The Java Community Process

Version 2 (Review Draft of 2000.04.13)

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EXECUTIVE SUMMARY

The international Java community develops and evolves Java™ technology specifications using the Java Community Process (JCP). The JCP produces high-quality specifications in "Internet time" using an inclusive, consensus building approach that produces a specification, a reference implementation (to prove the specification can be implemented), and a technology compatibility kit (a suite of tests, tools, and documentation that is used to test implementations for compliance with the specification).

Experience has shown that the best way to produce a technology specification is to gather a group of industry experts who have a deep understanding of the technology in question and then have a strong technical lead work with that group to create a first draft. Consensus around the form and content of the draft is then built using an iterative review process that allows an ever-widening audience to review and comment on the document.

This draft version of the JCP was developed by Sun based on input received from leading Java partners, most of whom produce implementations of the J2SE™ and J2EE™ platforms. In this version, an Executive Committee (EC) representing major stakeholders is responsible for approving the passage of specifications through key points of the JCP and for reconciling discrepancies between specifications and their associated test suites.

There are four major steps in this draft version of the JCP:

1. **INITIATION**: A specification is initiated by community member(s) and approved for development by the EC.

2. **COMMUNITY DRAFT**: A group of experts is formed to develop a first draft of the specification that both the community and the EC then review. The expert group uses feedback from the review to revise and refine the draft. At the end of the review, the EC decides if the draft should proceed to the next step.

3. **PUBLIC DRAFT**: The draft goes out for review by the public where anyone with an Internet connection can read and comment on the draft. The expert group uses the public feedback to further revise the document. Finally, the leader of the expert group sees that the reference implementation and its associated technology compatibility kit are completed before sending the specification to the EC for final approval.

4. **MAINTENANCE**: The completed specification, reference implementation, and technology compatibility kit are updated in response to ongoing requests for clarification, interpretation, enhancements, and revisions. The EC can review all proposed changes to the specification and indicate which ones can be carried out immediately and which will require the specification to be revised by an expert group. Challenges to one or more tests in a specification's technology compatibility kit are ultimately decided by the EC if they cannot be otherwise resolved.

FUNDAMENTAL DEFINITIONS

Java Community Process (JCP): The formal process described in this document for developing or revising Java technology specifications. The JCP itself is revised following the process described in this document except that there is no associated Reference Implementation or Technology Compatibility Kit.

Java Community Process Member (Member): A company or organization that has signed the JSPA and is abiding by its terms.

Java Specification Participation Agreement (JSPA): A one-year renewable agreement between Sun Microsystems and a company, organization, or individual.

Individual Expert Participation Agreement (IEPA): An agreement between Sun Microsystems and an individual that allows the individual to serve on an Expert Group. The IEPA has no fee and is valid until the Expert Group disbands.

Executive Committee (EC): The Members who guide the evolution of the Java technologies. The EC represents both major stakeholders and a representative cross-section of the Java Community. Only Members who have signed the ECPA are eligible to serve on the EC.

Executive Committee Participation Agreement (ECPA): A three-year agreement between Sun Microsystems and a company or organization that serves on the EC.

Process Management Office (PMO): The group within Sun Microsystems that is responsible for administering the JCP.

Java Specification (Specification): A written specification for some aspect of the Java technology. This includes the language, virtual machine, Platform Editions, Profiles, and application programming interfaces.

Platform Edition Specification (Platform Edition): A Specification that defines a baseline API set that provides a foundation upon which applications, extensions, and Profiles can be built. There are currently three Platform Edition Specifications: J2SE, J2EE, and J2ME.

Profile Specification (Profile): A Specification that references one of the Platform Edition Specifications and zero or more other JCP Specifications (that are not already a part of a Platform Edition Specification). APIs from the referenced Platform Edition must be included according to the referencing rules set out in that Platform Edition Specification. Other referenced specifications must be referenced in their entirety.

Reference Implementation (RI): The prototype or “proof of concept” implementation of a Specification.

Technology Compatibility Kit (TCK): The suite of tests, tools, and documentation that allows an implementor of a Specification to determine if their implementation is compliant with that Specification.

JCP Web Site: The web site where anyone with an Internet connection can stay informed about JCP activities, download draft and final Specifications, and follow the progress of Specifications through the JCP.

THE JAVA COMMUNITY PROCESS

1. INITIATE A NEW OR REVISED SPECIFICATION

1.1 INITIATE A JAVA SPECIFICATION REQUEST

definition – Java Specification Request (JSR): The document electronically submitted to the PMO by one or more Members to propose the development or major revision of a Specification.

definition – Umbrella Java Specification Request (UJSR): A JSR that defines or revises a Platform Edition or Profile Specification. A UJSR proceeds through the JCP like any other JSR.

definition – Expert: A Member representative, or an individual who has signed the IEPA, who has expert knowledge and is an active practitioner in the technology covered by the JSR.

definition – Expert Group: The group of Experts who develop or make major revisions to a Specification.

definition – Specification Lead (Spec Lead): The Expert responsible for leading the effort to develop or make major revisions to the Specification.

One or more Members can initiate a request to develop a new Specification by sending a JSR to the PMO. The JSR should follow the template available at the JCP Web Site. The JSR serves to identify the Members making the request (the sponsors), a proposed Specification Lead, and the initial members of the proposed Expert Group. It will also describe the proposed Specification, the reason(s) for developing or revising it, the target Java Platform Edition (if any), and any preexisting documents, technology descriptions, or implementations that might be used as a starting point. Any JSR under consideration can be withdrawn by its sponsors without explanation at any time prior to the completion of the JSR approval vote (see section 1.3 below) upon request by the initiator to the PMO.

1.1.1 REVISE EXISTING SPECIFICATIONS

Existing Specifications are maintained by a designated Maintenance Lead (see section 4). Only the designated Maintenance Lead can submit a JSR to revise his or her Specification. For continuity, the Maintenance Lead will be the named Spec Lead for the new JSR and is expected to make a reasonable effort to get some or all of the members of the previous Expert Group that last worked on the Specification to join the revision effort.

1.1.2 PROTECT THE INSTALLED BASE AND GUARD AGAINST FRAGMENTATION

Changes to the Java programming language, the Java virtual machine (JVM), the Java Native Interface (JNI), packages in the "`java.*`" space, or other packages delivered as part of J2SE, have the potential to seriously disrupt the installed base if carried out inconsistently across the Platform Editions. In order to protect the installed base, any such changes need to be accepted and carried out within a UJSR for J2SE. In addition, any JSR for J2SE that proposes to make changes to the Java language will require 2/3 majority approval votes by the EC, instead of simple majority votes, with Sun being one of the members who votes to approve.

In order to guard against fragmentation, new Platform Edition Specifications need to be defined with care and should not be used to substantially duplicate existing Platform Editions or Profiles. In the interest of providing stable base platforms for developers, UJSRs that propose new Platform Edition Specifications will require 2/3 majority approval votes by the EC, instead of simple majority votes, with Sun being one of the members who votes to approve.

1.1.3 VERSIONING OF SPECIFICATIONS

All Profiles proposed in UJSRs are based upon a specific Platform Edition. Similarly, all APIs proposed in JSRs are targeted to run on one or more Profile or Platform Edition versions. In order to avoid the need for a given specification to support all previous versions of a given Profile or Platform Edition, all submitted JSRs are required to explicitly target either current and/or immediately previous Profiles and Platform Editions. Further, immediately previous versions can be targeted only if less than 24 months have passed since the current version was finalized.

1.1.4 J2ME PROFILES AND J2ME BUILDING BLOCKS

> **definition – J2ME Building Block (Building Block)**: A self-consistent, reasonably sized subset of one or more existing J2SE or J2EE API specifications. The J2ME Platform Edition Specification is a collection of Building Blocks. J2ME Profile Specifications build up desired functionality by combining one or more existing Building Blocks, possibly with new APIs.

Subsets of J2SE and/or J2EE functionality are both desired and necessary in J2ME Profiles. The concept of J2ME Building Blocks has been established to provide an orderly process for defining and referencing such subsets with a view towards minimizing the very real possibilities of overlap, conflict, and confusion within the consumer and device spaces.

J2ME Profiles are normally based on the existing Java virtual machine and language Specifications. They include J2SE and J2EE functionality by referencing J2ME Building Blocks. Such Building Blocks are created and revised within a UJSR for the J2ME Platform Specification.

It is likely that different J2ME Profiles will require different J2SE/J2EE subsets. For example, different categories of devices may need different subsets of the "`java.net`" package. In order to accommodate this, no fundamental restrictions have been placed on the number of times or ways in which J2SE/J2EE functionality can be packaged into J2ME Building Blocks.

It is recognized that the consumer and device marketplaces can change very rapidly in comparison to the desktop and server marketplaces. The definition of new Building Blocks (as well as the revision of existing blocks) may need to be carried out very quickly in order for some J2ME Profiles to keep up with changing market needs. It is therefore permissible for Building Blocks to be defined and revised within the JCP Maintenance Cycle (see section 4.2) for the J2ME Platform Edition.

Expert Groups that need to create or update a J2ME Building Block should approach the Maintenance Lead for the J2ME Platform Edition Specification with the request. The J2ME Maintenance Lead, after consultation with both the J2ME Expert Group and the Maintenance Lead of the Platform Edition the block is to be derived from, may propose the new Building Block as part of a maintenance update to the J2ME specification.

Under exceptional circumstances, the J2ME Platform Edition Specification may define J2ME Building Blocks for use with special classes of devices that can only implement subsets of the Java virtual machine. Such Building Blocks can only be defined and approved only within a UJSR for the J2ME Platform Edition. They are not to be defined using the Maintenance Cycle because proposals for Building Blocks for these special classes of devices need to be subject to the widest possible review.

1.2 JSR REVIEW

> **definition – JSR Review**: A 14 day period during which time anyone with an Internet connection can review and comment on a new JSR.
>
> **definition – JSR Page**: Each initiated JSR will have a dedicated public web page on the JCP Web Site established to contain a history of the passage of the JSR through the JCP. This will include all public comments received and the decisions, actions, and votes taken by the EC with respect to the JSR.

When a JSR is received, the PMO will assign it a tracking number, create its JSR Page, announce the proposed JSR to the public, and begin JSR Review. Comments on the JSR should be sent to the e-mail address listed on the JSR Page. All comments will be made available off a link on the JSR Page as they are received.

During the review period, Members who are interested in joining the Expert Group (should the JSR be approved for development) can identify themselves by sending an e-mail to the nomination address listed on the JSR.

1.3 JSR APPROVAL BALLOT

definition – JSR Approval Ballot: A simple majority vote by the EC to allow the JSR to proceed.

During JSR Review, all public comments and Expert Group nominations received by the PMO will be forwarded to EC members for consideration. EC members should review the JSR, the comments, and any nominations and then decide if the JSR should be approved to proceed through the JCP or not. EC members should cast their vote on or before the end of the JSR Review. If an EC member does not return their ballot, the member will be assumed to have voted to approve. EC members who vote to disapprove should provide detailed comments on what changes, if any, could be made to the JSR to make it acceptable.

If the ballot fails, all EC comments will be sent to the JSR sponsors by the PMO. The sponsors then have the option of revising the JSR and resubmitting it to the PMO within 14 days. If a revised version is not received by the end of the 14 days, the original decision by the EC will stand and the JSR will be closed by the PMO.

1.4 JSR RECONSIDERATION BALLOT

definition – JSR Reconsideration Ballot: A simple majority vote by the EC to allow a JSR to proceed.

If a revised JSR is received during the 14-day revision period, the PMO will post it to the JSR Page, announce the revised JSR to the public, and send it to all EC members for a 7-day JSR Reconsideration Ballot. During that time EC members will decide if they wish to approve the revised JSR. This ballot will be a simple approve/disapprove with no explanations required. EC members who do not return ballots will be assumed to have voted to approve. If the revised JSR is not approved during the JSR Reconsideration Ballot, it will be closed by the PMO. Sponsors may reinitiate the JSR no earlier than one month after the failed reconsideration ballot.

2. CREATE THE COMMUNITY DRAFT

2.1 FORM THE EXPERT GROUP

When a JSR is approved, the PMO will notify the Spec Lead identified in the JSR to form the Expert Group. If the Member that contributed the Spec Lead withdraws from the Community before the JSR is approved, the PMO will request the members of the initial Expert Group listed in the JSR to select a replacement Spec Lead from among themselves.

There is no size limit on the Expert Group. The Spec Lead may add additional Experts at any time provided the existing Expert Group is consulted first. New members may be added, for example, to increase diversity of opinion. A Spec Lead recruits new Experts by approaching other Members directly and working with them to identify an expert and bring him or her into the Expert Group. Individual experts can be brought into the Expert Group provided they sign an IEPA.

2.1.1 FREEDOM OF WORKING STYLE

Each Expert Group is free to define and follow whatever working style it finds most productive and appropriate as long as it is compatible with the JCP. Use of the Internet is encouraged. E-mail exchanges on mailing lists established for the use by the Expert Group, along with conference calls and group meetings, have been used by past Expert Groups to discuss and resolve issues raised as the draft evolves. In-person group meetings are useful but they tend to slow down work considerably due to the need to coordinate schedules.

2.1.2 WITHDRAWAL OF AN EXPERT FROM THE EXPERT GROUP

An Expert may withdraw from the Expert Group at any time. When this happens, the Specification Lead may approach the Member who originally contributed the Expert and work with them to find a replacement. If no replacement is offered, the Specification Lead may recruit a replacement from another Member if desired. If the departing Expert is the Spec Lead, the Expert Group should choose one of their members as the new Spec Lead.

2.1.3 UNCOOPERATIVE OR UNRESPONSIVE EXPERT GROUP MEMBERS

There may be rare instances when members of the Expert Group feel that one of their fellow Experts is not acting in ways that advance the work of the Expert Group. These concerns should be brought to the attention of the Spec Lead and/or the PMO as quickly as possible so they may be proactively addressed and resolved. The Expert Group is expected to make a reasonable effort to resolve any such issues among themselves. If a 2/3 majority of the members of the Expert Group find that a Spec Lead is being unresponsive, and the Spec Lead does not work to resolve the situation in a timely manner, the PMO may ask the Member who provided the Spec Lead to provide a replacement.

2.2 WRITE THE FIRST DRAFT OF THE SPECIFICATION

The Expert Group should begin work by considering the requirements set forth in the JSR, any contributed documents or technology descriptions, comments received during JSR Review and, if this is a revision of an existing Specification, the Change Log kept by the Maintenance Lead (see section 4). Additional input can be obtained from discussions with other Members, industry groups, software developers, end-users, and academics. The goal is to define requirements and then write a draft suitable for review by the Community.

When the Expert Group decides that the first draft is ready for review, the Specification Lead will send the draft, along with any additional files required for review, to the PMO. The Specification Lead should also suggest the length of the Community Review period if the Expert Group feels it should go beyond the minimum 30 days.

2.2.1 EARLY WARNING AND FEEDBACK ON LICENSING TERMS FOR THE RI AND TCK

The Spec Lead's company or organization is responsible for the Reference Implementation (RI) and Technology Compatibility Kit (TCK). The Spec Lead shall therefore provide the EC with the terms under which the RI and TCK will be licensed to others no later than the start of Community Review. EC members should provide feedback on the terms as an indication of how the Community might react as a whole.

2.3 COMMUNITY REVIEW

> **definition – Community Review**: A period lasting between 30 and 90 days during which Members can review the first draft.
>
> **definition – Community Review Area**: A password protected area of the JCP Web Site where Members can download draft Specifications for review.

Refinement of the first draft begins when the PMO posts it to the Community Review Area of the JCP Web Site and announces the start of Community Review to all of the Members. The goal of Community Review is to get the draft Specification into a form suitable for Public Review as quickly as possible by uncovering and correcting major problems with the draft.

All comments from Members should be sent to the e-mail feedback address listed in the draft. The Spec Lead is responsible for ensuring that all Member comments are considered and responded to. For simplicity, similar comments may be combined and responded to as one.

2.3.1 UPDATING THE DRAFT DURING COMMUNITY REVIEW

If the Expert Group makes major revisions to the draft during Community Review, the Spec Lead should send the revised draft (with a synopsis of the changes) to the PMO at any time up until the last 7 days of the review period. The draft will be frozen during the last 7 days of Community Review in order for the EC to complete their Draft Specification Approval Ballot (see section 2.4). The PMO will post any updated drafts received to the Community Review Area and announce the update to all of the Members.

2.4 DRAFT SPECIFICATION APPROVAL BALLOT

> **definition – Draft Specification Approval Ballot**: A simple majority vote by the EC to allow the draft Specification to proceed to Public Review.

During Community Review, EC members are strongly encouraged to have one or more technical members of their organization carry out a review of the draft in order to uncover possible overlap between the draft and other Specification(s) or duplication of features or services already provided by other Specifications.

EC members should inform the Expert Group of any such discoveries using the Member e-mail feedback address listed in the draft. The Spec Lead is responsible for insuring that these comments are considered and responded to like all other Member comments.

During the last 7 days of Community Review, EC members need to decide if the draft specification should be approved to proceed to Public Review or whether it needs changes. They should cast their vote on or before the end of Community Review. EC members who do not return a ballot by the end of Community Review will be assumed to have voted to approve. EC members who vote to disapprove should identify what changes, if any, could be made to the draft in order to approve it during the Draft Specification Reconsideration Ballot.

At the close of balloting, all EC comments will be sent to the Expert Group by the PMO. If the ballot passes, the draft Specification proceeds to Public Review (see section 3).

2.5 DRAFT SPECIFICATION RECONSIDERATION BALLOT

> **definition – Draft Specification Reconsideration Ballot**: A simple majority vote by the EC to allow a revised version of the draft Specification to proceed to Public Review.

If the Draft Specification Approval Ballot fails, the Expert Group will have 30 days to prepare a response to the EC and send it to the PMO. If a response is not received by the end of the 30 days, the original decision by the EC will stand and the JSR will be closed by the PMO. If a response is received, the PMO will send it to all EC members and initiate a 7-day Draft Specification Reconsideration Ballot. EC members will then review the response and decide if they wish to approve the draft to proceed into Public Review. This ballot will be a simple approve/disapprove with no explanations required. EC members who do not return ballots will be assumed to have voted to approve. If the reconsideration ballot fails, the JSR will be closed by the PMO and the Expert Group will disband. Sponsors may reinitiate the JSR no earlier than one month after the failed ballot. If the JSR was a revision to an existing Specification, the Spec Lead will resume the role of Maintenance Lead of the previous version of the Specification (see section 4).

3. COMPLETE THE SPECIFICATION

3.1 PUBLIC REVIEW

> **definition – Public Review**: A period lasting between 30 and 90 days during which time the general public can review and comment on the draft Specification.

Public Review begins when the PMO posts the draft Specification on the JCP Web Site and announces it to the public. Anyone with access to the Internet can download and comment on the draft. Public Review is an important part of the JCP. In the past, comments from the public have raised fundamental architectural and technological issues that have considerably improved some Specifications.

The Spec Lead is responsible for ensuring that all public comments are read and considered. If those comments result in revisions to the draft, and those revisions result in major changes (in the opinion of the Expert Group), then the Specification Lead will send an updated draft (with synopsis of the changes) to the PMO. Upon receipt, the PMO will update the draft on the JCP Web Site and announce it to the public.

3.1.1 PREPARE THE FINAL DRAFT

Upon completion of Public Review, the Expert Group will make any revisions necessary and then the Spec Lead will send the final draft to the PMO. The PMO will post the final draft on the JCP Web Site and announce it to the public.

3.1.2 COMPLETE THE REFERENCE IMPLEMENTATION AND TECHNOLOGY COMPATIBILITY KIT

The Spec Lead will then ensure that the Reference Implementation (RI) and Technology Compatibility Kit (TCK) are completed. If the RI and TCK uncover areas of the Specification that were under-defined, incomplete, or ambiguous, the Spec Lead will see that these deficiencies are corrected, and e-mail a revised Specification (with synopsis of the changes) to the PMO. All such revisions will be posted to the JCP Web Site and announced to the public. The Expert Group will continue to consider any further comments received from both Members and the public during this time.

3.2 FINAL APPROVAL BALLOT

> **definition – Final Approval Ballot**: A simple majority vote by the EC to approve the final draft.

When the Expert Group is satisfied that the TCK provides adequate test coverage, the RI adequately implements the Specification, and the RI passes the TCK, the Specification Lead will send the final draft to the PMO. The final draft will be circulated to all EC members along with a Final Approval Ballot. The Spec Lead should make the RI and TCK available to EC members for their review under an evaluation license (if applicable) during this time. The EC members will have 7 days to vote on the final draft. EC members who do not return their ballots within 7 days will be assumed to have voted to approve. EC members who disapprove should identify what changes, if any, could be made to the draft in order to approve it during the Final Approval Reconsideration Ballot.

At the close of balloting, all EC comments will be sent to the Expert Group by the PMO. If the ballot passes, the draft Specification proceeds to Final Release (see section 3.4).

3.3 FINAL APPROVAL RECONSIDERATION BALLOT

> **definition – Final Approval Reconsideration Ballot**: The simple majority vote by the EC to reconsider their rejection of the final version of the Specification based on a response by the Expert Group.

If the ballot fails, the Expert Group will then have 30 days to prepare a response to the EC and submit it to the PMO. If a response is not received by the end of the 30 days, the original decision by the EC will stand and the PMO will close the JSR. If a response is received from the Expert Group, the PMO will send it to all EC members for a 7-day Final Approval Reconsideration Ballot. The ballot will be a simple approve/disapprove with no explanations required. EC members who do not return their ballots within 7 days will be assumed to have voted to approve.

If the reconsideration ballot fails, the PMO will close the JSR and the Expert Group will disband. Sponsors may reinitiate the JSR no earlier than one month after the failed reconsideration ballot. If this was a revision to an existing Specification, the Spec Lead will resume the role of Maintenance Lead of the previous version of the Specification (see section 4).

3.4 FINAL RELEASE

Specifications that are approved will be posted by the PMO on the JCP Web Site and an announcement made to the public. Upon Final Release, the Expert Group will have completed its work and disbands.

4. MAINTENANCE

4.1 KEEP THE SPECIFICATION UP TO DATE

definition – Maintenance Lead (ML): The Expert responsible for maintaining the Specification.

The Maintenance Lead is responsible for carrying out maintenance on the Specification by fielding requests for clarification, interpretation, and enhancements to the Specification from both Members and the public via an e-mail address listed in the Specification. The ML will consider all requests and will decide how and if the Specification should be updated in response. The ML will typically be the Spec Lead from the Expert Group that developed the Specification.

definition – First-Level TCK Appeals Process: The process defined by the ML that allows implementors of the Specification to appeal one or more tests defined by the Specification's TCK.

The ML is also responsible for establishing a clearly defined First Level TCK Appeals Process to address challenges to the tests contained in the TCK. This process must be described in the documentation included in the TCK. See Section 4.3 for more information on the full TCK Appeals Process. Note that examples of First Level TCK Appeals Process applicable to situations ranging from simple API Specifications all the way up to Platform Edition Specifications can be found in the TCK section of the JCP Web Site.

4.1.1 THE MAINTENANCE LEAD MAKES A LONG TERM COMMITMENT

definition – Major Revision: Substantial changes to an existing Specification carried out by an Expert Group.

The Maintenance Lead is expected to make a long-term commitment to shepherding the Specification throughout its life cycle. The ML will normally be the Spec Lead for each subsequent Major Revision of the Specification and will be responsible for deciding when to submit the associated JSRs.

4.1.2 RELINQUISHING OWNERSHIP

definition – Dormant Specification (Dormant): A Specification that does not have an identified Maintenance Lead. All Specifications become Dormant at the end of their life cycle.

If the ML decides to discontinue his or her work for whatever reason (including discontinuing maintenance activities or declining to be the Spec Lead in a Major Revision) the ML should make a reasonable effort to locate another Member whom is willing to take on the task. If the ML fails to find a replacement, the PMO will declare the Specification to be Dormant. No further maintenance will be carried out on it until a new ML is identified and ownership of the Specification, Reference Implementation, and Technology Compatibility Kit is transferred to the new ML's organization.

4.2 THE MAINTENANCE CYCLE

The ML will review all comments, identify common themes, and arrange with the PMO to publish a list of frequently raised issues in the Specification's JSR Page. The ML is free to consult with the former members of the Expert Group, or any other sources, for advice on how to revise the Specification. All changes proposed by the ML will make their way into the Specification by either the Minor Revision process (described in section 4.2.1) or by a Major Revision initiated by the ML.

4.2.1 MINOR REVISION PROCESS

definition – Minor Revision: Clarifications and minor changes made to an existing Specification by the ML.

definition – Change Log: The section of the JSR Page that lists all changes made to the Specification after Final Release. There are three sections: PROPOSED (changes not yet made to the Specification), ACCEPTED (changes made), and DEFERRED (changes to be considered only during a Major Revision).

definition – Maintenance Review: A period of at least 30 days prior to finalization of a Minor Revision when Members and the public consider and comment on the changes listed in the PROPOSED section of the Change Log.

The ML will arrange to have all proposed changes placed into the PROPOSED section of the Change Log and then send a request to the PMO to initiate a Maintenance Review. Upon notification, the PMO will announce the review to the public and then begin the review.

The ML may choose to modify one or more of the proposed changes based on comments received during review. All comments will be published in the JSR Page. At the end of Maintenance Review, the ML will update the Specification, document all revisions in the ACCEPTED section of the Change Log, and delete the corresponding entries in the PROPOSED section. All changes not incorporated into the Specification may be either left in the PROPOSED section or moved to the DEFERRED section.

4.2.2 THE EC MAY INITIATE A MAJOR REVISION

During Maintenance Review an EC member may identify one or more of the proposed changes that they believe should only be carried out during a Major Revision and will notify the PMO. If any such objections are received, the PMO will circulate those objections to both the ML and the EC. If 1/3 or more of the EC members also object to any of the identified changes, the PMO will notify the ML on or before the close of Maintenance Review. The ML will place such items in the DEFERRED section and should initiate a new JSR if he or she believes that the changes need to be carried out.

4.2.3 KEEP THE RI AND TCK SYNCHRONIZED WITH THE SPECIFICATION

Whenever the Specification is updated, the ML is responsible for reviewing the current RI and TCK to determine what revisions (if any) are needed to keep the RI and TCK synchronized with the Specification. The maintenance changes will be considered final when the RI and TCK are synchronized with the Specification.

4.3 THE TCK APPEALS PROCESS

As part of completing the TCK, the Expert Group must identify and specify in the TCK documentation a First-Level TCK Appeals Process by which future challenges to the TCK will be addressed.

An implementor of a Specification can challenge a TCK test using the First-Level TCK Appeals Process. Implementors who are not satisfied with a first level decision can appeal it to the EC.

4.3.1 APPEALING A FIRST-LEVEL DECISION TO THE EC

> **definition – Appeal Ballot**: A ballot by the EC to override a first-level decision on a TCK test challenge.

Implementors appeal a first-level decision to the EC by filing a written request with the PMO using the online form available at the TCK section of the JCP Web Site. The PMO will circulate the request to the EC and initiate an Appeal Ballot. Members of the EC will then have 7 days to consider the appeal and cast their ballots. A 2/3 majority of the EC must vote to override the first-level decision in order for the Appeal Ballot to be successful. Members of the EC who do not cast their ballot by the end of the balloting period will be considered to have supported the first-level decision.

4.3.2 UPDATE THE RI TO MATCH THE TCK AND THE SPECIFICATION

When the EC overrides a first-level decision, the ML will update the TCK and/or the Specification in accordance with the EC decision and then, if necessary, update the RI to match.

APPENDIX A: EXECUTIVE COMMITTEE

A.1 CHARTER

The Executive Committee (EC) oversees the development and evolution of the Java technologies within the JCP by:

1. Selection of Java Specification Requests for development within the JCP.
2. Approval of draft Specifications prior to Public Review.
3. Final approval of completed Specifications.

A.2 STRUCTURE

The Executive Committee consists of 16 Java Community Process Members and one Chair. The Chair of the EC will be a member of the Process Management Office. The Chair is a non-voting position except to cast tie-breaking votes within in the EC. Another representative of Sun Microsystems, who is not a part of the PMO, will have a permanent voting seat on the EC.

The remaining 15 seats will be held by other Java Community Process Members who do not represent Sun Microsystems, Inc. None of these Members can hold more than one seat on the EC at any given time.

If a Member has majority-ownership of one or more other Members, then that group of Members can have only one seat on the EC at any given time.

A.3 TENURE

definition – Ratified Seat: An EC seat filled by the ratification process described in section A.5.

definition – Elected Seat: An EC seat filled by the election process described in section A.6.

All 15 seats have 3-year terms. There are 10 Ratified Seats and 5 Elected Seats. The 3-year terms are staggered so that 5 of the 15 seats are normally up for ratification/election each year as follows:

	Ratified Seats Replaced	**Elected Seats Replaced**
Year 1	3	2
Year 2	3	2
Year 3	4	1

The cycle repeats every 3 years. Ratified or Elected Seats that are vacated due to resignation as described in section A.4 will be filled during the next ratification/election as described in sections A.5 and A.6.

A.4 RESIGNATION OF EC SEATS

EC members may resign their seats at any time during their term.

If the individual representing an EC member resigns (as opposed to the individual's company or organization resigning), then that EC member may put forward a new individual within 30 days of the effective date of the resignation to serve out the remaining term of the seat. If the EC member declines to name a replacement within the 30 days, that Member will be assumed to have resigned the seat.

Should any company with a seat on the EC acquire a majority ownership of another sitting EC member, one of those members will be required to resign his or her seat by the effective date of the acquisition.

EC members who fail to remain an EC or Java Community Member in good standing will be assumed to have resigned their seat.

A Ratified Seat vacated through resignation will be filled using the ratification process described in section A.5. An Elected Seat vacated through resignation will be filled using the election process described in section A.6.

A.5 SELECTION PROCESS FOR RATIFIED SEATS

Members are selected for the 10 Ratified Seats using a ratification process that is carried out starting on May 15 of each year. The table given at the end of section A.3 determines the number of Ratified Seats up for ratification each year of the 3-year cycle.

Ratified Seats that were vacated by resignation, and whose 3-year terms on the EC were not ending that year will be filled for the remainder of their term at the next ratification vote.

- The PMO nominates Members to fill the vacant Ratified Seats based on feedback from current EC members and the Community with due regard to the need for balanced community and regional representation.
- The PMO will post the nomination list to the Community for 15 days prior to the ratification ballot.
- Eligible Members will vote to ratify the nominees over the following 7-day voting period.
- If one or more of the nominees are not ratified by the vote, Sun will nominate additional Members as needed and hold additional ratification votes until the vacant seats are filled.

All Java Community Process Members are eligible to participate in a ratification ballot subject to the provision that if a Member has majority-ownership of one or more other Members, then that group of Members will collectively have 1 vote.

A.6 SELECTION PROCESS FOR ELECTED SEATS

Members are selected for the 5 Elected Seats using an election process that is carried out starting on April 15 of each year. The table given at the end of section A.3 determines the number of Elected Seats up for election each year of the 3-year cycle.

Elected Seats that were vacated by resignation, and whose 3-year terms on the EC were not ending that year will be filled for the remainder of their term at the next ratification vote.

- Any Member who is not currently serving on the EC can be nominated by another Member or themself.
- The PMO will accept nominations from the Community for a period of 30 days.
- At the close of nominations, the PMO will post the nomination list to the Community for 15 days.
- Eligible Members may vote for as many nominees as there are vacant Elected Seats over the following 7-day voting period.
- The nominees who received the most votes will fill the vacant Elected Seats.

The PMO will open nominations from the community at least 30 days prior to an election, and the nominations from the public and the PMO will be posted at least 15-days prior to the election, with updates as late nominations are received.

All Java Community Process Members are eligible to participate in an election ballot subject to the provision that if a Member has majority-ownership of one or more other Members, then that group of Members will collectively have 1 vote.

A.7 FORMATION OF THE FIRST EXECUTIVE COMMITTEE

The first EC will be formed by holding a special ratification/election process to fill all 10 Ratified Seats and 5 Elected Seats. A random drawing will determine which of these seats will come up for ratification/election in Year 1, Year 2, and Year 3. The Year 1 ratification/election process will begin in the year following the formation of the first EC.