification Approval

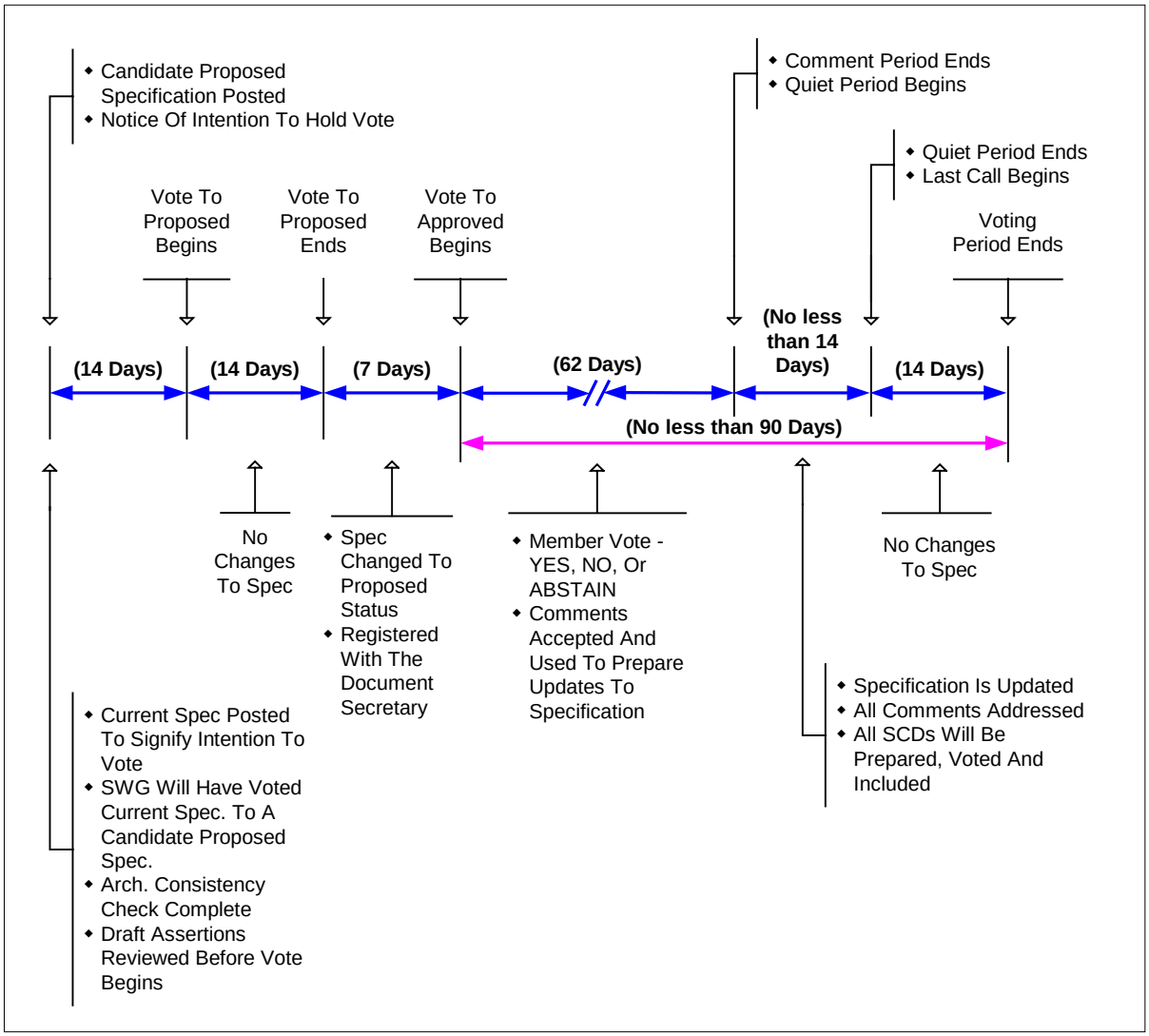

Figure 10: E-Voting Process for Specifications

9 Roles and Responsibilities

There are several well-defined roles and responsibilities defined in the WAP Forum™ working group processes.

9.1 Board of Directors

The Board of Directors approves:

- Creation and termination of all working groups
- Charters of working groups and the schedules for working group deliverables
- Publication of final WAP specifications

The Board of Directors also:

- Is the final approval on all technical processes
- The final arbiter of all voting appeals

The Board of Directors is formed according to the processes described in the WAP Forum™ Articles of Association (http://www.wapforum.org/who/wapartic.doc).

9.2 Specification Committee

The Specification Committee:

- Manages specification creation process for the Board, including the document lifecycle
- Manages the activity creation process for the Board
- Manages the liaison process for the Board
- Manages the chartering processes for the Board
- Manages the chair selection process for the Board
- Tracks unresolved, pending, and future technical and liaison work items for the Board

The Specification Committee is comprised of Board members or their appointees.

9.3 Architecture Group

The Architecture Group has the following roles and responsibilities:

- Specify the WAP technical architecture
- Provide expert technical consultation, analysis and expertise to the Board of Directors
- Provide technical consultation to the Board of Directors regarding the architectural implications of activity creation and termination
- Ensure architectural consistency of all Specifications, SINs

The Architecture Group is identical to a Specification Working Group except for the following differences:

- Technical disputes and issues that the Architecture Group is unable to resolve MUST be escalated to the Board of Directors for resolution. The Board of Directors MAY delegate the authority to resolve the dispute to the Specification Committee
- The Architecture Group is a permanent group, but it still MUST have periodic re-chartering, just like any other WG. Membership in the Architecture Group is open to all member companies

9.4 Working Group Chair

The working group chair has the following roles and responsibilities:

- Manage the process and work within the working group
- Organise and conduct working group meetings and events
- Act as the working group's liaison to the Board of Directors and other working groups
- Within the working group, manage and enact all processes and procedures defined in this document

- Manage the voting process
- Ensure that the working group conforms to its Board-approved charter
- Publish detailed and accurate minutes from the working group meetings and events
- Track working group open issues and work items
- Act as the external representative of the working group
- Appoint specification editors
- Appoint sub-groups to address well-defined technical issues, specification drafting, etc.
- Publishing regular status reports of working group activity to the Specification Committee and Architecture Group
- Conduct meetings in accordance with the meeting procedures defined in section 5.5

The chair is free to delegate responsibilities to working group members as they see fit. For example, it is expected that most chairs will appoint a secretary.

9.5 Specification Editor

The specification editor has the following roles and responsibilities:

- Create a specific draft specification
- Track issues and open work items with a draft specification
- Ensure that the draft specification conforms to the WAP Forum™ documentation format and processes
- Publish regular updates of the draft specification, reflecting working group technical decisions

The working group chair appoints specification editors.

10 Templates

A variety of document templates, including Change Requests, Activity Proposals, Working Group Charters and Specification Change Documents are available on the WAP Forum™ Document Secretary web site, at http://www1.wapforum.org/member/speccomm/DocSec/documents.html.

11 Checklists and FAQs

A variety of helpful checklists and FAQs relating to this document may be found on the Specification Committee web page located at http://www1.wapforum.org/member/speccomm/.

12 External Liaison Process

12.1 Principles for Liaison Activities.

The WAP Forum™ member participants with a broad range of experience, knowledge, and ability participating in other organisations at the national and international levels may, given appropriate authorisation to do so, represent the WAP Forum™ and/or its Technical Groups in the capacity of liaison officer. This participation draws on the talents of individuals of the WAP Forum™ Members and requires part-time involvement of both management and technical experts to deal with subjects of increasing complexity and technical difficulty.

The WAP Forum's™ objectives in liaising with outside organisations are:

1. To optimally convey information in a manner which increases the effectiveness of the WAP Forum's™ program of work.
2. To support the acceptance of the WAP Forum's™ specifications and technical positions by outside standards organisations.
3. To facilitate collaboration and co-operation with external organisations.
4. To receive on behalf of the WAP Forum™ such information needed to understand additional any requirements to meet the needs of that organisation for successful adoption of the WAP Forum's™ work.

Potential ways in which WAP specifications can be adopted in appropriate standards activities are as follows:

1. The standards body can delegate production of documents to the WAP Forum™,
2. The standards body MAY negotiate WAP Forum™ specification content to be adopted in its specifications,
3. The standards body MAY reference WAP documents in their specifications, or
4. A joint working group MAY be established to create specifications.

All liaisons between the WAP Forum™ and other organisations MUST be conducted with due diligence in regard to Intellectual Property Rights (IPR), which will require an agreement and possibly a Non-Disclosure Agreement (NDA) to be in effect covering the information being conveyed between both parties covering copyright and other IPR.

12.2 Liaison Activities in External Standards Committees.

In most cases liaison may be conducted by correspondence. However, when the subject is of an urgent nature and requires a focal point for ongoing collaboration or requires an individual to actively represent the WAP Forum™ or its Technical Subcommittees at external meetings, an individual or individuals may be chosen to physically be present to represent the WAP Forum™ or its Technical Subcommittees. The individual(s) chosen to liaise on behalf of the WAP Forum™, i.e. liaison officers, SHALL be identified to the liased organisation in writing by the WAP Forum™ prior to attending the liased organisations meeting.

Liaison activities and discussions SHOULD be limited to the purposes of the organisation and the description of the liaison as approved by the WAP Forum™. The liaison individual(s) or officer is not empowered to take binding actions on behalf of the WAP Forum™ without specific authorisation. The liasing committee within the WAP Forum™ SHOULD provide definitive direction to the liaison officer at a meeting, including conference call base meeting, or via appropriate use of the WAP Forum's™ email service prior to the liaison occurring.

This complete text of this process is available online at http://www1.wapforum.org/member/liaison/Liaison3.htm.