Policies and Procedures of the OMG Technical Process

pp/17-06-01

Version 3.3 9th June, 2017

This document defines the policies and procedures used by the Architecture Board and Technology Committees (collectively the "Technical Plenaries") of the Object Management Group, Inc. These policies and procedures may change by vote of those groups as their needs and purposes change (see Section 7).

[Sections set off from the text in the manner of this section are explanations or *rationales*, rather than binding rules governing the operation of the Technical Plenaries. They reflect the rationale and reasoning behind a decision laid out in the *Policies and Procedures*, in order to better convey the intent of the document.]

Contents

- 1 Purpose of the Technical Plenaries
- 2 Definitions and Acronyms
- 3 Policies of the OMG Technical Plenaries
 - 3.1 Composition of a Technical Plenary
 - 3.2 Meetings of the Technical Plenaries
 - 3.4 Agenda of a Technical Plenary Meeting
 - 3.5 Voting
 - 3.6 Rôle of a Technical Plenary Chair
 - 3.7 Subgroups
 - 3.8 Documents and Distribution
- 4 Procedures for Adoption of Submissions
 - 4.1 General Adoption requirements
 - 4.2 Steps to Specification Adoption by RFP
 - 4.3 Request for Comments Procedure
 - 4.4 Finalisation and Revision
 - 4.5 Specification Retirement Procedure
- 5 Procedure for certifying tests for compliance to Formal Specifications
 - 5.1 Scope
 - 5.2 Procedure for open, non-proprietary test suites
 - 5.3 Procedure for test suites requiring licences
 - 5.4 Withdrawal of OMG certification

- 6 Proprietary Rights
- 7 Adoption and modification of this document
- 8 Copyright, Authorship and Revisions

1 Purpose of the Technical Plenaries

According to the Bylaws:

The purposes of the [Object Management] Group are:

- (a) to promote object-oriented applications integration based on appropriate industry standards, a model-driven architectural approach to software design and the application of modelling and middleware technology to specific vertical markets; to foster building communities in modern computing technology;
- (b) to promote frameworks for compatible and independent development of applications;
- (c) to enable coordination among applications across heterogeneous networked systems in a multinational, multilingual environment;
- (d) to adopt a core of specifications that comply with these frameworks and to promote their international market acceptance and use;
- (e) to actively influence the future direction and development of these adopted specifications; and
- (f) to foster the development of tools and applications that conform to these specifications and to provide a mechanism for certifying compliance with the adopted specifications.

The purpose of the Technical Plenaries of the OMG is collectively to solicit, propose, review, recommend modifications to, and recommend adoption of specifications of technology in pursuit of these goals. The voting and representation structure of the OMG's Technology Committees and their subgroups is designed to ensure that all OMG Members may participate in this process.

[It will be clear from the Bylaws of the OMG that the Technical Plenaries are consulting bodies, making only recommendations to the BOD. The BOD makes all final decisions of the OMG.]

2 Definitions and Acronyms

Alpha Specification

An OMG Specification that has not yet been begun the finalisation process.

Architecture Board (AB)

The OMG Architecture Board.

Architecture Board Chair (ABC)

A post appointed by the OMG Technical Director to lead the activities of the AB.

Beta Specification

A draft OMG Specification produced during the finalisation or revision process which has the document structure of a Formal Specification, but whose technical content might be subject to further changes.

Board of Directors (BOD)

The OMG Board of Directors, as defined by the Bylaws of the OMG.

Charter

The document defining the purpose of a Subgroup.

Domain Technology Committee (DTC)

The OMG Domain Technology Committee.

DTC Member

An organisation that is a member of the DTC.

DTC Voter

A Representative authorised by a DTC Member to cast its vote on DTC Items. DTC Voters represent OMG Contributing Members and OMG Domain Members. Only one Representative of a given Member may be a DTC Voter.

Domain Technology Committee Chair (DTCC)

A post appointed by the Technical Director of the OMG, to lead the activities of the DTC.

Finalisation Task Force

A Task Force with a closed membership of named individuals, responsible for managing the document integration and revision that produces a Beta Specification from an Alpha Specification or previous Beta Specification.

Formal Specification

An OMG Specification which has been through the finalisation or revision process, and has been approved for formal publication under the OMG Bylaws.

Invited Guest

An individual attending an OMG Technical Plenary meeting who does not represent an OMG Member, but is either (a) a liaison representative appointed by an external organisation having reciprocal liaison status with the OMG, or (b) who has attended no more than one previous plenary meeting and has been invited by OMG staff, or (c) who has been invited by at least two Contributing, Domain or Platform Members. It is the policy of the OMG freely to allow guests & observers to attend, so long as they request to do so in advance.

Issue

A report made to OMG of an error in an OMG Specification. OMG accepts Issues from any source.

Item

A Question or issue before a Technical Plenary for discussion and resolution.

Observer

An individual affiliated with an OMG Member, and attending a meeting where that Member has no voting rights.

OMG Member, or Member

Any organisation that is a Member of OMG in good standing, and with a membership class as defined in the OMG Bylaws.

OMG

The Object Management Group.

OMG Specification

Any Specification that the Board of Directors has selected to be adopted by OMG, in accordance with the Bylaws. OMG Specifications are further categorised as Alpha Specifications, Beta Specifications or Formal Specifications.

Parent Body

The Technical Plenary that charters a particular subgroup.

Participant

A representative of an OMG Member named on the charter of a Revision Task Force (RTF) or Finalisation Task Force (FTF). Participants have an obligation to identify patents containing Essential Claims they believe will be infringed by implementations of the OMG Specification being revised or finalised. See the OMG IPR Policy for details.

Platform Technology Committee (PTC)

The OMG Platform Technology Committee.

PTC Member

An organisation that is a member of the PTC.

PTC Voter

A Representative authorised by a PTC Member to cast its vote on PTC Items. Voting PTC Members represent OMG Contributing Members and OMG Platform Members. Only one Representative of a given member may be a PTC Voter.

Platform Technology Committee Chair (PTCC)

A post appointed by the Technical Director of the OMG, to lead the activities of the PTC.

Platform Independent Model (PIM)

A model in an appropriate rigorous modelling notation that is independent of any particular implementation platform.

Platform Specific Model (PSM)

A model in an appropriate rigorous modelling notation that takes account of the characteristics of a particular implementation platform.

Quorum

The minimum number of voters required to be present at a meeting for the proceedings to be valid and voting to take place.

Registered Voter

An individual authorised by an OMG Member to cast its vote in meetings and electronic votes where that Member is eligible to vote. Registration is by depositing a letter with OMG staff, signed by an authorised Member Representative, naming a single individual as that Member's Registered Voter for one or more of the OMG's Technology Committees.

Representative

An individual affiliated with an OMG Member and attending a meeting of an OMG Technical Plenary or Subgroup.

Request for Comments (RFC)

A process allowing an OMG Member to request OMG adoption of a complete Specification that does not have material competition without requiring a Request for Proposals to be issued.

Request for Information (RFI)

A general request to the computer industry, academia, and any other interested parties to submit information about a particular technology area to one of the OMG's TFs.

Request for Proposals (RFP)

An explicit request to OMG Members to make Submissions to one of the TC's TFs. Such Submissions must be received by a certain deadline (see Section 4.2) and are evaluated by TFs.

Revision Task Force (RTF)

A Task Force with a closed membership of named individuals, responsible for clarifications of and minor modifications to an OMG Formal Specification.

Single Transferable Vote (STV)

A voting technique for filling multiple positions in the course of one poll. The procedure is laid down by the Electoral Reform Society and documented in OMG document pp/96-04-03.

Special Interest Group (SIG)

A Subgroup set up by its Parent Body solely for the purposes of sharing information about topics covered by its Charter.

Special Interest Group Chair

A representative elected by a SIG, responsible for leading the activities of that SIG and reporting them to its Parent Body.

Standing Proxy

An individual authorised by a Member's Registered Voter to cast that Member's vote in OMG meetings or electronic polls.

Subcommittee Chair (SCC)

A representative elected by an SC, responsible for leading the activities of that SC, as well as presenting SC recommendations to the Parent Body.

Subcommittee (SC)

A standing Subgroup chartered to provide recommendations to its Parent Body which are not technology adoption recommendations.

Subgroup

A Task Force, Subcommittee or Special Interest Group. Subgroups have wider membership criteria than their parent bodies, so it is possible for an OMG Member without voting rights in a particular Technical Plenary to have voting membership of one of its Subgroups. An OMG Member represented in a Subgroup has a single vote in decisions of that Subgroup, regardless of how many Representatives attend.

Submission

A specification that an OMG Contributing, Domain or Platform Member wishes to sponsor under the Bylaws of the OMG under the RFP or RFC process. Submissions are evaluated by the TCs and the AB, which may recommend that the Board of Directors select them as OMG Specifications.

Task Force (TF)

A Subgroup chartered to make technology adoption recommendations in specified topic areas to its Parent Body.

Task Force Chair (TFC)

A representative elected by a TF, responsible for leading the activities of that TF, as well as presenting TF recommendations to its Parent Body.

Technical Plenary

A Technology Committee or the Architecture Board.

Technology Committee (TC)

An OMG Technology Committee, composed of Representatives of OMG Member organisations.

Testing Task Force (TTF)

A Task Force with a closed membership of named individuals, responsible for determining whether a proposed test suite accurately tests compliance of individual implementations to OMG Specifications.

Voting Member

A Member that has voting rights as to a particular meeting or matter.

Voting Representative, or Voter

A Representative authorised to vote on a Member's behalf in a meeting where the Member has voting rights; a Registered Voter, or someone named as his or her proxy.

3 Policies of the OMG Technical Plenaries

This section describes the common policies for all the OMG Technical Plenaries. The extensions of these policies to cover the particular circumstances of the individual Technical Plenaries, and the relationship between those bodies, is described in later sections.

3.1 Composition of a Technical Plenary

An OMG Technical Plenary is composed of OMG Member Representatives and a Chair (an OMG employee).

Analyst Members may send at most two Representatives to each of at most two meetings of an OMG Technical Plenary per calendar year; all other classes of OMG Member may send any number of Representatives to any meeting. However, the Chair of the Technical Plenary may at his discretion limit the number of attendees on a maximum-per-Member basis.

[Attendance limits may need to be imposed if meeting space is limited. However, every effort is made to avoid this.]

The voting rights of Representatives are determined by the membership structure of the individual Technical Plenary. Each Member eligible to vote in a particular plenary nominates a named Voting Representative when it becomes an OMG Member, as detailed in section 3.5.1.

3.1.1 Composition of the Platform Technology Committee

The Platform Technology Committee is composed of Representatives of all Members of the OMG. The Voting Members of the PTC are the Contributing and Platform Members of the OMG.

3.1.2 Composition of the Domain Technology Committee

The Domain Technology Committee is composed of Representatives of all Members of the OMG. The Voting Members of the DTC are the Contributing and Domain Members of the OMG.

3.1.3 Composition of the Architecture Board

The Architecture Board comprises the Architecture Board Chair and ten members, each of whom is affiliated with an OMG Contributing, Domain or Platform Member. Five members are elected by the Platform Technology Committee, five by the Domain Technology Committee. Each of these ten seats comes due for re-election by the appropriate TC at 24 month intervals. AB members may not simultaneously chair any OMG Subgroup except an Architecture Board Subgroup, a Revision Task Force or a Finalisation Task Force.

[AB members are expected to participate in many of the parallel Subgroup meetings during an OMG Technical Meeting week, so it would not in general be feasible for them also to run Subgroups. However, RTFs & FTFs typically meet briefly, if at all, during technical meeting weeks, so there is little possibility of scheduling clashes, whilst preventing AB members running the Subgroups they themselves charter would be rather contradictory.]

AB seats are assigned to an individual, but only for as long as he or she remains affiliated with the same OMG Member; there may be no more than one AB member from any particular organisation, and Members may not send substitutes to AB meetings An AB member may relinquish that membership voluntarily, or automatically by non-attendance at two out of any three successive AB meetings. Upon loss to the AB of a member for any reason, a replacement must be chosen by election at the earliest reasonable opportunity.

[The non-attendance rule is to ensure continuing participation by AB members - with only 10 elected members of the AB, any non-participation by an AB member seriously compromises the group's capabilities.]

Election for Domain and Platform seats on the AB is by Single Transferable Vote of OMG Members eligible to vote in the appropriate Technology Committee. An election is initiated by the DTC or PTC Chair when one or more of the corresponding AB seats becomes vacant. Where an election for a seat takes place before the expiry of a 24 month term, the newly-elected AB member occupies that seat for at most the balance of that original term. Should a single election for several seats of different remaining terms take place in one TC, the STV vote transferring process will be used to fill the seats in order, longest term first.

[This "by-election" rule is to ensure that, as far as is possible, AB elections remain grouped together at one point in the year, so as not to distract attention from the AB's technical rôle.]

Nomination requires the signatures of 10 of the Voting Representatives of the appropriate TC and the written sponsorship of the Member to which nominee is affiliated, including a commitment of up to 25% of his or her working time to AB activities. The closing date for nominations for AB candidates shall be announced to the OMG membership at least thirty days beforehand by email. If, at the closing date, there are no more candidates than seats available, all the candidates are deemed elected unopposed, and no election is held. If there are both full- and partial-term seats in an unopposed election, but more candidates than full-term

seats, lots will be drawn to determine which candidates are assigned the full-term seats.

3.2 Meetings of the Technical Plenaries

Technical Plenary meetings shall be conducted by the Chair, or another appointed representative of the OMG, and under the general guidance of Robert's Rules of Order.

[Robert's Rules codify usual Parliamentary procedure. The book can be found in most US book shops.]

Minutes of each Technology Committee meeting shall be distributed before the next meeting.

[Minutes and other OMG documents are usually distributed via electronic mail; the use of paper, whilst not precluded, is rare.]

Only OMG Member Representatives, OMG Staff members and Invited Guests may attend meetings of the Technical Plenaries.

3.2.1 Meetings of the Platform and Domain Technology Committees

Meetings of the Technology Committees shall be announced at least five weeks in advance, by paper or by electronic mail, to the entire OMG membership. Meetings shall occur four times per year.

3.2.2 Meetings of the Architecture Board

There shall be a meeting of the AB co-located with every meeting of one or more of the Technology Committees. There is no upper limit on the number of AB meetings.

3.4 Agenda of a Technical Plenary Meeting

The content of the agenda for a Technical Plenary Meeting is managed solely by the Chair, and may be modified prior to the meeting as appropriate, as long as notice requirements of the different phases of the specification adoption procedure are met. A written agenda shall be distributed to OMG Members at least three weeks before each meeting.

[In order to allow the business of a Technical Plenary to move along smoothly, the Chair may adjust the agenda based on Representatives'

schedules, available presentations and meeting sites, etc. Members are protected from capricious agenda changes by requirements for lead time on procedural presentation and votes.]

Motions to dissolve any subgroup, or to charter or modify the Charter of a Task Force, Subcommittee or Special Interest Group are only in order at a Technical Plenary meeting if they were on the agenda published three or more weeks before the meeting. No notice is required for motions to charter or modify the Charter of a Revision, Finalisation or Testing Task Force.

[Subgroups, as defined in section 3.7 below, include Finalisation Task Forces, Revision Task Forces, Task Forces, Subcommittees and Special Interest Groups, but not Working Groups, which have no Charter and no formal status within the OMG technical process. Motions to dissolve RTFs or FTFs before their delivery deadline do require 3 week agenda notice.]

3.5 Voting

3.5.1 Registration of TC Voters

Each OMG Member eligible to cast a vote in a Technology Committee shall deposit with OMG staff a letter signed by an authorised representative (i.e. an officer of the company for a commercial organisation), naming a single individual as that Member's Registered Voter for one or more of the OMG's Technology Committees. The registration must include postal, telephone, fax and email contact details. It is the responsibility of the Member to notify OMG staff of any change to the Registered Voter for any Technology Committee.

Voting on behalf of a Member, whether at an OMG meeting or electronically (see section 3.5.3) may be either by the Registered Voter, or by an individual named in a written proxy deposited with OMG staff and signed by the Registered Voter. Such proxies may be for a single issue, or a Standing Proxy may be deposited with OMG naming a number of individual Representatives, all of whom are eligible to cast that Member's vote. However, at no time will any Member have more than one vote in any poll conducted by an OMG Technical Plenary or Subgroup, and where one Member names several proxy holders, it is their responsibility to determine amongst themselves which of them will cast the vote, and how.

A Registered Voter may also send an Item-specific proxy to OMG staff, specifying precisely how that Member wishes its vote to be recorded on a particular Agenda Item.

[In order to ensure that business moves along, we wish to allow proxy

11

voting, duly noting the dangers of voting without physical proximity. We feel that the notification requirements for the different phases of the adoption process sufficiently protect Member companies from adoption without due ability to oppose.]

3.5.2 Polls During DTC and PTC Meetings

Quorum for DTC or PTC meetings is calculated as half the number of Voting Members in that TC which have been represented, in person or by proxy, at two or more of the last three TC meetings.

Unless explicitly over-ridden elsewhere in this document, a simple majority of the non-abstaining votes cast (either by the Registered Voter or the holder of a proxy) is required to pass any motion at a TC meeting.

[In order to avoid deadlocking a TC's business in the event of a continued lack of attendance by its voting Members, it was felt that some flexibility in the definition of quorum was necessary. This quorum policy, in which only half of consistently attending Members are required for quorum, protects active Members and the TC process as a whole, without ever depriving any eligible TC member of its vote.]

The Chair shall not vote in any Technology Committee poll.

In regard to polls that require documentation (i.e., on adoption of particular documents or based on the content of a document), one third of the Voting Members represented at the meeting may invoke the requirement that documentation supporting the poll must be available at least four weeks prior to the poll.

[The four-week rule ensures that Voting TC members can enforce adequate time to read, distribute and gather comments on documents before voting on the document at the following TC meeting.]

3.5.3 Polls Between DTC and PTC Meetings

A TC may conduct a poll by fax or electronic mail between TC meetings. Such polls may be brought by motion and second at a TC meeting, or by direct action of the Chair at any time. Any motion that would be in order at a TC meeting may also be voted on electronically, and requires the same majority of non-abstaining votes cast as it would at a meeting (i.e. usually a simple majority, but two-thirds majority for a change to these Policies and Procedures - see section 6). Motions recommending the adoption or retirement of a Specification are not in order at a TC meeting - they may only be voted on electronically, and must attract a two thirds majority of non-abstaining votes cast in order to pass.

Where a poll is initiated by fax, Members may respond by electronic mail, and vice-versa.

[It is often necessary to conduct polls between TC meetings; such polls will usually be initiated by electronic mail. Voting by fax is not precluded, but email is now so widely available that its use is unlikely to disenfranchise any OMG Members.]

3.5.3.1 Eligibility

Only TC Members in good standing on the date the poll was initiated are permitted to participate in an electronic poll. If a Member loses its Voting status before an electronic poll has completed, and if that Member has already voted, the vote stands; if that Member has not voted, then a vote of Abstain is entered instead.

A vote cast on a Member's behalf in an electronic poll must come from the Registered Voter or a Representative named as a Standing Proxy.

3.5.3.2 Deadline

Unless otherwise stated in the motion being considered, the deadline for voting in an electronic TC poll shall be 8 weeks from the date on which it was initiated; however, the deadline shall not be less than six weeks from the initiation date. Voting shall not be considered to be complete, nor shall the result of the poll be announced, until the deadline has been reached; however, current voting figures shall be made available to Members during the course of the poll. A Member may alter an already-cast vote at any time during the TC poll. The chair of the relevant TC shall take reasonable efforts to remind all non-responding Eligible Voters of the electronic poll not less than two weeks prior to the deadline.

3.5.3.3 Quorum

Quorum for all electronic TC polls is half of the number of Members of the relevant TC in good standing on the date the poll commenced.

3.5.3.4 Completion

If, at the completion deadline, the number of votes cast (whether in favour, against, or abstaining) does not satisfy quorum then the motion fails. If quorum is satisfied and the appropriate majority of affirmative votes is attained then the motion passes. The chair of the TC immediately announces the result by electronic mail, and again in person at the next TC meeting.

3.5.3.5 Withdrawal

Electronic polls may be withdrawn by a majority vote at any meeting of the relevant TC prior to the completion of the electronic poll.

3.5.4 Polls During and Between Architecture Board Meetings

Quorum for polls at AB meetings is normally three less than the number of current AB members (including the chair). However, should this yield a quorum of less than six, quorum will instead be set at six. Quorum may be satisfied by AB members in attendance or by proxy votes.

The assent of a simple majority of AB members in attendance at a meeting (whether in person or by proxy) is required to pass any motion in the AB.

Written proxies for polls on specific issues at meetings may be given to the ABC or another AB member by an AB member unable to attend a meeting in person. Proxies are not counted towards an AB member's attendance record, and must specify the issue to be voted on and how the vote should be cast.

Where a poll at a meeting requires documentation (i.e., on adoption of particular documents or based on the content of a document), one third of the AB members represented at the meeting may invoke the requirement that documentation supporting the poll must be available at least four weeks prior to the poll.

A poll on any AB Item may be initiated by the ABC between meetings, collecting votes by fax or electronic mail. The ABC will take reasonable precautions to ensure that the AB members themselves cast the votes, rather than, say, other representatives of their companies. There are no proxies for electronic polls, but neither is there is a time limit - instead, the ABC must continue gathering votes until no further voting could affect outcome. Results of any electronic poll must be announced to the whole OMG membership (by email), and at the next AB meeting.

[Quorum for AB electronic polls is effectively 100%, but without requiring the ABC to pursue AB members for votes that cannot effect the outcome, nor allowing an AB member to block progress simply by refusing to cast a vote.]

The ABC has full voting rights on the AB.

3.6 Rôle of a Technical Plenary Chair

The chair of a Technical Plenary is responsible for the continued progress of the work programme of the group concerned. The Chair shall ensure the following:

- Note is taken of which Members and Voting Members are represented at each meeting, whether by the Voting Representative, a substitute, or by proxy.
- Meetings are announced and agenda published with appropriate notice prior to each meeting.
- Meetings are facilitated in general.
- A record of meeting minutes and all other distributed materials is kept.
- A record of all electronic mail discussions is kept.
- The OMG Technical Director is kept appraised of the current business of the Technical Plenary.
- Resolutions for recommendation to the BOD are brought to the attention of the OMG Technical Director.

3.6.1 Rôle of the PTC and DTC chairs

In addition to the above duties of a Technical Plenary Chair, the DTC and PTC Chairs shall ensure that RFIs and RFPs are issued in a timely, orderly manner.

3.6.2 Rôle of the AB Chair

The AB Chair takes an active part in the technical work of the AB, and is therefore a voting AB member, providing an impartial OMG technical opinion on Architecture Board Items.

In addition to the above duties of a Technical Plenary Chair, the AB Chair shall ensure:

- Active participation of AB members in the subgroups of the Technical Plenaries
- Notification of empty AB seats to the appropriate TCC(s)

3.7 Subgroups

In order to carry out their business in a timely and efficient manner, OMG Technical Plenaries may charter Subcommittees (SCs), and Special Interest Groups (SIGs). In addition, a Technology Committee (but not the Architecture Board) may charter Task Forces (TFs), Revision Task Forces (RTFs), Finalisation Task Forces (FTFs) and Testing Task Forces (TTFs).

The Technical Director shall from time to time notify each Technical Plenary of any Subcommittees and Special Interest Groups that have not met in the previous 12 months. The appropriate Technical Plenary may then vote to determine if these groups should be continued, disbanded or possibly combined with more active groups.

[In the past, some groups have not met for a considerable time and are no longer active. The existence of these groups can be misleading to those trying to understand what OMG is currently doing. This review mechanism allows for reviewing the status of Subcommittees and Special Interest Groups and taking some action when appropriate. This helps ensure the groups in OMG are aligned with the actual work being done within the organisation.]

Subgroups may set their own meeting schedules; in particular, they do not have to meet every time their Parent Body meets, nor are they prevented from organising meetings not co-located with those of the Parent Body, provided that in every case the relevant meeting notice and reporting criteria are met (see section 3.2). However, there are some restrictions on the decisions that a Task Force may take at a meeting that is not co-located with that of its Parent Body (see below).

[Practical travel considerations dictate that most Subgroups will indeed be co-located with meetings of the Parent Body. However, it may be useful to have stand-alone Subgroup meetings where (for instance) a Task Force wishes to expedite discussions leading to an adoption recommendation, or where a SIG wishes to hold a meeting at a trade show attended by several Representatives active in that Subgroup.]

SIGs, Task Forces and Subcommittees (but not Revision, Finalisation or Testing Task Forces) may generate discussion papers intended for distribution outside OMG. Such discussion papers shall not be adopted by their Parent Body, and do *not* represent the official position of any OMG Technical Plenary, or the OMG itself. Each such discussion paper distributed outside OMG shall include a cover page with the following statement:

This paper presents a discussion of technology issues considered in a Subgroup of the Object Management Group. The contents of this paper are presented to foster wider discussion on this topic; the content of this paper is not an adopted standard of any kind. This paper does not represent the official position of the Object Management Group.

3.7.1 Membership of OMG Subgroups

A Subgroup is composed solely of Representatives of OMG Members. Each type of group is chartered by simple majority vote of a Technical Plenary in the course of normal business.

Except where stated, the following rules apply to membership of all OMG Subgroups:

- Any OMG Member may send a Representative to attend any meeting of a Subgroup (even if the voting membership of that Subgroup is closed), with the exception of meetings of a Testing Task Force chartered to study a test suite requiring a licence, where the submitter of the certification request may request that Observers not be admitted to specific TTF meetings (see section 5.3). Subgroup discussions conducted electronically (for instance, by email or teleconference) shall also be open to any OMG Member Representative. OMG Members other than Analyst Members may send any number of Representatives to any meeting or electronic discussion, subject only to per-Member attendance limits that a meeting chair may have to impose if meeting space or other resources are limited. Analyst Members may send at most two Representative to at most two meetings of any particular Subgroup in any calendar year.
- Observers and Invited Guests may contribute to subgroup discussions at the sole discretion of the Subgroup's chair.

[In the interests of ensuring the efficient operation of any meeting, the chair may limit or eliminate the opportunity of any non-member of the subgroup to contribute to the discussion at any meeting.]

 A Subgroup's voting and membership rules (including rules for closed voting lists) also apply to any defined subset of the Subgroup membership established for a specific task, such as submission evaluation.

3.7.2 Subgroup chairs

3.7.2.1 Rôle of Subgroup chairs

The chair of a Subgroup is responsible for organising the activities of that Subgroup, including:

- Arranging meetings at times and places convenient for the Subgroup membership. If the Subgroup membership wishes to meet concurrently with its Parent Body and the Subgroup chair is unable to attend that meeting, it is nevertheless the responsibility of that Subgroup chair to arrange the meeting and appoint a facilitator for it.
- Announcing meeting arrangements to the entire OMG membership, including initial agenda for the meeting, at least 3 weeks in advance.
- Recognising the OMG Members represented, and which are entitled to vote.
- Encouraging broad participation of the TF membership.
- Ensuring that minutes of meetings are taken, and made available electronically to the entire OMG membership before the next meeting.
- Ensuring the smooth and orderly running of the meeting.
- Reporting on Subgroup activities to the Parent Body, including presenting Subgroup recommendations (if any).
- Keeping the Chair of the Parent Body apprised of the progress of the Subgroup.

3.7.2.2 Election and term of Subgroup chairs

Each Finalisation, Testing or Revision Task Force has a Chair or Co-Chairs set by the Charter of that Subgroup (see sections 4.4.1.2 and 5.3). All other Subgroups elect their own Chairs.

Where a Subgroup elects its own Chair, it may choose to elect either a single Chair, or several Co-Chairs. Where a Subgroup has more than one Chair, each Co-Chair has equal authority, and must be affiliated with a different Member. The term of an elected Chair or Co-Chair is at the discretion of the Subgroup itself; the Chair or Co-Chair may relinquish that position voluntarily or may be replaced by a vote of the Subgroup.

3.7.3 Subgroup Polls

Procedures for polls in Finalisation and Revision Task Forces are set out in section 4.4.1.3. Procedures for polls in Testing Task Forces are set out in section 5.

Polls in all other Subgroups are governed by this section 3.7.3.

OMG Members other than Trial, Analyst and Task Force Members are eligible to vote in any Subgroup poll. A Task Force Member may vote only in the Task Force, Subcommittee or Special Interest Group that has been linked to its specific Membership class by the Board of Directors. Trial and Analyst Members are not eligible to vote in any Subgroup poll. In addition, Task Forces and Subcommittees (but not Special Interest Groups) may create a closed voting list for polls on specific issues (see below). Unless explicitly over-ridden elsewhere in this document, a simple majority of the non-abstaining votes cast is necessary to pass any motion in a Subgroup.

[Task Force Membership, as described in section 2.3 of the OMG Bylaws, is not a single membership class, but instead a category of membership classes. The Board of Directors may, at its discretion, create a new membership class in this category and link that class to a single Task Force, Subcommittee or SIG that the Platform TC or Domain TC has previously chartered. Members in this class may participate fully in the work of the linked Subgroup, including voting (where permitted by the rules on closed voting lists) and making technology submissions (where the linked Subgroup is a Task Force). Such Members may also participate fully in any F/RTF for a specification whose adoption was overseen by a Task Force linked to their membership class. However, such Members have no voting rights in any other OMG Subgroup, F/RTF or OMG Plenary.]

Votes on behalf of a Member at any Special Interest Group, Subcommittee or Task Force meeting may be cast by any Representative of the Member or any individual named in a written proxy signed by the Member's Registered Voter. However, at no time will any Member have more than one vote in any poll conducted by any Subgroup, and where one Member names several proxy holders, it is their responsibility to determine amongst themselves which of them will cast the vote, and how.

Quorum for any Subgroup poll, including closed voting list polls and email polls, is defined as half the number of Members that are both eligible to vote in the poll, and have been represented in person at two or more of the preceding three meetings of the Subgroup co-located with meetings of the parent TC. If these calculations yield a quorum of less than three, then quorum for that poll shall instead be set at three. A Subgroup poll on a recommendation to the parent TC shall occur only at Subgroup meeting that is co-located with meetings of that TC.

A Subgroup may close the list of Members entitled to vote on specified issues, but is not required to do so. A closed voting list names Members, rather than specific Representatives.

[Subgroup voting lists may be closed to avoid late vote-packing in the Subgroup and encourage the establishment of a working core of Representatives.]

In order to close a voting list, a Subgroup must pass an appropriate motion, and the deadline for membership requests must be announced to the entire OMG membership a minimum of six weeks in advance. Where the voting list is for issues relating to a Request for Proposals (RFP), both the decision and the announcement may be made implicitly by including the closing date in the issued RFP's written timetable. Any OMG Member filing a Letter of Intent (LOI) with the OMG to submit a specification in response to that RFP will be automatically registered on the appropriate TF voting list. A Member may withdraw from a Voting List at any time by notifying the Technical Director in writing; withdrawal is effective upon delivery of the notice.

[Where the voting list closure is implicit in the issuance of an RFP, it is recommended that the closing date be at least 7 days before the date of the initial presentations, to give the TF chair time to compile and verify the list, and that the impending closure of the list be announced a further week before that deadline to give all Members ample reminder of the need to register.

See the OMG IPR Policy for details of how withdrawal from a voting list affects a Member's IPR obligations.]

Voting in polls at subgroup meetings shall be conducted by show of hands, or by calling the roll of eligible voters, at the Chair's discretion.

[Polls at face-to-face meetings are conducted in accordance with normal parliamentary procedure. See "The Meeting Chair's Vade Mecum" (pp/98-01-02) for concise guidance.]

Where a poll at a meeting requires documentation (i.e., on adoption of particular documents or based on the content of a document), one third of the Voting Members represented at the meeting may invoke the requirement that documentation supporting the poll must be available at least four weeks prior to the poll.

A Subgroup Chair may instigate an electronic poll on a motion at his sole discretion, provided there has been at least one face-to-face meeting of the Subgroup in the 12 calendar months preceding the initiation of the poll, and no Subgroup meeting is scheduled to take place for at least three weeks following the initiation of the poll. Electronic polls by Subgroups shall be announced by email to the Subgroup's email list, and also to the members of the Subgroup's

parent TC. Only Members eligible to vote in Subgroup meetings that have also been represented in person at one of more of the Subgroup's preceding three face-to-face meetings shall vote in an electronic poll. The completion deadline for a Subgroup electronic poll shall be set by the Chair to be no less than 7 and no more than 21 days after the initiation of the poll. The complete list of votes cast in the poll, and the result, shall be announced to the Subgroup email list and the members of the parent TC by the Subgroup Chair on completion of the poll.

3.7.4 Task Forces

In order for a Technology Committee to move quickly on technology adoption Items, most such Items will be delegated to a Task Force, which in due course will return to the parent TC with a recommendation.

Finalisation and Revision Task Forces are not governed by this section 3.7.3, but by sections 4.4.1 and 4.4.2. Testing Task Forces are not governed by this section 3.7.3, but by section 5.

Task Forces have the following characteristics:

- In order to expedite specification adoption, Task Forces may meet more often than their parent bodies.
- Task Forces deal primarily with technology adoption, and make adoption recommendations to their parent bodies.
- A Task Force has a Charter defined by its Parent Body, setting out its missions and goals.

A Task Force comes into existence when the parent TC creates a Charter containing a mission statement describing the purpose of the TF. This mission shall of course be strongly influenced by the TC's intent in creating the TF. A TFC must come forward during this chartering process to manage the affairs of the new TF.

[The motion to charter a TF must be on the published agenda of the parent TC; see section 3.4.]

A TF's main purpose is to manage adoption of new OMG Specifications via the Request for Proposals (RFP) or Request for Comment (RFC) processes. Task Forces are the only Subgroups that may recommend issuance of a Request for Information, Request for Proposals or Request for Comment by their parent TC.

3.7.5 Subcommittees

Any OMG Technical Plenary may charter subcommittees. Subcommittees are long-standing entities with general portfolios with the following characteristics:

- Subcommittees deal with procedural or other non-standards issues, and make non-standardisation recommendations to their Parent Body.
- Subcommittees set their own missions and goals.

3.7.6 Special Interest Groups

Special Interest Groups define their own missions and goals, and serve as a forum for OMG Members to discuss technologies in specific areas of mutual interest, including hearing relevant presentations from Members and Invited Guests. SIG meetings are usually co-located with OMG plenary meetings

SIGs make no recommendations to their Parent Body, but can generate discussion papers for the industry covering their technology area.

3.8 Documents and Distribution

All documents generated during the deliberations of the OMG Technical Plenaries and their Subgroups shall be made available to OMG staff in machine-readable form, unless this is prevented by copyright or other considerations beyond the control of OMG Members. The Chairs of the respective Technical Plenaries shall be responsible for organising the storage of, naming/numbering of, and electronic access to, all such documents.

The preferred electronic document formats shall be determined from time to time by the OMG technical director.

[At the time of writing the preferred formats are ASCII text and ISO 32000-1:2008 (PDF). Postscript, ISO/IEC 26300:2006 (OpenDoc 1.1), ISO/IEC 29500:2008 (OOXML, .docx), MS Word .doc format and Framemaker file formats may additionally be used.]

The primary medium for the distribution of documents within the Technical Plenaries and their Subgroups shall be public data networks, using whatever widely-accessible technology is deemed appropriate from time to time by the OMG Technical Director (such as FTP, electronic mail, or the World Wide Web, all via the Internet). Distributing documents on paper (via the international postal service or fax), while deprecated, is not prohibited.

Internet mail shall be used for day-to-day discussion between OMG Members. OMG staff shall be responsible for the maintenance of mailing lists for the various OMG Technical Plenaries and Subgroups.

4 Procedures for Adoption of Submissions

4.1 General Adoption requirements

The requirements in this section 4.1 apply to all OMG Specification adoption, whether initiated by RFP, RFC, RTF, FTF, or action of a TC outside the normal request processes.

Domain Members may make specification adoption proposals to the Domain Technology Committee and its Task Forces. Platform Members may make specification adoption proposals to the Platform Technology Committee and its Task Forces. Contributing Members may make specification adoption proposals to any Technology Committee and its Task Forces. Task Force Members may make specification adoption proposals to a Task Force only if that Task Force is linked to their Task Force Membership class.

The conventional procedure for OMG Specification adoption begins with a TC chartering a Task Force to make recommendations in a particular technology domain. This TF issues an RFP soliciting technology, possibly preceded by an RFI to gather background information from the industry. The RFP usually results in a single Submission, which the TF recommends for adoption. This Submission must be endorsed by the AB before being passed to the relevant TC for a possible technology adoption vote. If this vote passes, the Submission is passed to the Board of Directors, and if approved becomes an Alpha Specification, and then enters a finalisation process, during which a Finalisation Task Force of Member Representatives from submitters and other involved parties resolves any minor issues that arise as the Specification is being implemented by the wider community. The resulting Beta Specification must be endorsed by the AB and relevant TC before ratification by the Board of Directors as a Formal Specification. During its life a Formal Specification may have further minor revisions made to it by Revision Task Forces chartered by the appropriate TC, producing Beta Specifications of a new minor version. These revisions must also be endorsed by the AB and parent TC before ratification by the Board. Any major revisions and enhancements are made to the Specification by running an appropriate adoption process, followed by finalisation of the newlyextended Specification. At the end of its life a Specification is retired using the Request for Retirement procedure.]

4.1.1 Use of models

At the discretion of the relevant Task Force, Technology Committee and the Architecture Board, Submissions being considered for OMG adoption by the OMG Technical Plenaries may be required to employ a platform-independent model (PIM), specifying the architecture and structure of the Submission in a way that is independent of any implementation technology. Where use of a PIM is mandated, Submissions may further be required to refer to a specific PIM already adopted by OMG (specifying modifications or extensions to that PIM if necessary), or may be required to specify a new PIM.

[PIMs will typically be required where the Specification is for a service accessed via middleware, whether a platform service usable in many application domains, or a service that's highly specific to one application domain. PIMs will typically not be required where the Specification is for a modelling language or part of a middleware platform, such as a programming language mapping.]

Where use of a PIM is a requirement in an RFP response, that requirement shall be explicitly stated in the RFP, and the modelling language or languages to be used may be identified. Adoption of a Submission including a PIM implies adoption of that PIM by OMG.

Any Submission that uses a PIM shall also include one or more Platform-specific models (PSMs), each derived from a part of, or the whole of, the identified PIM. The design decisions used in the derivation process shall be documented in the Submission, and the whole of the PIM shall be mapped onto the PSM or PSMs in this way.

[Submissions may contain multiple PSMs, each specifying the whole of the same PIM for a different implementation technology, or multiple PSMs which taken together specify one complete PIM using multiple implementation technologies.]

For each PSM in a Submission, the Submission shall include either:

- 1. A normative algorithm for generating an implementation skeleton in that technology (optionally augmented by a non-normative specification of the resulting skeleton), or:
- 2. A normative Specification of the implementation skeleton, which shall be accompanied by a non-normative description of the technique used to derive that skeleton.

A Submission shall clearly specify which of these two approaches (normative derivation algorithm or normative skeleton) it has used for each PSM. The derivation technique (whether normative or non-normative) may be specified by

reference to an OMG Specification.

[In this context, an "implementation skeleton" is an outline of a complete implementation, possibly lacking parts that will be filled in later, but at least showing the shape of the implementation and its external interfaces. Examples might include CORBA IDL definition, XML DTDs or Schemas, or Java Interfaces.]

4.1.2 Adoption polls

The recommendation to the BOD of a Submission for acceptance as an OMG Specification, or the recommendation for a Beta Specification to become a Formal Specification, requires the endorsement of the AB (voting either at a meeting or electronically, according to the procedures described in section 3.5.4), and affirmative votes from two-thirds (2/3) of the Voting Members of the appropriate TC that cast a non-abstaining vote in an electronic poll (conducted according to the procedure described in section 3.5.3).

[It was felt that this most important vote of all should be a poll of an entire Voting TC membership, rather than the portion attending a particular meeting, to allow all OMG Members entitled to vote to have a say on the issue.]

Upon adoption by the BOD as an OMG Specification, a Submission becomes an Alpha Specification.

[For example, upon adoption by the BOD, the Submission to the "General Facilities RFP" would become the "General Facilities 1.0alpha" or "General Facilities 1.0a" Specification. A Submission to the subsequent "General Facilities 2 RFP", soliciting a major revision to that Specification, would become the "General Facilities 2.0a" Specification. In exceptional circumstances, an RFP for a new minor version of a Specification may be issued, so that the "General Facilities 2.4 RFP" would lead to the adoption of the "General Facilities 2.4a" Specification.]

Submissions resulting from an RFP evaluation may be recommended to the BOD for adoption conditional on certain changes to the Specification that the proposing TC deems necessary, within a specified time frame.

[This clause is entirely to allow a TC to vote for *conditional* adoption of a Submission. This adoption would be provisional, based only the timely completion of the TC's suggested changes in the Specification.]

4.1.3 Commercial availability

A TC recommendation for the BOD to adopt a Submission is conditional on the

BOD establishing that an implementation of the Specification will be made available to prospective users in a manner acceptable to the BOD.

[See the separate policy statements from the Board and its subcommittees on what constitutes an acceptable implementation, and under what circumstances the Board may accept Specifications whose implementation would necessarily require licensing IPR.]

4.2 Steps to Specification Adoption by RFP

4.2.1 Outline of RFP process

Task Forces are responsible for generating RFIs and RFPs requesting information and proposals from industry. TFCs shall co-ordinate issuance of RFIs and RFPs with the Chair of the parent TC, who shall bring issuance of the request to a poll in TC meetings. The issuance of an RFI is intended to gather information for the benefit of the TC, or to help plan a future specification adoption process. The whole RFP process is as follows:

- 1. An RFP is usually drafted by the Task Force responsible for that technology area, and passed to the TF's parent TC for issuance. The content of the RFP is subject to the requirements outlined in section 4.2.2 below.
- 2. A TC may only issue an RFP for which it has obtained AB approval, so that the AB can verify that the RFP contains no requirements that are incompatible with the OMG's technical architecture. Having obtained this approval, the TC poll to issue the RFP may take place at a meeting, or electronically (by fax or email, using the procedure described in section 3.5.3). The initial submission date of an RFP must be at least twelve weeks from its issue date (which is the date on which the TC vote passes).
- 3. Each OMG Member that intends to respond to an RFP, whether individually or jointly with other Members, must submit a Letter of Intent to respond (LOI) by a deadline specified in the RFP. The LOI date, which is explicitly stated in the RFP, is typically about 60 days before the initial Submission deadline. OMG will only consider Submissions from Members that have provided Letters of Intent, that hold the appropriate Membership level (Contributing or Platform for Platform RFPs, Contributing or Domain for Domain RFPs) on the initial Submission deadline, and that maintain an appropriate Membership level for the remainder of the RFP process described in this section 4.2.1. If a Member withdraws its LOI or subsequent Submission at any stage during the RFP

process then it cannot subsequently re-enter that RFP process. Any withdrawal of LOI or Submission must be made in writing.

- 4. The membership list for voting on issues related to the RFP may be closed, as described in section 3.7.4.1.
- 5. Initial Submissions to the RFP shall be made available electronically to the entire OMG membership on or before the specified initial Submission deadline. Each RFP Submission deadline shall be not less than four (4) weeks prior to the date of that Submission's presentation to the appropriate Task Force. RFP Submissions shall use the Submission template published by the AB. All initial Submissions shall be written specifications capable of full evaluation, and not just a summary or outline.

[In addition, anyone who makes a Submission or Contribution to an OMG Specification must identify any patents of which they are aware containing Essential Claims they believe will be infringed if the Submission or Contribution is included in the OMG Formal Specification and implemented. See the OMG IPR Policy for details.]

- 6. Presentations about the Submissions are made by the submitters to a meeting of the TF that recommended issuance of the RFP. The TF begins deliberation on the responses to the RFP.
- 7. One or more further revised Submission deadlines may optionally be set by the Task Force, giving Members who have made initial Submissions the opportunity to modify those Submissions. Only Members who made an initial Submission are eligible to make a revised Submission. Should a revised Submission deadline be set, there is no obligation on a submitter to alter its Submission; under these circumstances that Member's most recent Submission will be re-examined by the TF. However, if a submitter explicitly withdraws its Submission (in writing, to the OMG Technical Director), then it will not be reconsidered, and furthermore the submitter may not subsequently make another response to that RFP.
- 8. Except as described below, neither a TF nor TC poll on a recommendation to adopt a particular Submission may be initiated until at least the second meeting of the relevant TC following the date when that Submission was made.

A TF may vote on a motion to recommend a Submission earlier than the second TC meeting following the date the Submission was made only if the following three conditions are met:

- At least one of the submitters makes a formal request in writing (by letter or fax to OMG headquarters), at least four weeks before the beginning of the TF meeting in question, that the evaluating TF(s) make an adoption recommendation at that meeting.
- The discussion and poll on an adoption recommendation appear on the published TF agenda along with the exact, correct time during which the discussion (and possible poll) will be held.
- The motion to consider voting upon an adoption recommendation passes with at least 3/4 of the Members present and on the voting list (or 3/4 of those present and eligible to vote if there is no closed voting list) voting affirmatively to consider such a vote.

[This procedure sets the expectation that Submissions are presented to the evaluating TF (and recommending TC) at the meeting immediately following the due date. Voting Members then have the time until the next meeting to evaluate the Submissions with the benefit of having had presentations and the opportunity to discuss and clarify issues both with the submitters, and amongst themselves.

The procedure for holding an "early" vote is designed to allow Members sufficient time to evaluate and reflect upon Submissions. Only in the case where there is an overwhelming consensus that such an "early" vote will not disenfranchise Members from conducting a reasonable evaluation is such a vote allowed to proceed.]

- 9. No earlier than the date of the initial presentations, the TFC of the TF considering the RFP responses reports on the recommendation of the TF to the parent TC for adoption of one or more Submissions, potentially with modifications. The TFC should provide enough commentary of the TF's deliberations to allow TC voters to make an informed decision based on this recommendation.
- 10. Also no earlier than this meeting, the TC that issued the RFP begins a poll on a motion recommending that the BOD adopt one or more Submissions, taking into account the TF recommendation. This TC may only recommend adoption of a Submission whose compliance with the OMG's technical architecture has been endorsed by the Architecture Board. In those cases where the TF recommends more than one submission for adoption, those submissions should complement each other.

[The procedure outlined above provides a minimum adoption process of about twenty-four weeks. Voting Members are protected from adoption of Submissions that they wish to vote against by the minimum period between responses and adoption vote, and by the fact that the adoption vote is conducted by fax or email poll of the whole voting membership of the TC in question. This foreshortened process allows a TC to adopt a particular Specification quickly, though the procedure will generally take longer than four meetings.

Typically, the TF recommends one Submission per RFP, but in some cases more than one Submission may be recommended when the multiple Submissions complement each other.]

All Members participating in making Submissions to OMG are bound by the same OMG requirements, including documentation deadlines. To this end, at least the LOI and initial Submission deadlines shall be set out in the published RFP. If necessary, either the responsible Task Force or the parent TC may modify the RFP's timetable after it has been issued, subject to the following conditions:

- All new or changed deadlines must apply equally to all submitters or potential submitters, and must fall at least 14 days after the date of the motion that changes them.
- Neither the Letter of Intent deadline nor the initial Submission deadline may be moved to an earlier date by the Task Force.
- A revised Submission deadline may only be eliminated or moved to a date earlier than its existing date if the initial Submission deadline has already passed, and with the unanimous consent of all submitters that have not explicitly withdrawn from the process.

[If a Task Force wishes to admit a submitter to the RFP process retrospectively, after one or more of the RFP deadlines has passed, it may only do so if all other potential submitters are also offered the same opportunity, and given reasonable notice of this. If a previously-published deadline is eliminated or brought closer (but not if it is delayed) then the submitters (or potential submitters) must be consulted, since they will have used the original deadlines when allocating resources to their submission effort. In general, moving dates in published RFP timetables, whilst permitted, risks creating confusion, and should be avoided where possible by setting realistic timetables when RFPs are issued.

RFPs typically require that LOIs provide a statement of a companies' intention to meet OMG's commercial availability requirements. In order not to place undue constraints on companies working towards joint submissions, companies are not obliged to explain in the LOI whether their intended Submission will be an individual Submission or one made jointly with one or more other companies.]

The issuance of RFIs and RFPs shall be accomplished by such means (which may include methods such as advertising, press releases, direct mailings and/or other actions, but giving due regard to the budgetary limitations of OMG) as are intended to bring the request to the attention of as wide and representative a section of the industry as possible (including non-Members) and generate the most technically valuable and diverse response.

Responses to RFPs shall be made available to OMG in machine-readable form.

4.2.2 Requirements for all Requests for Information and Proposals

All RFIs and RFPs must include:

- A statement of who may respond to the Request, including the required OMG membership level of submitters, if any.
- A statement that responses shall not include proprietary information.
- A stipulation that responses subject to copyright must include a waiver of that copyright for unlimited duplication by OMG staff, and a limited waiver of that copyright to allow OMG Members to make up to fifty copies of the document for OMG review purposes only.
- A clear statement of all Submission and other deadlines relevant to the RFP or RFI (e.g. for RFPs, the deadlines for Letters of Intent to respond, initial and revised responses). The deadline for any response to either an RFI or an RFP shall be at least four (4) weeks before the first OMG meeting where those responses will be considered.

[This reduces the risk that TC and Task Force members arrive at meetings to review proposals without having seen the Submissions and provides time for OMG to send papers to its Members.]

• A clear statement of any other mandatory requirements on responses.

4.2.2.1 Requirements specific to RFPs

In addition to the above, RFPs shall include a stipulation that responses must provide a proof of concept statement to explain the ways in which their specification has been demonstrated to be technically viable.

[It is important for a TC to understand the technical viability of an RFP response during the evaluation process. Technical viability has a lot to do with the state of development of the technology being submitted. This is not

the same as commercial availability which is an OMG BOD consideration. Proof of concept statements can contain any information deemed relevant by the submitter.

Some examples might be:

- This specification has completed the design phase and is in the process of being prototyped.
- This specification has been in a beta test program for 4 months.
- This specification has been announced and is currently implemented in product xyz which has a customer base in excess of 500 users.
- This technology has been utilised in five products, all of which are in the final stages of testing.]

OMG Specifications (and therefore RFP responses) may reference specifications from other organisations. Incorporating specifications by reference requires that the OMG Specification clearly designate what portions of the other specification are referenced, the version of the other specification, a complete reference to the other specification, and complete information on how to obtain the other specification. Whenever possible, submitting organisations are asked to make available to OMG the referenced specification in machine-readable form.

Every RFP shall include a statement under section 4 of OMG's IPR Policy specifying the authorised IPR Mode under which the RFP Adoption Process will operate.

4.2.2.2 Requirements specific to RFIs

In addition to the requirements outlined in 4.2.1, an RFI must include a statement of who is eligible to respond to any follow-on Request for Proposals.

4.3 Request for Comments Procedure

In order to allow adoption of a Specification for which a Contributing, Domain, Platform or Task Force Member has an acceptable commercially-available implementation, there is a second path to technology adoption which may operate in lieu of the Request for Proposals procedure.

A Contributing, Domain, Platform or Task Force Member with technology that:

- is relevant to a current Task Force adoption plan;
- conforms to all applicable OMG Specifications;
- has a commercially-available or commercially-used implementation; and

is without material competition

may make an unsolicited Submission to the TFC of the relevant Task Force for presentation to that TF for consideration through a Request for Comments. A Contributing Member may make an RFC submission to any Task Force, a Platform Member may only make an RFC submission to a Task Force chartered by the Platform TC, a Domain Member may only make an RFC submission to a Task Force chartered by the Domain TC, and a Task Force Member may only make an RFC submission to a Task Force linked to its Membership class.

[There are cases in which Contributing, Domain, Platform or Task Force Members have an important relevant technology in place and commercially-available and would like that technology to be recognised as a standard so that customers may comfortably use the technology. When the technology is relevant, the implementation is acceptable, and no competition for the technology is likely to arise, the RFC process may be proposed in lieu of the usual RFP process. The RFC procedure allows an adoption cycle for exactly this case, and also covers the potential for adoption of standards built by other standards organisations and consortia. Although the RFC process can be somewhat faster than the RFP process, it should only be used for adopting complete Specifications without material competition. Attempting to use the RFC process to adopt a controversial specification is likely to end with a failure to gain the approval of any of the Technical Plenaries or the Board of Directors.]

The steps in the RFC process are:

- 1. One or more Contributing, Domain, Platform or Task Force Members submit to the TFC of the relevant Task Force an unsolicited proposal for adoption through the Request for Comments procedure. This proposal shall conform to the AB submission template, and shall include:
 - A rationale stating how the proposal fits into that Task Force's plan of specification adoption
 - A rationale stating how the proposal meets the criteria for use of the RFC process in lieu of the usual RFP process
 - A clear statement of the proposed conformance criteria for the Specification
 - The name and contact details of a Representative of each Submitter to act as liaison with OMG regarding the Submission

- A Disclosure under section 3 of OMG's Intellectual Property Rights policy identifying any patents containing Essential Claims that the Submitter(s) believe will be infringed if the Submission is included in an OMG Formal Specification and implemented.
- A statement under section 4 of OMG's Intellectual Property Rights policy specifying under which of the authorised IPR modes the proposed RFC Process will operate.
- If a submitted document is copyrighted, a waiver of copyright for unlimited duplication by OMG, and a limited waiver of copyright that allows each OMG member to make up to fifty (50) copies of the document for review purposes only.
- 2. The Task Force that received the proposal may recommend its issuance by its parent TC as an RFC. The TF may request a presentation of the proposal from the Submitter before taking this decision.
- 3. The TC obtains AB confirmation that the Submission complies with OMG's technical architecture and may then, by majority vote, cause OMG to issue the Submission as an RFC. If so, the comment period then opens.
- 4. During the RFC period, any party (including all classes of OMG Members, as well as any non-Member of OMG) may send comments on the Submission to OMG Headquarters, to an address announced with the RFC issuance. OMG staff will manage collection of the comments.

[It is important that anyone may make a comment on an outstanding RFC, since there is no other public comment or response period for this Specification. RFCs are to the industry, not just Members (as are other Requests), and are publicised just as are other requests.]

5. The comment period closes forty (40) days later, or four (4) weeks before the start of the next TC meeting, whichever is the later. At this point the RFC and all comments received are sent back to the issuing TF, which decides whether they contain any significant objection to OMG adoption of the Submission. The TF decides, by majority vote, whether to recommend the Submission to its parent TC for adoption.

[With approximately 4 TC meetings per year, the comment period will normally be about 60 days.]

6. If the TF recommends adoption, the parent TC shall obtain Architecture Board approval before making a final decision on whether to recommend

the Submission for adoption by the Board of Directors, using an electronic poll needing a 2/3 majority to pass in accordance with the process described in section 3.5.3. The ballot in this poll shall include not only the Submission, but also all comments received during the comment period.

[When the TC adoption vote begins the submitter(s) can expect to receive the standard Questionnaire from the Board's Business Committee asking about IPR ownership of the Specification and commercial availability of implementations, and requesting a grant of copyright for publication.]

4.4 Finalisation and Revision

Adoption by the Board of Directors of a Submission marks the end of the technology adoption process, and results in an Alpha Specification. All Alpha Specifications shall subsequently be finalised using the procedure set out in section 4.4.2, to create a new Formal Specification. Unless specifically stated otherwise in the Submission, this Specification shall have a new major version number (Revision x.0). A Formal Specification may optionally then be subject to one or more revisions, each of which shall be carried out by a Revision Task Force and shall comply with the Specification's Scope clause. Each Revision leads to a new minor version-number of a Formal Specification (Revision x.y becomes Revision x.(y+1)). In very exceptional circumstances, it may be necessary to create a new minor revision of a Specification via an RFP or RFC adoption process rather than via Finalisation or Revision. If so, the intended Specification's minor revision number shall be explicitly stated in the Submission.

[Adopting a new minor revision via a Submission may be appropriate where the internal structure of a Specification requires such radical revision that the RTF process would impose too great an administrative overhead. However, the changes to the externally-visible behaviour specified should nevertheless be consistent with a minor revision of the previous Specification. Major Specification revisions should always have new major version numbers.]

If a Revision Task Force expires without making a recommendation of a Revision of the Formal Specification, a TC may (if desired) extend the deadline or reopen the TF membership.

In some specific circumstances an RTF (but not an FTF) may recommend changes that extend a Specification (see section 4.4.1.1 below). Under all other circumstances enhancement of a Formal Specification shall only be accomplished by a new adoption process (whether RFP or RFC), creating a new Alpha Specification, which shall then be finalised to create a major revision of the Formal Specification (Revision x.y becomes Revision (x+1).0Alpha, which is then finalised as Revision (x+1).0).

4.4.1 Procedures for Finalisation and Revision Task Forces

With the exception of the extension provision set out in section 4.4.1.1 below, the procedures set out in this section 4.4.1 apply to both RTFs and FTFs, and for simplicity the term "F/RTF" is used to signify both RTFs and FTFs. Further procedures that are specific to Finalisation Task Forces, and do not apply to Revision Task Forces, are set out in section 4.4.2 below.

4.4.1.1 Scope

An F/RTF is chartered by the appropriate TC to address Issues reported for one or more particular OMG Specification(s), and to decide whether changes are necessary in response to those Issues.

An F/RTF may recommend changes that provide clarification of the wording without changing its intent, or minor revisions that correct the detail of the Specification without adding or removing significant functionality.

Enhancements to the Specification are always outside the scope of an FTF, and shall be deferred, either to a later adoption process (see section 4.2), or in some specific circumstances to a later RTF (see next paragraph).

Unlike an FTF, in certain circumstances an RTF may respond to an Issue by proposing an extension that adds functionality to a Specification. An RTF may only propose extensions to a Specification if they have been independently, formally verified to be strict extensions of that Specification via a documented chain of reasoning, and if the RTF's report is delivered before 15th September 2020. RTFs shall not propose extensions that break backwards compatibility with the Specification being revised, although deprecation of identified features of a Specification is permitted.

[This limited ability to extend a Specification within an RTF would, for example, allow an ontology to be easily extended with a few new terms that are within the Specification's scope in order to maintain market relevance. This would not break previous usage, nor impose additional testing burdens on end-users that do not use the additional terms.]

4.4.1.2 *Charter*

An F/RTF is chartered by the appropriate TC. The Charter must:

• Identify the OMG Specification(s) under consideration (including their status as Alpha, Beta or Formal Specifications). Where an F/RTF charter

identifies more than one specification, all these specifications shall have been recommended for adoption by the same Task Force.

[One F/RTF may be chartered to work simultaneously on any number of Specifications, and deliver a single Report accompanied by multiple, separate Beta Specifications.]

• Include a list of named Representatives to become the Participants in the F/RTF. This list will usually include a Representative from each of the Members whose submissions contributed to the OMG Specification(s) under consideration, plus other appropriate interested parties. A Contributing, Platform, Domain, Influencing, Government or University Member may be represented on any F/RTF. A Task Force Member may only be represented on an F/RTF chartered to revise a specification whose Alpha version was recommended for adoption by a Task Force linked to its membership class. No OMG Member may cast more than one vote on an F/RTF.

[Participants must identify patents of which they are aware that contain Essential Claims they believe will be infringed by implementations of the OMG Specification being revised. See the OMG IPR Policy for details.]

- Identify which Representative(s) is/are to chair the F/RTF.
- Set a deadline for comments on the Specification(s) from OMG Members and others.
- Set a date by which the F/RTF shall deliver its report. This is the latest possible delivery date the F/RTF ceases to exist after this date, and cannot make further revisions to the report thereafter.

[Since the F/RTF ceases to exist after this final possible delivery date, it is strongly recommended that the date be set a week after the TC meeting at which the AB considers the report and the TC begins its adoption vote. The report itself should be published four weeks before this TC meeting, to allow time for TC review. Any minor problems noted during this review can then be corrected by the F/RTF while it still exists. Presenting the report after the F/RTF has been dissolved removes any possibility of correcting such problems.]

Except for resignations or automatic removal of delinquent members (see 4.4.1.3 below), any change to the F/RTF Charter (including the adding of new members) shall only be made by the TC that created the Charter. However, should the chair cease to be a member of the F/RTF, the members of the F/RTF shall elect another F/RTF member as acting chair until the next meeting of the

appropriate TC.

[An FTF Charter must also include further information - see section 4.4.2 for details.]

4.4.1.3 Meetings

The chair of the F/RTF may organise discussion and gather votes by any appropriate means; in particular, the F/RTF need not meet, but may conduct all its business by email or teleconferences. Only F/RTF members may vote; however, in common with all OMG Technical Plenaries and Subgroups, the meetings, conference calls and email discussions of the F/RTF are open to Representatives of all OMG Members, and non-members of the F/RTF may contribute at the chair's discretion.

The chair is responsible for moderating discussion of an issue, ensuring that a response is formulated, and organising the poll on that response. When the chair initiates an email poll he must set a voting deadline and take reasonable steps to ensure the F/RTF members are aware of it. To pass any motion in an F/RTF requires a simple majority of the non-abstaining votes cast. Quorum for all F/RTF polls, however conducted, is half the F/RTF membership.

Where a response changes text that originated from a particular Submission, an F/RTF Representative of a Member that made that Submission may veto the response at the poll if:

- The poll is initiated within 18 months of the date of adoption of the Submission by the Board, and
- The Member in question has satisfied the criteria established by the BOD (or its appropriate subcommittees).

An ordinary "no" vote is not considered an automatic veto; the veto must be stated explicitly.

[This veto rule applies to any RTF or FTF that works on a Specification within 18 months of its initial adoption by the Board of Directors. Original submitters commit to making implementations commercially available within 12 months of OMG's initial adoption. The ability of any of the original submitters to veto potentially disruptive changes ensures that technology can be made available that is, at the time of its introduction and for a reasonable time following (6 months), fully compliant with the current OMG Specification. It also helps to avoid, at least during the initial 18 month period, capricious changes promoted by parties that do not have a direct investment in the viable commercialisation of the technology. However, the

veto is limited to submitters that have satisfied the Board that they have complied with or will comply with their commercial availability commitment; this judgement is usually made by the Board's Business Committee, based upon responses to a questionnaire sent to submitters whilst the TC adoption recommendation vote is in progress.]

A Representative on the F/RTF who fails to vote in a contiguous sequence of at least two polls that complete during a period of at least two weeks is automatically removed from the F/RTF. A proxy vote or a vote of abstain is considered a vote for this purpose.

A Member may withdraw from an F/RTF at any time by notifying the Technical Director in writing; withdrawal is effective upon delivery of the notice.

[See the OMG IPR Policy for details of how withdrawal from a voting list affects a Member's IPR obligations.]

4.4.1.4 Normal Deadlines

The F/RTF is not obliged to respond to Issues received after the comment deadline, with the exception of Urgent Issues (see below). Issues received before the comment deadline must be addressed by modifications to the Specification, or by a brief explanation of why no modification is appropriate (e.g. either that the comment is unfounded, or that the resolution would be outside the scope of the F/RTF).

4.4.1.5 Urgent Issues

In response to urgent requests for clarifications to a Specification ("Urgent Issues"), the OMG shall provide clarifications of specific issues.

[Issues may arise that require interpretation or clarification of a Specification in a very short period of time. For example, there may be disputes over interpretation during the course of conformance testing in the context of a branding program, or urgent clarifications required by a vendor during product implementation. Resolution needs to occur within a very short period of time (approximately 2 weeks), and should result in modifications on a point-by-point basis.]

Urgent Issues shall be directed to the OMG Technical Director (or his appointee), who will determine whether the issue is appropriate for urgent resolution, and if so direct it to the appropriate F/RTF. If no appropriate F/RTF is currently active, the Architecture Board will be responsible for resolving the issue. The Technical Director (or his appointee) will propose specific wording for the clarification to the committee (either the F/RTF or AB). The committee is then at liberty to vote

on the proposed clarification or to propose other clarifications. The issue is deemed closed when a particular clarification has been accepted by a poll of the F/RTF members (or the AB in the event there is no FTF or RTF). If a period of two weeks has passed from the date the Technical Director (or his appointee) declared the Issue as Urgent, and no clarification has been accepted, the Technical Director (or his appointee) shall determine the appropriate clarification.

[A clarification (in the sense used here) typically eliminates an ambiguity by narrowing the possible interpretations of a Specification when there are multiple, incompatible interpretations. In cases where a Specification is not logically consistent, a clarification may also render a part of a Specification void or add new content, only inasmuch as it is necessary to make the Specification consistent. This process must never be used to extend a Specification's functionality.

The deployment of the Architecture Board in this rôle is intended as a backstop, a last resort in case an appropriate F/RTF is not active. The Architecture Board should by no means become the "normal" vehicle for resolving issues of this nature. It is the responsibility and duty of the Technology Committees to charter F/RTFs for OMG Specifications and maintain their readiness to respond as needed.

It will most likely be the case that committee discussions and polls on urgent issues will be conducted electronically. OMG staff will maintain appropriate email and document exchange mechanisms to facilitate this process.]

Resolutions of Urgent Issues will be formulated and maintained as isolated revisions to the Specification, published as "dot dot" revisions of the Specification. Any revisions generated in response to Urgent Issues shall be incorporated into the final recommendation produced by the F/RTF. Should there not be an appropriate F/RTF, or if the F/RTF does not produce a recommendation before its delivery deadline, any clarifications produced in this manner will automatically and collectively constitute a recommendation of revision. Once a clarification has been accepted, it should not be revisited by the F/RTF during the current revision cycle.

[The prohibition against revisiting a clarification is not intended to shackle the F/RTF, but to give clarifications generated by this process some stability. The requirements of branding programs are the primary motivation for this process. An Urgent Issue that alters a branding test suite may affect the implementation of shipping, branded software products, requiring one or more vendors to alter their products to conform to the Specification as clarified. It is reasonable for vendors to expect that the clarification will not be arbitrarily reversed simply because the balance of opinion in an F/RTF shifts for some reason (e.g., a change in membership) before its final revision proposal is recommended to the parent Technology Committee. The need for

stability is balanced against the need for TC approval. It is possible for the TC to reject the recommendation of an TF (and thus, a set of clarifications), but our assumption is that the TC understands the consequences of such a decision and would only do so under extraordinary circumstances.

As an example: If a Specification's current version number is 2.1, the Specification with an Urgent Issue resolution incorporated would be published as version 2.1.1. When an F/RTF produces its revision recommendation (either explicitly or by default), the clarifications will be folded into the overall revision, resulting in revision 2.2. If the F/RTF fails to produce a recommendation, OMG staff will collect clarifications into a revision recommendation, which if adopted confirms version 2.2.1 as the current Formal Specification.]

4.4.1.6 Report

The F/RTF deliverable is a Report listing comments received by the F/RTF and the resolution, if any, for each comment (referred to by its Issue Number), including how F/RTF members voted on the resolution. Each resolution must be expressed as a list of precise wording changes made. The Report must be accompanied by a complete revised Specification which includes change-marks indicating where issue resolutions were applied; however, if this Specification and the Report disagree, the Report takes precedence.

Any interim versions of the Specification published by the F/RTF during its life, and the revised Specification delivered with the report, shall be labelled as Beta Specifications, with a sequence number if required.

The F/RTF shall conduct an explicit poll to approve the specific wording of any Beta Specification that it delivers. This vote shall be conducted according to the normal quorum and majority voting rules.

[Participants in an OMG FTF or RTF which approves a Beta Specification for publication may incur obligations under OMG's IPR Policy - see that Policy for details. If a Participant votes "No" in this poll for any reason, but is outvoted, that Participant is advised to consult the IPR Policy to ensure he/she understands any possible ramifications.]

4.4.2 Finalisation

When a TC recommends a Submission for adoption by the Board of Directors, the recommendation shall if necessary include a proposal on how the resulting OMG Specification is to be grouped with other OMG Specifications for publication as a single Formal Specification.

After the initiation of a TC vote to recommend adoption of any Submission, the

TC shall charter a Finalisation Task Force (FTF) for the resulting OMG Specification, or for the group of OMG Specifications that the TC has recommended be published together.

[The FTF is normally chartered before the Board of Directors votes on the TC adoption recommendation. Should the Board of Directors decide to reject the recommendation, any already-chartered FTF for that Submission serves no purpose, and is automatically disbanded.]

The FTF operates according to the procedures described in section 4.4.1, with additional procedures laid out in this section 4.4.2.

The FTF delivery deadline shall be no more than 14 months after the date of its chartering. In addition to the content set out in section 4.4.1.2, the Charter for an FTF shall specify a deadline for publishing a Beta Specification, which shall fall at least 28 calendar days before the comment deadline. Before publication, this Beta Specification shall be voted on by the FTF (to ensure that it correctly reflects the original submission) and checked by the Staff Editor (to ensure adherence to formatting and style directives).

The Beta Specification shall be in a document format and style determined by the OMG Technical Director. Where a Submission is an enhancement (or one of a set of enhancements) to a Formal Specification, this Beta Specification shall be a textual integration with that Formal Specification.

[The first task of the Finalisation Task Force is to take the Submissions which have gone through the adoption process and generate a single Beta Specification from them. This may involve integrating several Submissions with each other, and possibly also with an existing Formal Specification which they modify. It is this Beta Specification which will be used by third party implementers, and any issues arising from their implementation experience should be incorporated by the FTF in generating its report. Although it is not appropriate to dictate exactly how they divide the work, it is essential that the FTF and the Staff Editor co-operate in producing the Beta Specification document.]

The Beta Specification is made generally available on or before the publication date set in the FTF Charter, but in such a way as to make it clear that it is not (yet) a Formal Specification. If it is an enhancement to a previous Formal Specification, it does not supersede that Specification until it has been ratified as a Formal Specification by the Board of Directors at the end of the finalisation phase. Formal Specifications may not reference or have dependencies on Alpha or Beta Specifications.

[Any other RFP process that needs to refer to this Specification should in general use the current Formal Specification, not an Alpha or Beta

Specification, because of the likelihood that the latter will change. Where the this is impractical (e.g. where the Specification is not a revision of an existing Formal Specification, but nevertheless it seems essential immediately to start another dependent technology adoption) then submitters should be explicitly made aware that the Alpha or Beta Specification may change.]

The FTF uses the procedures described in section 4.1 to decide whether changes in response to reported Issues are necessary or appropriate.

[If an Issue demands immediate resolution in order not to delay implementation of the Specification or related products such as test suites then it should be proposed to the OMG Technical Director as an Urgent Issue, along with a proposed resolution. The FTF response will then be available within two weeks. Resolutions of non-urgent issues may not be available until the FTF's final delivery deadline.]

The report that the FTF delivers (see 4.4.1.6 above) shall be accompanied by a revised Beta Specification, and shall not be the subject of any motion at the parent TC unless it has been endorsed by the AB. If the parent TC does not recommend the FTF report to the BOD, it may optionally charter a new Finalisation Task Force, taking a Beta Specifications as its input.

If the parent TC has not begun a poll on a motion to recommended a finalised Beta Specification to the BOD within 26 months of the chartering of the first FTF for that Specification, then all non-Formal versions of that Specification are withdrawn, and the adoption process is automatically terminated.

[The various stages of the FTF process generate a sequence of Beta Specifications. Apart from being given separate document numbers, for clarity these should also be labelled Beta1, Beta2 etc in sequence. The TC vote to recommend the final Beta Specification for Board adoption as a Formal Specification is conducted according to the usual 2/3 majority voting rules.]

If ratified by the Board of Directors, the finalised Beta Specification will be published as a new Formal Specification, which supersedes any previous Formal Specification from which it was derived.

4.5 Specification Retirement Procedure

Formal Specifications or parts of Formal Specifications may be retired by means of the specification retirement procedure.

[Specification maintenance via Revision Task Forces ensures the currency of the Formal Specification set and its continuing relevance to the needs of the industry. However, from time to time Formal Specifications are superseded, found never to have been fully implemented, or simply reach the end of their useful life. In order to avoid ambiguity over which Specifications are current, this procedure allows OMG Members to initiate retirement of Formal Specifications via a public request process. Retirement is sometimes referred to as "sunsetting".]

The steps in this process are:

- 1. Any OMG Member may send to the chair of the appropriate Technology Committee a Request for Retirement (RFR) proposal containing:
 - The name and OMG document number of the Formal Specification concerned, and precise details of what text within it is being proposed for retirement.
 - A detailed and specific rationale for the retirement proposal. In cases
 of under-specification or ambiguity, detailed examples from the
 Specification should be given. If the text is obsolete, the new business
 requirements or technology changes which make it so should be
 described.
 - A list of known commercial implementations of the Formal Specification (if any), describing whether each one completely implements the Specification, and if not, to what extent.
 - A detailed description of the expected impact on other Formal Specifications should the retirement proposal be implemented, including how dependencies in other Formal Specifications (if any) will be managed.
- 2. The TCC assigns the RFR to the appropriate Task Force, which considers the proposed RFR for issuance, and may request a presentation from the author of the proposal before taking this decision.
- 3. If the TF recommends issuance of the RFR, the recommendation must be endorsed by a majority vote of the Architecture Board before it can be acted upon by the TF's parent Technology Committee. The TC may then decide, by majority vote, whether to cause OMG to issue the RFR.
- 4. During the RFR period, anyone (Member or non-Member) may send comments on the proposal to OMG Headquarters, to an address announced with the RFR issuance. The Liaison SC is informed that the RFR is under consideration and is responsible for informing any liaison organisations that may have concerns. OMG staff will manage collection of comments from all sources.

- 5. Ninety (90) days from issuance of the RFR, the RFR comment period closes. The proposal is then sent back to the AB for a retirement recommendation with all received comments attached.
- 6. If the AB endorses a retirement recommendation, it is then sent to the issuing TC for further consideration.
- 7. The issuing TC decides whether to make a retirement recommendation to the BoD. Assent of two-thirds (2/3) of all non-abstaining Voting Members of the appropriate TC, not just those Members represented at a meeting, is required before the recommendation can be passed to the BoD, and the electronic voting procedure described in section 3.5.3 must therefore be used. If the RFR or comments upon it describe any impact on other Formal Specifications then the TC recommendation must include a complete list of dependencies to be passed to appropriate RTFs, creating appropriate RTFs if necessary.
- 8. If the OMG Board of Directors votes to adopt the recommendation, the specification text is removed from the set of Formal Specifications, and any necessary issues are automatically passed to the appropriate RTFs.

5 Procedure for certifying tests for compliance to Formal Specifications

This section 5 establishes procedures under which test suites may be certified as accurately testing compliance of individual implementations to Formal Specifications. Certification that an individual implementation has satisfactorily completed testing by such test suites is outside the scope of this section 5.

5.1 Scope

An OMG Contributing, Domain or Platform Member may request OMG certification that a test suite submitted by that Member can accurately test compliance of individual implementations to all or part of one or more identified Formal Specification(s).

[The implementations being tested can be software, hardware, or any combination of the two. For convenience of distribution and certification, the test suites are currently limited to being electronically storable, but may include both executable software and scripts for a human tester. This procedure is solely concerned with how OMG verifies that a test suite genuinely does test compliance with a particular Specification. If and how

the certified test suite is then used is outside the remit of an OMG Technology Committee.]

OMG shall only certify test suites that test compliance against Formal Specifications.

An OMG member submitting a test suite for OMG certification shall specify the parts of the Formal Specification(s) that the test suite is claimed to test.

In areas where a Formal Specification does not specify how a conformant implementation shall behave, the implementation is free to exhibit any behaviour whatsoever. OMG shall not certify test suites which signal either conformance or non-conformance relating to any interface, data format or behaviour not described by a Formal Specification.

5.2 Procedure for open, non-proprietary test suites

Where the proposed test suite is open and non-proprietary, the procedure documented in this section 5.2 shall be used. See section 5.3 for modifications to this procedure for software licenced on other terms.

1. A Contributing, Domain or Platform Member submits to the TCC of the relevant Technology Committee an unsolicited proposal for the certification of a proposed test suite.

The request shall include:

- A statement of the precise version number(s) and OMG document number(s) of the Formal Specification(s) which the test suite is claimed to test, with a list of the compliance point(s) tested.
- A reference to the OMG document number for the test suite.

[The test suite must be submitted to OMG and filed with an OMG document number. This automatically makes it open and non-proprietary under the terms of section 6 of these Policies and Procedures, and also guarantees that all OMG Members can easily obtain it.]

2. The relevant TC considers the request, and if appropriate charters a Testing Task Force (TTF) for the test suite concerned. The TTF charter shall specify:

- The precise version number(s) and OMG document number(s) of the Formal Specification(s) which the test suite is claimed to test, with a list of the Specification's compliance point(s) tested.
- The OMG document number for the test suite being considered.
- A list of named Representatives to become the members of the Testing Task Force. This list may include Representative(s) from the Member submitting the test suite. A Contributing, Platform, Domain, Influencing, Government or University Member may be represented on any TTF. A Task Force Member may only be represented on a TTF chartered to test a specification whose Alpha version was recommended for adoption by a Task Force linked to its membership class. No OMG Member may cast more than one vote on a TTF.
- Which Representative is to chair the TTF.
- A deadline by which the TTF shall deliver its report. This is the latest possible delivery date the TTF ceases to exist after this date, and cannot modify the report thereafter.

[It is recommended that the TTF be chartered to complete its report by the Technical Meeting following that where it was chartered, and that the report be delivered to the wider OMG membership four weeks before that meeting. The delivery deadline should be set shortly after that Technical Meeting, allowing the TTF report to be amended in response to TC reviewer comments if necessary.]

3. The TTF chair shall organise the deliberations of the TTF in any appropriate manner, including face-to-face meetings, by email, or by teleconference.

The chair of the TTF is responsible for organising and moderating discussion of the features of the proposed test suite, and organising the formulating of the report.

The TTF may determine the applicability of executable parts of the test suite by examining their source code, determining their behaviour, or any combination of the two.

4. If in the course of examining the test suite and Specification(s) the TTF concludes that there is an error or ambiguity in a Specification, an issue shall be filed against that Specification in the usual way. If resolution of

- the perceived error is essential to determining if the test suite correctly tests compliance, an Urgent Issue shall be filed in the usual way.
- 5. The TTF shall deliver a report with a parallel structure to the Specification(s) concerned, and for each section and subsection of the Specification(s) that specify a behaviour, interface or data structure, shall report to what extent the test software accurately tests compliance with that section or subsection. The report shall include a list of any issues the TTF filed as a result of its deliberations, and an overall conclusion as to whether the test suite accurately tests compliance against the compliance point(s) listed in the charter. The report shall include an OMG document number where OMG Members and others may download the version of the test suite to which the report relates this may be the same as the test suite originally supplied, or it may be a new version which has been modified by the submitter, the members of the TTF, or others.
- 6. The TC shall consider the TTF report, and if appropriate, recommend the version of the test suite to which it relates to the Board of Directors for endorsement as an OMG-approved test suite for those Formal Specification(s) and compliance point(s).

5.3 Procedure for test suites requiring licences

The procedure for test suites requiring licencing is as documented in section 5.2, except:

- 1. The certification request from the OMG Member shall instead include:
 - The precise version number(s) and OMG document number(s) of the OMG Formal Specification(s) which the test suite is claimed to test, with a list of the compliance point(s) tested.
 - A statement that a free licence for the test software will be granted to any OMG Members that the relevant OMG Technology Committee appoints to the Testing Task Force for at least the duration of that TTF. The request shall include a pro-forma copy of this licence. The licence shall explicitly grant TTF members the right to both execute the test suite and examine its source code, and shall not prevent TTF members from documenting the behaviour of the test suite.
 - A cryptographic hash of a tar or ZIP archive of the test suite using a cryptographic hash function approved by the OMG Technical Director.

[Members submitting test suites requiring licencing must not submit the test suites themselves to OMG - if they do, they will automatically become open and non-proprietary under the terms of section 6 of these Policies and Procedures. Instead, the owner of the test software must provide the software directly to those Members who will be using it under the terms of this section. The cryptographic hash allows Members to check that they all receive the same version of the software.

At the time of writing, an acceptable hash algorithm is SHA-1.]

- 2. A motion to charter a TTF for a test suite that requires licencing is only in order at a Technical Plenary meeting if the relevant certification request was made available to TC members at least six weeks before that meeting.
- 3. The TTF charter shall include the cryptographic hash of the test suite instead of a document number for downloading it.
- 4. Should the relevant TTF be chartered it can only include as its members individuals willing to sign the provided licence agreement. The submitting Member must provide the test suite to every member of the TTF within 42 days of their becoming a member; if this is not achieved, the TTF charter is automatically revoked.
- 5. The submitter of the certification request may require that Observers not be admitted to specific TTF meetings where internal details of the test suite are to be discussed.
- 6. The TTF report shall not include an OMG document number where OMG Members may download the version of the test software to which the report relates instead, the report shall include the cryptographic hash for a ZIP or tar archive of the final version of the test software to which the report pertains.

5.4 Withdrawal of OMG certification

The appropriate OMG Technology Committee may at any time recommend the Board of Directors to withdraw certification of a test suite. Motions to make such recommendations are only in order at a Technical Plenary meeting if they were on the agenda published three or more weeks before the meeting.

6 Proprietary Rights

Information disclosed in connection with any OMG activity, including but not limited to meetings, contributions, and submissions, is not confidential.

[See the OMG Byelaws and OMG IPR Policy for further details.]

7 Adoption and modification of this document

In order to be adopted, this document must be ratified by both:

- A two-thirds (2/3) majority of each Technology Committee (under the rules herein), either at a meeting, or using the procedure outlined in section 3.5.3.
- A vote of the Architecture Board

Changes to this document are to be ratified by the same procedure.

Meetings in which a poll on acceptance or modification of this document is to occur must include an announcement of that poll in the published agenda for the meeting. It is the responsibility of the OMG Technical Director to obtain approval from OMG counsel for any proposed change of these Policies & Procedures before the Technical Plenaries vote for adoption of that change.

8 Copyright, Authorship and Revisions

This entire document is copyright © 1989-2017, Object Management Group, Inc. All Rights Reserved. The Object Management Group assumes no responsibility for fitness of use.

These Policies and Procedures initially were originally developed for the OMG Technical Committee (1989-1996) by the OMG TC Policies and Procedures Subcommittee, chaired by Dr. Richard Mark Soley of the Object Management Group. That document was subsequently extensively revised to accommodate the changes resulting from the OMG's 1996 reorganisation of its technical committee structure. The revision history of the document is as follows:

Document tc/89-11-5 (November 8, 1989): First draft.

Document tc/89-12-2 (December 11, 1989): Adopted. Changes in adoption wording. Spelling corrected. Amendments per December 1989 TC meeting:

- Task Force chairs may vote; no proprietary conversations may be held at the TC meeting.
- **Document tc/90-2-17** (February 28, 1990): Amendment per February 1990 TC meeting: Documents must be available 3 weeks before vote.
- **Document tc/90-4-6** (April 12, 1990): Amendments per April 1990 TC meeting: meetings 8 weeks apart rather than 6, and separate Subcommittees, Task Forces and Special Interest Groups.
- **Document tc/90-5-4** (May 17, 1990): Amendments per May 1990 TC meeting: quorum only majority of members who have attended two of the past three meetings, rather than majority of Corporate members. Two-thirds vote of quorum required to change Policies & Procedures.
- **Document tc/90-9-1** (September 4, 1990): Amendment per August 1990 TC meeting: three-week rule not automatic; instead may be invoked by one-third of quorum.
- **Document not published** (March 1, 1991): Amendment per February 1991 TC fax vote: add provision for combined end-user member category voting.
- **Document tc/91-12-2** (December 23, 1991): Amendments based on November 1991 recommendations of Policies & Procedures Subcommittee, adopted at January 1992 TC meeting: Allow distribution of electronic documents by post; add required statements to RFI's and RFP's; control Task Force membership; control evolution of adopted technology by revision & enhancement processes; add required legal purview over changes to Policies & Procedures; clarify non-member invited guest status; disallow proprietary document distribution; clarify fax voting rules.
- **Document tc/92-2-3** (February 11, 1992): Amendments adopted during January 1992 TC meeting: adoption of OMG counsel wording for observers, RFI issuance & proprietary disclosure; encouragement of broad geographic representation at meetings.
- **Document tc/92-11-7** (November 23, 1992): Amendment adopted during October 1992 TC meeting: votes for changes to Policies & Procedures must be announced in meeting agenda.
- **Document tc/93-8-1** (August 2, 1993): Amendments adopted during July 1993 TC meeting: Request closure dates must allow time before TC meetings; procedures to end dormant subgroups; extend Letter of Intent requirements

- to all co-submitters; require statement of proof of concepts in Request responses.
- **Document tc/93-9-17** (September 24, 1993): Amendments adopted during September 1993 TC meeting: allow special voting procedures for End-User member companies.
- **Document tc/93-12-22** (December 15, 1993): Amendments adopted during December 1993 TC meeting: correct accidental disenfranchisement of End-User member companies; change Task Force quorum rules; change TC fax vote quorum rule and add time limitation to TC fax voting procedures; add Request for Comments fast-track adoption procedure.
- **Document tc/94-4-14** (April 13, 1994): Amendments adopted during April 1994 TC meeting: clarify fax voting rules; clarification of abstention and voting membership for technology adoption recommendation votes.
- **Document tc/95-1-48** (January 31, 1995): Amendment adopted during January 1995 TC meeting: automatically invite representatives of organisations with officially established liaison; allow End-User Voter to invite guests.
- **Document tc/95-4-4** (April 26, 1995): Amendments adopted during March 1995 TC meeting: encourage availability of referenced documents; grant automatic Task Force voting membership for submitters.
- **Document tc/95-9-41** (September 21, 1995): Amendment adopted during September 1995 TC meeting: change fax voting procedure to promote faster close to fax voting process.
- **Document pp/96-05-03** (20th May 1996): Extensive revisions for the new organisation, but preserving the sprit of the original P&P.
- **Document pp/97-01-01** (13th January 1997): Amendments to AB-specific policies; clarify terms of AB seats at bye-elections; allow AB members to chair RTFs and AB SCs; alter quorum rule to max (n-3, 6); alter attendance rule to at least 2 in any 3 consecutive meetings.
- **Document pp/97-06-01** (4th June 1997): Introduction of RFR procedure; added table of contents; minor clarifications on adoption votes in section 4.1.
- **Document pp/98-03-03** (11th March 1998): Amendment to allow OMG staff limited authority to invite guests to TC meetings; "Vote-to-vote" rule to encourage TFs to evaluate submissions for at least one meeting cycle.

- **Document pp/98-04-06** (17th April 1998): Amendment to clarify circumstances under which RFP deadlines may be altered or deleted; addition of fast turnaround process for generating specification clarifications via Revision Task Forces.
- **Document pp/98-08-01** (4th August 1998): Amendment to simplify the electronic voting procedure for TCs.
- **Document pp/98-10-01** (16th October 1998): Completely overhauled section 4.4 to incorporate finalisation procedure and to tighten up rules governing RTFs; changes to reflect Adopted Specification and Available Specification nomenclature; changes to reflect the new Platform member category introduced by the BoD.
- **Document pp/99-01-02** (29th January 1999): Amendment to limit veto rights on Finalisation and Revision Task Forces to submitters that have responded to the Business Committee's questions; added a notice requirement for motions to dissolve subgroups; changed the notice period for motions to create or dissolve subgroups to two weeks.
- **Document pp/99-05-01** (10th May 1999): Added explicit copyright declaration.
- **Document pp/99-11-02** (27th November 1999): Clarified voting list quorum rules, set minimum Task Force quorum to three, removed references to electronic voting in Task Forces.
- **Document pp/01-09-01** (28th August 2001): Support for Model-Driven Architecture, various other small changes.
- **Document pp/02-10-02** (8th October 2002): Amended section 4.4.1.2 to make clear that RTFs and FTFs should deliver reports well before they are dissolved.
- Document pp/03-10-01 (24th October 2003): Removed requirement that AB members can only be notified of meetings in writing or by email, renamed Auditing Members as Trial Members, specified that submission withdrawal letters must go to Technical Director, referred to Bylaws for definitions of membership classes, added some definitions, changed 4.4.1.3 bullet 2 to refer only to "BOD criteria" rather than specify what they might be, extensive rationalisation of capitalisation.
- **Document pp/04-05-01** (1st May 2004): Clarified that Task Force voting follows the same one-Member-one-vote rules as Plenary voting; incorporated current

- practice that submitters must have the appropriate membership level on the date of the initial submission; amended the RFC procedure to allow the comment period to complete in one meeting cycle, and other smaller changes.
- **Document pp/06-01-01** (1st January 2006): Added new section 5 to describe Testing Task Force procedure. Renumbered following sections. Added some definitions in section 2 (Definition and acronyms) and section 3.7 (Subgroups).
- **Document pp/06-12-02** (8 December 2006): New policies on subgroup electronic voting; relaxation of two week NDA requirement for TTFs; relaxed requirements for SC membership in line with TFs; minor modifications for change to 4 TC meetings per year; various other small clean-ups and clarifications.
- Document pp/07-08-01 (7 August 2007): Revisions to extend the three week meeting notice period to four weeks, and to clarify that the "four week rule" applies to all TC, TF and AB meetings. RFP deadlines before 1 Jan 2008 grandfathered at 3 weeks. Extended maximum life of any one FTF from 12 to 14 months, to ensure that it can run a whole year even if TC meeting for report review is slightly more than 52 weeks later. Renames OMG Specifications from "Adopted" & "Available" to "Alpha", "Beta" & "Formal".
- **Document pp/08-06-01** (11 June 2008): Revision to allow Architecture Board members to chair Finalisation Task Forces.
- **Document pp/09-01-02** (21 January 2009): Revisions to allow adoption of multiple submissions from one RFP, and one F/RTF to deliver multiple Specifications.
- **Document pp/09-12-01** (22 December 2009): Revision to allow RFPs that create minor versions of Specifications, to accommodate "clean up" RFPs like the proposed UML 2.4 RFP.
- Document pp/12-12-01 (14 December 2012): Initial draft of revisions to accommodate revised IPR policy. Many other clean-ups included: Clarified roles of SIGs and SCs; Made clear that 25% AB commitment is an upper bound; Removed TC chair voting rights: a 50/50 vote is not "tied", it fails; Removed voting notification in 3.5.3.1 we never do this; Removed comment about incomplete TC polls this never happens, and the comment was non-binding; Allowed any group except an RTF or FTF to generate a discussion paper; Moved some material on voting into the voting section; Removed duplicate text on closed voting lists; Made sure that "commercially used" (end

user) implementations are OK; Changed "comment" to "issue" for RTFs & FTFs; Introduced the IPR policy term "Participant"; Added text requiring explicit F/RTF approval of Beta Specifications; Simplified the FTF 14 month rule slightly; Removed FTF implementation experiences section; Clarified that the AB must approve an FTF report before the TC can base a subsequent (usually second) FTF upon it; Changed the FTF drop-dead date from 24 months to 26, to avoid problems at meetings falling just after the 24 month anniversary of the first FTF.

Document pp/14-06-04 (20 June 2014): Altered definition of RFC process.

Document pp/16-12-03 (9 December 2016): Amended to allow RTFs (but not FTFs) to make changes that are (verifiably) strict extensions to a specification, until a sunset date of 15th September 2020.

Document pp/17-04-01 (April 2017): Amendments to align P&P with the April 2017 revision of the OMG Byelaws, including quoting the revised Purposes, introducing the Task Force Membership category and amending the rules for the Trial Membership category. Other minor corrections and simplifications.