JCP: 2 Process DocumentProcedures

JCP 2: Process Document

The formal procedures for using the Java Specification development process

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Comments to: pmo@jcp.org

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23 EXECUTIVE SUMMARY

24 The international Java community develops and evolves Java™ technology specifications using the
25 Java Community Process (JCP). The JCP produces high-quality specifications ~~in "Internet time"~~ using
26 an inclusive, ~~consensus~~Consensus~~consensus~~ building approach that produces a
27 Specification~~specification~~, a Reference Implementation~~reference implementation~~ (to prove the
28 Specification~~specification~~ can be implemented), and a Technology Compatibility Kit~~technology~~
29 ~~compatibility kit~~ (a suite of tests, tools, and documentation that is used to test implementations for
30 compliance with the Specification~~specification~~).

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

36 This version of the JCP was developed ~~through the JCP~~using the Java Community Process itself
37 ~~through the JCP~~ by means of JSR 348~~???~~, led by Oracle ~~???~~ and the combined Executive
38 Committees as the Expert Group~~expert group~~.

39 An Executive Committee (EC) representing a cross-section of both major stakeholders and other
40 members of the Java community is responsible for approving the passage of Specifications through
41 the JCP's various stages ~~specifications through key points of the JCP~~ and for reconciling
42 discrepancies between Specifications~~specifications~~ and their associated test suites. There are two
43 ECs: one to oversee the Java technologies for the desktop/server space (with responsibility for the
44 Java SE™~~SE™~~ and Java EE™ Specifications~~EE™ specifications~~) and the other to oversee the Java
45 technologies for the consumer/embedded space (with responsibility for the Java ME™ Specification).
46 The EC's are considering merging the two bodies into a single one in the near future, so newly elected
47 EC members should be aware that their terms may vary from what is specified in section 6~~5~~.4, "EC
48 SELECTION PROCESS AND LENGTH OF TERM"~~ME™ specification).~~

49 There are four major stages~~steps~~ in this version of the JCP:

50   1. **INITIATION**: A Specification~~specification~~ targeted at the desktop/server or
51   consumer/embedded space is initiated by community member(s) and approved for

development by the responsible EC. A group of experts is formed to assist the Spec Lead with the development of the Specification.

2. **DRAFT RELEASES**: The Expert Group develops the Specification through an iterative process, releasing drafts for public review and comment. After the formal Public Review the EC ~~votes~~holds a ballot on whether the JSR should proceed to the Final Release stage.

3. **FINAL RELEASE**: The Spec Lead submits the Specification to the PMO for publication as the Proposed Final Draft. When the RI and TCK are completed, and the RI passes the TCK, the Specification, the RI, and the TCK are submitted to the PMO, who circulates them to the responsible EC for final approval.

1. ~~**EARLY DRAFT**: A group of experts is formed to develop a preliminary draft of the specification that both the community and the public will then review. Anyone with an Internet connection can read and comment on the draft. The expert group uses feedback from the review to revise and refine the draft.~~

2. ~~**PUBLIC DRAFT**: The draft goes out again for review by the public. The expert group uses the feedback to further revise the document. At the end of this review, the EC decides if the draft should proceed. If approved by the EC, 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 responsible EC for final approval.~~

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

I ~~FUNDAMENTAL~~ DEFINITIONS

Appeal Ballot: The EC ballot to override a first-level decision on a TCK test challenge.

Change Log: An area accessible from the JSR Page that lists all changes made to the Specification, RI, TCK, and licenses since the previous R~~r~~elease. A Change Log has six sections: PROPOSED (changes not yet made to the Specification), ACCEPTED (changes made to the Specification), DEFERRED (changes to be considered in a new JSR), RI (changes made to the RI), TCK (changes made to the TCK) and LICENSING (changes to the licensing terms)

Consensus: The use of the word "consensus" refers always to "rough consensus" as defined in section 3.3 of the IETF's RFC 2418: "[...] consensus does not require that all participants agree although this is, of course, preferred. In general, the dominant view of the working group shall prevail. (However, "dominance" is not to be determined on the basis of volume or persistence, but rather a more general sense of agreement). [...] Note that 51% of the working group does not qualify as "rough consensus" and 99% is better than rough. It is up to the Chair to determine if rough consensus has been reached (IETF Working Group Guidelines and Procedures).

Contribution Agreement: A legal agreement defining the terms, particularly those concerning the grant of intellectual property rights, under which contributions are made to a project.

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

Early Draft Review: A 30 to 90 day period during which the public reviews and comments on the draft Specification.

Elected Seat: An EC seat filled by the election process described in section ~~5.3.4~~6.4.4.

~~**Java Community Process (JCP)**: The formal process described in this document for developing or revising Java technology specifications.~~

~~**Java Community Process Member (Member)**: A company, organization, or individual 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 that allows the latter entities to participate in the Java Community Process.~~

Executive Committee (EC): The Members who guide the evolution of the Java technologies. The EC represents a cross-section of both major stakeholders and other Members of the Java Community. EC members are apppointed in an annual election process.~~Members must have signed the EC acceptance letter in order to serve on the EC.~~ The EC Policies and Procedures are in the EC Standing Rules, which is a separate document.~~Appendix A.~~

Expert: A Member or Member Representative who has expert knowledge and is an active practitioner in the technology covered by the JSR.

Expert Group (EG): The group of Experts who develop or make significant revisions to a Specification.

Final Approval Ballot: The 14-day EC ballot to approve the Final Draft along with its associated RI and TCK.

Final Approval Reconsideration Ballot: The 14-day EC ballot to reconsider an initial rejection of a Final Draft, RI, and TCK.

Final Draft: The final draft of the Specification that will be put forward for EC approval.

Final Release: The final stage in the JSR development process when the Specification, RI, and TCK have been completed and can be licensed by implementors.

First-Level TCK Appeals Process: The process defined by the Spec Lead that allows implementers of the Specification to appeal one or more tests defined by the Specification's TCK.

Item Exception Ballot: The EC ballot to determine whether or not to include specific change items in a Maintenance Release.

Java Community Process (JCP): The formal process described in this document for developing or revising Java technology Specifications.

Java Community Process Member (Member): A company, organization, or individual that has signed the JSPA and is abiding by its terms. In the case of an individual, that person may represent himself/herself, or may represent or be otherwise empowered to act on behalf of a company or organization. No more than five individual Members are permitted at any one time as representatives of a company or organization.

~~**Program Management Office (PMO)**: The group within Sun Microsystems that is responsible for administering the JCP and chairing the EC.~~

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.

Java Specification Request (JSR): The document submitted to the PMO by one or more Members to propose the development of a new Specification or significant revision to an existing Specification.

Java Specification Participation Agreement (JSPA): A one-year renewable agreement between Oracle America and a company, organization or individual that allows the latter entities to participate in the Java Community Process.

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

JSR Approval Ballot: The EC ballot to determine if the JSR should be approved.

JSR Reconsideration Ballot: The EC ballot to determine if a revised JSR should be approved.

JSR Page: Each JSR has a dedicated public web page on the JCP Web Site where the JSR's history is recorded and where other relevant information about the JSR is published.

JSR Renewal Ballot: An EC ballot to confirm that a JSR should continue in its work.

JSR Renewal Reconsideration Ballot: An EC ballot to determine if a revised JSR should continue its work.

JSR Review: A 4 week period during which the public can review and comment on a new JSR.

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

Maintenance Release: The final stage in the JSR maintenance process when the Specification, RI, and TCK have been updated and can be licensed by implementors.

Maintenance Review: A period of at least 30 days prior to finalization of a Maintenance Release when Members and the public consider and comment on the change items listed in the PROPOSED section of the Change Log.

Maintenance Review Ballot: An EC ballot to determine whether the changes proposed by a Maintenance Lead are appropriate for a Maintenance Release.

Member Representative: ~~An employee of a Member company or an associate of a Member organization who has been approved by the Member to represent it within the JCP.~~A person who is an employee or agent of a Member company or a Member organization and who has been authorized by that Member to represent its interests within the JCP.

Platform Edition Specification (Platform Edition): A Specification that defines a baseline API set that provides a foundation upon which applications, other APIs, and Profiles can be built. There are currently three Platform Edition Specifications: Java~~JJave~~ SE, Java EE, and Java ME.

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~~specifications~~ must be referenced in their entirety.

Program Management Office (PMO): The group within Oracle America that is responsible for administering the JCP and chairing the EC.

Proposed Final Draft: The version of the draft Specification that will be used as the basis for the RI and TCK.

Public Draft Specification Approval Ballot : The EC ballot to determine if a draft should proceed after Public Review.

Public Draft Specification Reconsideration Ballot : The EC ballot to determine if a revised draft should proceed after Public Review.

Public Review: A 30 to 90 day period when the public can review and comment on the draft Specification.

Ratified Seat: An EC seat filled by the ratification process described in section ~~5.3.3~~6.4.3.

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

Release: A Final Release or a Maintenance Release

Specification Lead (Spec Lead): The Expert responsible for leading the effort to develop or make significant revisions to a Specification and for completing the associated Reference Implementation and Technology Compatibility Kit. A Spec Lead (or the Spec Lead's host company or organization) must be a Java Community Process Member.

Spec Lead Member: The individual JCP member who is a Spec Lead, or otherwise the company or organization that employs, and is represented by, the Spec Lead.

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

| 207 | **Transfer Ballot:** The EC ballot to approve transfer of ownership of a Specification, RI, and |
| 208 | TCK from one Member to another Member. [1] |

| 209 | **Umbrella Java Specification Request (UJSR):** A JSR that defines or revises a Platform |
| 210 | Edition or Profile Specification. A UJSR proceeds through the JCP like any other JSR. |

| 211 | The use of the term **day** or **days** in this document refers to calendar days unless otherwise |
| 212 | specified. |

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

216 ~~**JCP Specification Page (Spec Page)**: Each Specification approved for development or revision will~~
217 ~~have a dedicated public web page established on the JCP Web Site to contain a history of the~~
218 ~~passage of the Specification through the JCP, including a record of the decisions, actions, and votes~~
219 ~~taken by the EC with respect to the draft Specification.~~

220 THE JAVA COMMUNITY PROCESS ^{SM} PROGRAM

221 1. GENERAL PROCEDURES

222 1.1 EXPERT GROUP TRANSPARENCY

223 Each Expert Group is free to use the working style that it finds most productive and appropriate, so
224 long as this is compatible with the requirements specified in this document. For example, EGs may
225 choose to operate by seeking ~~consensus~~Consensus or by voting on issues where there is
226 disagreement.

227 As specified below, Expert Groups must operate in a transparent manner, enabling the public to
228 observe their deliberations and to provide feedback. All feedback must be taken into consideration and
229 public responses must be provided. In the initial JSR submission the Spec Lead must specify the
230 transparency mechanisms (for example, the mailing lists and issue tracker) that the Expert Group
231 intends to adopt, and must provide the URLs for accessing the chosen collaboration tools. The PMO
232 will publish this information on the public JSR Page. The Spec Lead must also provide a pointer to any
233 Terms of Use required to use the collaboration tools so that the EC and prospective EG members can
234 judge whether they are compatible with the JSPA.

235 If the EG changes its collaboration tools during the life of the JSR these changes must be reported to
236 the PMO, who will update the relevant information on the JSR Page. Any such changes must ensure
237 that previously-published information is incorporated into the new tools. When voting to approve a
238 JSR's transition to the next stage EC members are expected to take into consideration the extent to
239 which the Spec Lead is meeting the transparency requirements.

240 Spec Leads should be aware of their obligations under the JSPA to license the output of their JSR on
241 Fair, Reasonable, and Non Discriminatory terms, and to make certain patent grants. Incorporating
242 feedback provided through public email ~~aliases~~lists or forums without ensuring that the provider has
243 signed the JSPA or an equivalent Contribution Agreement (the JSPA is preferable, and sufficient) may
244 make it impossible to meet these requirements or may expose the Spec Lead Member to legal liability.

245 The use of *Confidential materials* (as defined in the JSPA) by Expert Groups limits transparency, is
246 strongly discouraged, and will be prohibited in a future version of the Process. If the Spec Lead

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1 Transfer of ownership does not mean transfer of IP rights, only transfer of the right to start again. The new Spec Lead
  can, however, negotiate a transfer of IP with the old Spec Lead.

intends to permit the use of *Confidential materials* (such as emails, drafts or submissions marked as *Confidential*), this must be specified in the initial Java Specification Request. Expert Groups may also choose to keep information private by means other than marking it as Confidential (for example, by not publishing it on a publicly available site).[2]

1.1.1 ~~Mailing Lists~~MAILING LISTS

All substantive business must be carried out on a public mailing list designated by the Spec Lead. The purpose of this list is to keep observers aware of important issues and, minor administrative issues that distract from substantive business should therefore be kept private. A private mailing list should be used for minor administrative matters. Significant business includes, for example, eliminating or adding new features to the JSR, changes to the membership of the Expert Group, ~~modifications to the reference implementation or the TCK,~~ publication of the agenda, and on-going debate about JSR specifics. Non-substantive administrative matters such as notifications of meeting schedules, messages directing Expert Group members to particular documents or URLs, and reminders about voting or task assignments should be excluded from the public mailing list.

If the ~~public mailing list is writable only by Expert Group members~~Expert Group uses a mailing list writable only by Expert Group members, then the EG must also provide a publicly readable and writable email list or a forum to enable feedback and comments from the public.

1.1.2 ~~Issue Tracking~~ISSUE TRACKING

Issues must be tracked through a publicly readable issue tracking mechanism. Formal comments must be entered into the issue-tracker, and all open issues must be responded to publicly before the JSR moves to the next stage. If the EG decides to reject a suggested change then the response in the issue-tracker must include a rationale for rejection. Responses stating that the suggested change will be made at a later date (but before the JSR or Maintenance Release is finalized) are permissible; in these cases the issue should be kept open until the change has actually been made. The issue-tracking mechanism must make a clear distinction between open, responded-to, and closed issues so the EC can clearly judge whether the EG has met its obligation to respond to all issues.

EC members, when voting to approve a JSR's advance to the next stage, should take into consideration the EG's responses to comments, and may insist that a suggestion or issue the EG considers resolved be re-addressed before the JSR moves on.

1.1.3 ~~Response to Comments~~

~~Expert Groups must respond publicly to all comments before a JSR can move to the next stage. All comments regarding a JSR deserve a well-crafted response. Expert groups should review responses prior to release to ensure that the response addresses the specific comment. Responses to similar comments can be consolidated. Comments that are off-topic do not require a response but should be denoted as such. The Executive Committee reserves the right to require that a comment deemed by the Expert Group as off-topic be addressed before the JSR moves to the next stage. A formalized issue tracking mechanism will help to ensure that all issues raised by the Java community are documented and responded to before the JSR moves to the next stage.~~

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2   The EC intends to remove the Confidentiality language from the next version of the JSPA.

1.1.4 ~~Changes to Licensing Terms~~ CHANGES TO LICENSING TERMS~~If the licensing terms for a JSR change from one release to the next, the changes must be explicitly listed and explained. Changes to the licensing terms must be disclosed during JSR submission (in the case of a new JSR) or in the Change Log for Maintenance Releases. Subsequent changes to licensing terms during the life of the JSR must be disclosed when the Specification is next submitted to the PMO for public posting or review.~~

~~Existing licensees who not wish to accept a modified license when required to adopt a newer TCK will have the option to accept the updated TCK under the previous licensing terms.~~

As described in Section 2.2.1 below, the proposed licensing terms must be disclosed during JSR submission. The Specification License must not be modified after initial submission since to do so could invalidate IP grants. It may be necessary, however, to modify the proposed RI or TCK license. Any such changes must be disclosed when the Specification is next submitted to the PMO for public posting or review.

During the lifetime of the JSR the Spec Lead must continue to offer the RI and TCK licenses that were published at the time of Final Release, with the exception that reasonable increases in price are permitted. At subsequent Maintenance Releases alternate RI or TCK licenses may also be offered so long as all changes are disclosed in the Change Log, but licensees must be free to choose the original terms if they wish. For example, existing licensees who do not wish to accept a modified license when required to adopt a newer TCK will have the option to license the updated TCK under the previous terms.

When a newer version of a technology is created through a follow-on JSR the Specification, RI, and TCK license terms for the new JSR may differ from those offered for the previous JSR, but any such changes must be disclosed during JSR submission. The original terms for the previous JSR must be offered for the lifetime of that JSR.

1.2 EXPERT GROUP MEMBERSHIP

1.2.1 WITHDRAWAL OF AN EXPERT FROM THE EXPERT GROUP

An Expert may withdraw from the Expert Group at any time. ~~When this happens, the Spec Lead should approach the Member who originally contributed the Expert and work with that organization to find a replacement. If no replacement is offered, the Spec Lead may recruit a replacement from another Member. If the departing Expert is the Spec Lead, the Expert Group should choose one of its members as the new Spec Lead.~~ If the withdrawing Expert is the Spec Lead, the Expert Group, with the help of the PMO, should approach the Member who originally contributed the Expert, if any, and request them to provide a suitable replacement; if no such replacement is forthcoming, the Expert Group should choose one of its members as the new Spec Lead. If the withdrawing Expert is not the Spec Lead, the Spec Lead should approach the Member who originally contributed the Expert, if any, and work with that organization to find a suitable replacement. If no replacement is offered or is not otherwise available, the Spec Lead may recruit a replacement from amongst other Members.

1.2.2 DISRUPTIVE, 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, and is being disruptive, uncooperative or unresponsive. EG members are expected to make a reasonable effort to resolve any such issues among themselves, with the active help of the Spec Lead. However, if the situation cannot be resolved in a timely manner, any three members of the EG can approach the Spec Lead and request that the EG member in question be excluded from further participation in the EG. If the Spec

Lead agrees to the request he can then do so. In the case where the EG Member in question is an Member Representative, the Spec Lead must first request that the Member replace its representative. If the Member does not do so in a timely manner, the Spec Lead can exclude the Member itself from further EG participation. The Spec Lead's decision as to whether or not to exclude can be appealed to the EC by following the process outlined in Section 0.61.7, "Escalation and Appeals"

1.2.3 UNRESPONSIVE OR INACTIVE SPEC LEAD

2. 1. INITIATE A NEW OR REVISED SPECIFICATION

3. **There may be rare instances when members of the Expert Group feel that the Spec Lead is not acting in ways that advance the work of the Expert Group and is being unresponsive or inactive. These concerns should be brought to the attention of the EC as quickly as possible so they may be proactively addressed and resolved. The EC is expected to make a reasonable effort to resolve any such issues in a timely manner. However, if the situation cannot be resolved in a timely manner, any three members of the EG may request the EC to replace the Spec Lead for cause (which should be made clear and documented to the EC). If the EC agrees that there is cause, it may ask the PMO to replace the Spec Lead. In the case where the Spec Lead is an Member Representative the PMO should ask the Member to replace the Spec Lead, or it may seek to put in place an alternative Spec Lead, in which case the EC must conduct a tTransfer bBallot as specified in section 5.1.21 of this document. If no Spec Lead replacement can be found, the EC may disband the Expert Groupwill initiate a JSR Renewal Ballot to determine whether the JSR should be shut down.**

3.1 JSR DEADLINES

If a JSR does not begin Early Draft Review within the first 12 months following the completion of its initial JSR Approval Ballot (JSR Approval), or does not begin Public Review within 2 years of JSR Approval, or has not achieved Final Release within 3 years of JSR Approval, then a majority of the EC mayshould initiate a JSR Renewal Ballot unless it is agreed that there are extraordinary circumstances that justify the delay. The PMO will inform the Spec Lead and Expert Group of this decision and will request the Spec Lead and Expert Group to prepare a public statement to the EC. The JSR Renewal Ballot will start 30 days after the request. If the JSR Renewal Ballot is approved by the EC, then another renewal ballot cannot be initiated for that JSR for an additional year.

If the JSR Renewal Ballot fails, the Expert Group will have 30 days to update the JSR in response to the concerns raised by the EC, and may submit a revised version to the PMO. If a revised JSR is not received by the end of the 30 days, the original decision by the EC will stand and the JSR will be closed. If a revision is received, then the PMO will forward it to the EC and initiate a JSR Renewal Reconsideration Ballot. At the close of balloting, all comments submitted by EC members, together with their ballots will be circulated to the Expert Group by the PMO. If this ballot fails, the JSR will be closed and the Expert Group will disband. If the JSR was a revision to an existing Specification, the Spec Lead will resume the role of Maintenance Lead of the current Specification (see section 5).

3.2 COMPATIBILITY TESTING

~~1.1 INITIATE A JAVA SPECIFICATION REQUEST~~

The Spec Lead is responsible for defining the process whereby the TCK is used to certify implementations of the JSR as compatible. The ~~Spec~~Maintenance Lead must submit to the PMO at least quarterly, and at every Maintenance Release, a list of all implementations that have been certified as compatible and that have been released publicly or commercially. The PMO will publish this information on the JCP website. If the Spec Lead submits the information in the form of a pointer to an already published list the PMO may choose simply to reference that list rather than duplicate it.

TCK license terms must permit implementors to freely and publicly discuss the testing process and detailed TCK test results with ~~their customers~~all interested parties.

3.3 EXECUTIVE COMMITTEE DUTIES

3.3.1 ~~Transparency~~TRANSPARENCY

All substantive Executive Committee business should be conducted in the most transparent manner possible. EC transparency requirements are specified in a separate document, EC Standing Rules.

3.3.2 ~~Draft Reviews~~DRAFT REVIEWS

During Draft Review periods EC members are strongly encouraged to have one or more technical members of their organizations review the draft in order to uncover possible duplication of features or services between the draft and other Specifications. EC members should inform the Expert Group of any such discoveries using the feedback mechanism specified by the Spec Lead. EC feedback is particularly important to the Expert Group, and EC members are encouraged not to wait until ballot periods to raise concerns and issues.

3.4 PMO RESPONSE TIMES

Materials to be posted on the JCP website for review, comment, or any other official EG or EC business should be submitted to the PMO, which will post them on the website and announce their availability to Members and the public within seven days of receipt.

3.5 ESCALATION AND APPEALS

Unless otherwise specified in this document, any EG member can appeal to the EC regarding a decision, an action or inaction by the PMO, a Spec Lead, or a Maintenance Lead that affects EG participation or issue-resolution and which cannot be resolved by other reasonable means. An appeal must be initiated by sending an email message to the PMO (pmo@jcp.org) in all cases, even if it affects the PMO. The message must describe the issue under appeal clearly and concisely, with a short and relevant Subject: line, and provide all relevant documentation to support the appeal. The PMO shall transmit the message to the EC no later than seven days ~~of~~after receipt. The EC shall then respond to the appellant within 30 days, either with a resolution or with a request for clarification

405 and/or further documentation.

4. INITIATE A NEW OR REVISED SPECIFICATION

4.1 INITIATE A JAVA SPECIFICATION REQUEST

408 **definition - Java Specification Request (JSR)**: The document submitted to the PMO by
409 one or more Members to propose the development of a new Specification or significant
410 revision to an existing Specification.

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

414 **definition - Expert**: A Member representative who has expert knowledge and is an active
415 practitioner in the technology covered by the JSR.

416 **definition - Expert Group**: The group of Experts who develop or make significant
417 revisions to a Specification.

418 **definition - Specification Lead (Spec Lead)**: The Expert responsible for leading the effort
419 to develop or make significant revisions to a Specification and for completing the
420 associated Reference Implementation and Technology Compatibility Kit. A Spec Lead (or
421 the Spec Lead's host company or organization) must be a Java Community Process
422 Member.

423 One or more Members can initiate a request to develop a new Specification, or carry out a
424 significant revision to an existing one, ~~by sending a JSR to the PMO. The JSR must use~~
425 ~~the template available at the JCP Web Site~~by submitting the JSR Proposal through the
426 JCP website, as described in the Spec Lead Guide~~sending a JSR to the PMO. The JSR~~
427 ~~must use the template available at the JCP Web Site~~. Any JSR under consideration can be
428 withdrawn by its submitter(s) without explanation at any time prior to the completion of the
429 JSR ~~approval vote~~Approval Ballot~~approval vote~~ (see section 2~~11~~.3) upon request by the
430 submitter(s) to the PMO.

431 The following is some of the information required to be included with each JSR:

432 • the Members making the request (the submitters), the proposed Spec~~a Specification~~ Lead, and
433 the initial members of the Expert Group.
434 • a description of the proposed Specification~~specification~~.
435 • the reason(s) for developing or revising it.
436 • the primary Platform Edition, as well as any consideration given to other Platform Editions.
437 • an estimated development schedule.
438 • any preexisting documents, technology descriptions, or implementations that might be used as
439 a starting point.
440 • a transparency plan, which outlines the tools and techniques that the Spec Lead will use,
441 during the creation and development of the Specification~~specification~~, and for communicating
442 the progress within the Expert Group to Community Members, EC Members and the public.
443 The EC will expect the Spec Lead to operate the JSR in accordance with this plan.

4.1.1 ~~1.1.1~~ REVISE EXISTING SPECIFICATIONS

Existing Specifications, together~~along~~ with their associated RIs and TCKs, are maintained by a designated Maintenance Lead using the processes described in section 4~~5~~ of this document. Maintenance Lead Members ~~Leads (and their host companies or organizations)~~ are expected to assume long term ownership of the Specification, RI~~their Specifications, RIs~~, and TCK while respecting the wishes~~TCKs with due respect of the will~~ of the Java Community Members with regard to evolution. ~~This means that~~ Maintenance Leads will therefore~~automatically~~ be the Spec Leads for all significant revisions to their Specifications, ~~going forward~~ but they will not have the exclusive right to decide when a significant revision will take place. That will be decided by the EC in response to a revision JSR that can be initiated by any Java Community Member. Submitter ~~(or Members). The only provision is that the submitter~~(s) should make a reasonable effort to get some of the members of the previous Expert Group to join the revision effort.

4.1.2 ~~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 only as part of Java~~Jave~~ SE, 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 can only be accepted and carried out within a UJSR for Java SE.

In order to guard against fragmentation, new Platform Edition Specifications will not substantially duplicate existing Platform Editions or Profiles.

4.1.3 ~~1.1.3~~ PROFILES AND API SPECIFICATIONS TARGET CURRENT PLATFORM EDITIONS

All new or revised Specifications must be compatible with the most recent versions of the targeted Platform Edition Specifications. In order to achieve this, all UJSRs to define new Profile Specifications or revise existing Profile Specifications must reference the latest version of the Platform Edition Specification they are based upon.

~~1.1.5 CONTINUED AVAILABILITY~~

~~The technology that a JSR defines can be delivered as part of a Profile or Platform Edition, it can be delivered stand-alone or both. Future versions of the technology may be integrated into a Profile or a Platform Edition while previous versions were not. The submitter of a JSR will be required, via the JSR submission form, to indicate if it is the submitter's goal to deliver the JSR's RI and TCK as part of a Profile or Platform Edition, stand-alone or both. When delivering the JSR's RI and TCK integrated into a Profile or Platform Edition and not delivering these separately and where the RI and TCK of previous versions were available separately, the submitter must state the rationale. Also in this case the JSR Review (see section 1.2) will be 4 weeks instead of 14 days.~~

~~A JSR for a new version of an API that proposes to become part of a Profile or Platform Edition and is considering discontinuing stand-alone availability where the previous JSR for this API did not indicate this plan, must make that proposal to discontinue stand-alone availability one version ahead.~~

4.1.4 ~~1.1.6~~ PLATFORM INCLUSION

The technology that a JSR defines can be delivered as part ~~JSRs that want to be considered to be included in the definition~~ of a Profile or Platform Edition, it can be delivered stand-alone, or both. The JSR submission form requires the submitter to state whether ~~Platform Edition or a Profile should describe this intent in~~ the JSR's RI and TCK should be delivered as part of a Profile or Platform

488 Edition, in stand-alone manner, or both~~submission~~. The final decision whether a specific JSR is
489 included in a Profile or a Platform Edition is made by the Spec Lead and Expert Group of that Platform
490 Edition JSR or Profile JSR, and confirmed by the EC ballots on those JSRs. If the Platform Edition or
491 Profile JSR turns down the request for inclusion, then the JSR for the API will be required to deliver a
492 stand-alone RI and TCK.

493 Tehnologies may be incorporated into a Profile or Platform Edition after having been initially delivered
494 standalone. A JSR for a new version of an API that proposes to become part of a Profile or Platform
495 Edition and is considering discontinuing stand-alone availability must state the rationale for this
496 change. The public must be informed of the intention to discontinue the availability of the standalone
497 RI and TCK one ~~release~~JSR submission in advance.

498 4.2 ~~1.2~~ JSR REVIEW

499 **~~definition - JSR Review~~**~~: A 2 or 4 week period when anyone with an Internet connection~~
500 ~~can review and comment on a new JSR.~~

501 **~~definition - JSR Page~~**~~: Each initiated JSR will be published on a public area of the JCP~~
502 ~~Web Site.~~

503 When a JSR is received, the PMO will give it a tracking number, assign the JSR to the
504 appropriate EC (or to both ECs if so requested by the submitter), create its JSR Page,
505 announce the proposed JSR to the public, and begin JSR Review. Comments on the JSR
506 should be sent to the JSR's public feedback ~~alias~~mailing list. Comments will be forwarded
507 to the EC for its consideration and~~e-mail address listed on the JSR Page. All comments~~
508 ~~received~~ will be made available from the JSR Page (similar comments may be
509 consolidated.)~~) and forwarded to the EC for its consideration~~. Members who are interested
510 in joining the Expert Group (should the JSR be approved) should identify themselves by
511 submitting a nomination form to the PMO.~~ As described by section 1.1.5 the review period~~
512 ~~will be either 2 or 4 weeks~~.

513 **4.2.1 DISCLOSURE OF LICENSING TERMS** ~~FOR THE RI AND TCK~~

514 ~~1.2.1 EARLY WARNING AND FEEDBACK ON LICENSING TERMS FOR THE RI AND TCK~~

515 **The Spec Lead Member is responsible for developing the Reference Implementation**
516 **and Technology Compatibility Kit and for licensing them as described in the JSPA. The**
517 **Spec Lead Member must provide the EC with complete copies of the proposed**
518 **Specification, RI and TCK licenses no later than the start of JSR Review. The licenses**
519 **will be published on the public JSR page. EC members should provide feedback on the**
520 **terms as an indication of how the community as a whole might react to the terms. If the**
521 **EC** ~~consensus~~**Consensus is that the proposed licensing terms are not compatible with the**
522 **licensing guidelines established for use within the JCP, then balloting on the proposed JSR will**
523 **be delayed until Oracle legal provides an opinion on the matter. The opinion of Oracle legal will**
524 **be the final decision on the matter.**

525 ~~The Spec Lead's company or organization is responsible for the Reference Implementation (RI) and~~
526 ~~Technology Compatibility Kit (TCK) and its licensing under terms compatible with the licensing~~
527 ~~guidelines established for use within the JCP. The Spec Lead will provide the EC with the terms under~~
528 ~~which the RI and TCK will be licensed no later than the start of JSR Review. The Spec Lead must~~
529 ~~provide complete copies of the licenses that they intend to use, not simply a summary of some of the~~

530 ~~terms. The licenses will be published for public access with links on the public JSR page. If the Spec~~
531 ~~Lead subsequently determines that circumstances require a change to one or more of the licenses it~~
532 ~~provided, the Spec Lead shall provide both the revised licenses and the reasons for the changes to~~
533 ~~the EC. EC members will provide feedback on the terms as an indication of how the community might~~
534 ~~react as a whole to the terms.~~

535 ~~If Expert Group members are required to enter into an agreement (other than the JSPA) for access to~~
536 ~~Expert Group infrastructure (such as Expert Group mail lists, document or code repositories, etc.), the~~
537 ~~Spec Lead must include references to the licenses for use of these services in the Java Specification~~
538 ~~Request. Since hosting services may impose licensing requirements on Expert Group members, this~~
539 ~~information may be considered by the EC during the JSR Approval Ballot. If the Expert Group switches~~
540 ~~to a different hosting service after the JSR Approval Ballot, the Spec Lead must obtain EC approval~~
541 ~~and update the public Spec Page on the JCP Web site.~~

4.3 ~~1.3~~ JSR APPROVAL BALLOT

543 After the JSR Review, EC members will review the JSR and any comments received, and cast their
544 ballot ~~below 5as specified in Section~~ to decide**definition - JSR Approval Ballot**~~: The EC ballot during~~
545 ~~the last 14 days of the JSR Review to determine~~ if the JSR should be approved.

546 ~~During JSR Review, EC members should review the JSR (with its proposed Spec Lead and initial~~
547 ~~Expert Group), any comments and nominations received, and cast their ballot to decide if the JSR~~
548 ~~should be approved.~~

549 **~~definition - JSR Reconsideration Ballot~~**~~: The EC ballot to determine if a revised JSR~~
550 ~~should be approved.~~

551 If the JSR Approval Ballot fails, the PMO will send all EC comments to the JSR submitter(s) who may
552 revise the ~~will have the option of revising the~~ JSR and resubmit it~~resubmitting it to the PMO~~ within 14
553 days. If a revised JSR is not received in that time, the original EC decision will stand and the JSR will
554 be closed. If a revised JSR is received, the PMO will post it to the JSR Page, announce the revised
555 JSR to the public, and send it to all EC members for a JSR Reconsideration Ballot. If that ballot fails,
556 the JSR will be closed.

4.4 FORM THE EXPERT GROUP

5. ~~2. CREATE THE EARLY DRAFT~~

~~2.1 FORM THE EXPERT GROUP~~

6. Within 14 days of a a JSR being~~When a JSR is~~ approved, the PMO instructs ~~will notify~~ the identified Spec Lead to form the Expert Group. If the Member contributing the Spec Lead withdraws from the Community before the JSR is approved, the PMO will request the preliminary~~initial~~ Expert Group to choose a replacement from among themselves who is willing to take on the duties defined in this document. ~~(including taking responsibility for the RI and TCK, working towards the estimated schedule given in the JSR, and assuming the position of Maintenance Lead as described in section 4).~~

There is no size limit on the Expert Group. The Spec Lead may add additional Experts at any time provided the existing EG members are consulted~~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.~~

 Any JCP Member or Member Representative can request to join an Expert Group at any time by ~~sending an email to the Spec Lead of the EG~~submitting their nomination via the online form provided on the JSR Page. The ~~request~~nomination, together with the Spec Lead's official response, substantive deliberations within the EG about this matter, and any other official decision related to EG composition, including decisions to remove or replace EG members, must be made public via the EG's public ~~alias~~mailing list.

7. DRAFT RELEASES

7.1 WRITE THE FIRST DRAFT OF THE SPECIFICATION

~~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.~~

~~Spec Leads are encouraged to choose a style that provides maximal transparency to the Expert Group, community, the EC members and the public. The PMO provides Spec Leads with tools and techniques for making the actions of their Expert Groups transparent, and the EC members expect~~

593 Spec Leads to carefully choose which tools are best for their Expert Groups and commit to using
594 them. Transparency is valuable to everyone in the community, especially the Expert Group, because it
595 offers broader feedback to the group and helps build broader support for the final spec. The public
596 JSR page must contain information on what transparency techniques are being used by the Expert
597 Group and this information must be current before any JSR Ballot.

598 The use of JSPA Confidential materials (as defined in the JSPA) by Expert Groups limits transparency
599 and is strongly discouraged. If the Spec Lead intends to permit the use of JSPA Confidential materials
600 (such as emails, drafts or submissions marked as Confidential), this must be specified in the initial
601 Java Specification Request before the JSR Approval Ballot. Expert Groups may also choose to keep
602 information private by means other than marking it as Confidential (e.g. by not publishing it on a
603 publicly available site).

604 ### 2.1.2 WITHDRAWAL OF AN EXPERT FROM THE EXPERT GROUP

605 An Expert may withdraw from the Expert Group at any time. When this happens, the Spec Lead may
606 approach the Member who originally contributed the Expert and work with that organization to find a
607 replacement. If no replacement is offered, the Spec Lead may recruit a replacement from another
608 Member if desired. If the departing Expert is the Spec Lead, the Expert Group should choose one of
609 its members as the new Spec Lead provided he or she is willing to take on all of the responsibilities
610 defined in this document.

611 ### 2.1.3 UNCOOPERATIVE OR UNRESPONSIVE EXPERT GROUP MEMBERS

612 There may be rare instances when members of the Expert Group feel that one of their fellow Experts
613 is not acting in ways that advance the work of the Expert Group. These concerns should be brought to
614 the attention of the Spec Lead and/or the EC as quickly as possible so they may be proactively
615 addressed and resolved. The Expert Group members are expected to make a reasonable effort to
616 resolve any such issues among themselves. If a 2/3 majority of the members of the Expert Group find
617 that a Spec Lead is being unresponsive, or if a 2/3 majority of the EC determines that the Expert
618 Group is no longer capable of carrying out a vote, and the Spec Lead does not work to resolve the
619 situation in a timely manner, the EC may direct the PMO to ask the Member who provided the Spec
620 Lead to provide a replacement or may direct the PMO to ask a different Member to provide a
621 replacement.

622 ## 2.2 WRITE THE FIRST DRAFT OF THE SPECIFICATION

623 **The Expert Group should begin work by considering the requirements set forth in the**
624 **JSR, any contributed documents or technology descriptions, comments received**
625 **during JSR Review and, if this is a revision of an existing Specification, the Change**
626 **Log kept by the Maintenance Lead (see section 454). Additional input can be obtained**
627 **from discussions with other Members, industry groups, software developers, end-**
628 **users, and academics. The goal is to define requirements and then write a draft**
629 **Specificationspecification suitable for review by the Community and the public.**

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

634 Multiple Early Drafts (and Early Draft Reviews) are encouraged where the Expert Group feels that this
635 would be helpful.

2.2.1 CONFIRMATION OF LICENSING TERMS FOR RI AND TCK

The Spec Lead's company or organization is responsible for the Reference Implementation (RI) and Technology Compatibility Kit (TCK) and its licensing under terms compatible with the licensing guidelines established for use within the JCP. The Spec Lead will provide the EC with confirmation of the terms under which the RI and TCK will be licensed at each review period. EC members will provide feedback on the terms as an indication of how the community might react as a whole to the terms. The Spec Lead must provide complete copies of the licenses that they intend to use, not simply a summary of some of the terms. The licenses will be published for public access with links on the public JSR page. If the Spec Lead subsequently determines that circumstances require a change to one or more of the licenses it provided, the Spec Lead shall provide both the revised licenses and the reasons for the changes to the EC.

2.3 EARLY DRAFT REVIEW

definition - Community Review: A 30 to 90 day period when Members review and comment on the draft Specification.

definition – Early Draft Review: A 30 to 90 day period, coexistent with Community Review, when the public review and comment on the draft Specification.

Refinement of the draft Specification begins when the PMO posts it to the JCP Web Site and announces the start of Early Draft Review to all of the Members and the public. Anyone with access to the Internet can download and comment on the draft. The goal of Early Draft 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. Early Draft Review is an early access review, and shoulddesigned to ideally take place when the Specificationspecification still has some unresolved issues. The public's participation in Early Draft 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.

All comments from Members and the public should be sent to the e-mail feedback address listed in the draft. The Spec Lead is responsible for ensuring that all comments are read and considered. Members have a right to receive a response to their comments. For simplicity, similar comments may be combined and responded to as one. All comments received must be made available from the JSR Page (similar comments may be consolidated). Before the Public Review, a brief Expert Group response to each of the Early Draft Review comments must be made available from the JSR page.

7.1.1 2.3.1 UPDATING THE DRAFT DURING EARLY DRAFT REVIEW

If the Expert Group makes major revisions to the draft during Early Draft Review, the Spec Lead should send the revised draft, along with a synopsis of the changes, to the PMO who publish these online and . The PMO will notify Members of any updated drafts and change synopses received and make them available for download by Members and the public.

During Early Draft Review, EC members are strongly encouraged to have one or more technical members of their organizations carry out a review of the draft in order to uncover possible duplication of features or services between the draft and other Specifications. EC members should inform the Expert Group of any such discoveries using the Member e-mail feedback address listed in the draft so they can be considered and responded to like all Member comments. EC member feedback is important to the Expert Group, and EC members are encouraged not to wait until ballot periods to voice concerns and issues.

680 After the Early Draft Review period has ended, the Expert Group can make any additional changes to
681 the draft it deems necessary in response to comments before submitting the draft to the PMO for
682 ~~Public Review~~the next review~~Public Review~~.

8. ~~3. COMPLETE THE SPECIFICATION~~

8.1 ~~3.1~~ PUBLIC REVIEW

685 Public Review begins when the PMO posts a new draft Specification on the JCP Web Site and
686 announces its availability for public review and comment.

687 ~~**definition - Public Review**: A 30 to 90 day period when the public can review and~~
688 ~~comment on the draft Specification.~~

689 ~~Public Review begins when the PMO posts a new draft Specification on the JCP Web Site and~~
690 ~~announces it to both Members and the public. Anyone with access to the Internet can download and~~
691 ~~comment on the draft.~~

692 ~~All comments from Members and the public should be sent to the e-mail feedback address listed in the~~
693 ~~draft.~~ The Spec Lead is responsible for ensuring that all ~~public~~ comments are read and considered. If
694 those comments result in revisions to the draft, and those revisions result in major changes (in the
695 opinion of the Expert Group), then the Spec Lead must~~Specification Lead will~~ send an updated draft
696 (with a summary ~~synopsis~~ of the changes) to the PMO before the ~~at any time up until the last 7 days of~~
697 ~~the~~ review period ends~~(the draft is frozen during the last 7 days of Public Review in order for the EC to~~
698 ~~complete their Public Draft Specification Approval Ballot)~~. The PMO will post ~~both~~ the new draft and
699 the change summary on~~synopsis to~~ the JCP Web Site and will notify the public that the new draft is
700 available.~~notify both Members and the public. All comments received must be made available from the~~
701 ~~JSR Page before the end of the Review so that they can be considered by the EC during the ballot~~
702 ~~(similar comments may be consolidated). Before the Proposed Final Draft, a brief Expert Group~~
703 ~~response to each of the Public Review comments must be made available from the JSR page.~~

704 ~~EC members are strongly encouraged to have one or more technical members of their organizations~~
705 ~~carry out a review of the draft early on in Public Review, in order to uncover possible negative changes~~
706 ~~since Early Draft Review. EC members should inform the Expert Group of any such discoveries using~~
707 ~~the Member e-mail feedback address listed in the draft so they can be considered and responded to~~
708 ~~during the review period, like all Member comments. EC member feedback is important to the Expert~~
709 ~~Group, and EC members are encouraged not to wait until ballot periods to voice concerns and issues.~~

8.2 ~~3.2~~ PUBLIC DRAFT SPECIFICATION APPROVAL BALLOT

711 The ~~definition -~~ Public Draft Specification Approval Ballot starts when the Public Review closes. At the
712 close of balloting, all comments submitted by EC members with their ballots will be circulated to the
713 Expert Group by the PMO~~: The EC ballot to determine if a draft should proceed after Public Review~~.

714 ~~The Public Draft Specification Approval Ballot is carried out during the last 7 days of the Public~~
715 ~~Review. At the close of balloting, all comments submitted by EC members with their ballots will be~~
716 ~~circulated to the Expert Group by the PMO.~~

717 ~~**definition - Public Draft Specification Reconsideration Ballot** : The EC ballot to~~
718 ~~determine if a revised draft should proceed after Public Review.~~

719 If the Public Draft Specification Ballot fails, the Expert Group will have 30 days to update the draft in
720 response to the concerns raised by the EC and to submit a revised version to the PMO. If a revised
721 draft is not received within ~~by the end of the~~ 30 days, the original decision by the EC will stand and the

722 JSR will be closed. If a revision is received, the PMO will forward it to the EC and initiate a Public Draft
723 Specification Reconsideration Ballot. At the close of balloting, all comments submitted by EC members
724 with their ballots will be circulated to the Expert Group by the PMO. If this ballot fails, the JSR will be
725 closed and the Expert Group will disband. If the JSR was a revision to an existing Specification, the
726 Spec Lead will resume the role of Maintenance Lead of the current Specification (see section ~~4~~54).

9. FINAL RELEASE

~~3.3 PROPOSED FINAL DRAFT~~

PROPOSED FINAL DRAFT

730 ~~definition - Proposed Final Draft: The version of the draft Specification that will be used~~
731 ~~as the basis for the RI and TCK.~~

732 If the Public Draft Specification Approval Ballot (or Reconsideration Ballot~~reconsideration~~
733 ~~ballot~~) is successful, the Expert Group will prepare the Proposed Final Draft of the
734 Specification by completing any revisions it deems necessary in response to comments
735 received. The Spec Lead will then send the Proposed Final Draft to the PMO, who will
736 ~~announce it to both Members and the public and~~ post it on the JCP Web Site for public
737 download.

9.1.1 ~~3.3.1~~ COMPLETE THE RI AND TCK

739 The Spec Lead Member is responsible for the completion of both the RI and the TCK~~Reference~~
740 ~~Implementation (RI) and Technology Compatibility Kit (TCK)~~. JSRs that~~which~~ are assigned to both
741 ECs are required to support both environments, which ~~deliver an RI and TCK that are applicable to the~~
742 ~~Java ME environment and to the Java SE or Java EE environment. This~~ may require a separate RI and
743 TCK for each environment. If the RI and TCK uncover areas of the Specification that were under-
744 defined, incomplete, or ambiguous, the Spec Lead will work with the Expert Group to correct those
745 deficiencies and then send a revised Specification together with a summary ~~(with synopsis~~ of the
746 changes~~)~~ to the PMO. Information ~~All such revisions and change synopses received~~ will be posted to
747 the JCP Web Site ~~and announced to both Members and the public~~. The Expert Group will continue to
748 consider any further comments received during this time.

9.1.2 ~~3.3.2~~ ESTABLISH A FIRST-LEVEL TCK APPEALS PROCESS

750 ~~definition - First-Level TCK Appeals Process : The process defined by the Spec Lead~~
751 ~~that allows implementers of the Specification to appeal one or more tests defined by the~~
752 ~~Specification's TCK.~~

753 The Spec Lead is also responsible for establishing a clearly defined First Level TCK
754 Appeals Process to address challenges to ~~the~~ tests contained in the TCK. This process
755 must be described in the TCK documentation. Implementers who are not satisfied with a
756 first level decision should appeal to the EC by documenting their concerns in an email
757 message to the PMO. The PMO will circulate the request to the EC, together with any
758 information received from the ML concerning the rationale for the first-level decision, and
759 initiate a 7-day Appeal Ballot.~~documentation included in the TCK (see Section 4.3 for~~
760 ~~information on the full TCK Appeals Process). Examples of First Level TCK Appeals~~
761 ~~Process applicable to situations ranging from simple API Specifications all the way up to~~
762 ~~Platform Edition Specifications can be found in the TCK section of the JCP Web Site.~~

9.1.3 UPDATE THE DELIVERABLES IN RESPONSE TO THE APPEAL BALLOT

3.4 FINAL APPROVAL BALLOT

Depending on the nature of the problem, a successful TCK challenge will require updating one or more of the TCK, the Specification, or the RI. Within one month of the close of a successful TCK Appeal Ballot the Maintenance Lead must update these deliverables as necessary and record the changes in the relevant sections of the Change Log. The modified Change Log, the Specification (if changed,) and URLs for the updated RI and/or TCK must be delivered to the PMO, who will publish them on the JCP website.

9.2 FINAL APPROVAL BALLOT

definition - Final Draft: The final draft of the Specification that will be put forward for EC approval.

definition - Final Approval Ballot: The 14-day EC ballot to approve the Final Draft along with its associated RI and TCK.

When the Expert Group is satisfied that the TCK provides adequate test coverage, the RI correctlyadequately implements the Specification, and the RI passes the TCK, the Spec Lead will send the Final Draft of the Specification to the PMO togetheralong with instructions on how EC members can obtain the RI and TCK for evaluation. The PMO will circulate the materials to the EC and initiate the Final Approval Ballot. At the close of balloting, all EC comments will be sent to the Expert Group by the PMO.

TheEach TCK submitted as part of the Final Draft must meet the following requirements:

- Include all TCK documentation covering configuration and execution of the TCK, a definition and explanation of the First-level TCK Appeals Process, the compatibility requirements that must be met in addition to passing the TCK tests, and any other information needed to use the TCK (e.g. Tools documentation).

- Include requirements that all compatible implementations

    a) fully implement the Spec(s) including all required interfaces and functionality, and

    b) do not modify, subset, superset, or otherwise extend the Licensor Name Space, or include any public or protected packages, classes, Java interfaces, fields or methods within the Licensor Name Space other than those required/authorized by the Spec or Specs being implemented.

    These requirements must apply unless the Spec or TCK explicitly allows exceptions.

- Be accompanied by a test harness, scripts or other means to automate the test execution and recording of results.

- Include a TCK coverage document that will help Coverage Document for the EC members to evaluate the TCK's qualityuse in evaluating the sufficiency of the TCK. This document executive summary of the TCK should include an overview of the documentation included in the TCK, a description of means used to validate the quality of the TCK, the criteria used to

802   measure TCK test coverage of the Specification, test coverage numbers achieved, and a
803   justification for the adequacy of TCK quality and its test coverage.

804   • Provide 100% signature test coverage. These tests must ensure that all of the required API
805   signatures of the spec are completely implemented and that no non-specified APIs are
806   included in the JSR's namespace..

807   ~~definition - **Final Approval Reconsideration Ballot**: The 14-day EC ballot to reconsider~~
808   ~~an initial rejection of a Final Draft, RI, and TCK.~~

809   If the Final Approval Ballot fails, the Spec Lead will have 30 days to revise the
810   Specification, RI, and~~RI and/or~~ TCK in response to EC concerns and to resubmit modified
811   materials~~any EC concerns. At the same time, the Expert Group will have 30 days to revise~~
812   ~~the Final Draft in response to any EC concerns and send it~~ to the PMO.

813 If no responses are received within 30 days~~by the end of the 30 days,~~ the original decision of the EC
814 will stand, the PMO will close the JSR, and the Expert Group will disband. If the JSR was a revision to
815 an existing Specification, the Spec Lead will resume the role of Maintenance Lead of the current
816 Specification (see section 4~~5~~4).

817 If a response is received, the PMO will circulate it to all EC members for a Final Approval
818 Reconsideration Ballot. At the close of balloting, all ballot comments submitted by EC members will be
819 circulated to the Expert Group by the PMO. If the reconsideration ballot fails, the JSR will be closed
820 and the Expert Group will disband. If the JSR was a revision to an existing Specification, the Spec
821 Lead will resume the role of Maintenance Lead of the current Specification.

822 ~~All materials needed to publish a Final Release must be provided to the PMO before the start of the~~
823 ~~Final Approval Ballot. Within 14 days of a successful Final Approval Ballot, the PMO will publish the~~
824 ~~Specification and links to information on how to obtain the RI and TCK.~~

825 ## 9.3 ~~3.5~~ FINAL RELEASE

826 Within 14 days of a successful ~~Specifications that are approved by the EC during the~~ Final Approval
827 Ballot or Reconsideration Ballot, the PMO will publish on the JCP website the Specification and links
828 to information on how to obtain the RI and TCK and will announce the availability of these materials
829 ~~(or the reconsideration ballot) will be posted by the PMO on the JCP Web Site and an announcement~~
830 ~~made~~ to both Members and the public. The published TCK information must include a means for any
831 interested party to obtain a copy of the TCK documentation at no charge. Upon Final Release, the
832 Expert Group will have completed its work and disbands. The Spec Lead will typically be the
833 Maintenance Lead and may call upon Expert Group members and others for aid in that role.

834 The Maintenance Lead must ensure that the links to the RI and TCK remain valid through the lifetime
835 of the Specification. If the links become broken or non-functional, the Maintenance Lead will have 30
836 days following notification from the PMO of the invalid links to correct them. If the problems are not
837 corrected within 30 days, the Specification must reenter the Process at the Proposed Final Draft or
838 Maintenance Review stage as appropriate, and complete the Final Release or Maintenance Release
839 process again. NOTE: IP rights granted when the JSR made any previous R~~r~~eleases are not affected
840 by such a change in status.

10. MAINTENANCE

11. ~~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 and dealing with errata 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. The ML is not required to do all these tasks alone. The ML may find it very helpful to recruit members of the Expert Group that helped to develop the Specification to assist with the Maintenance duties.~~

11.1 ~~4.1.1 THE~~ MAINTENANCE LEAD RESPONSIBILITIES~~MAKES A LONG TERM COMMITMENT~~

The Maintenance Lead Member ~~(and his or her host company or organization)~~ is expected to assume long term ownership of the Specification, RI, and TCK while respecting the wishes~~with due respect of the will~~ of the Java Community Members with regard to evolution. A ~~This means that a~~ Maintenance Lead will therefore automatically be the Spec Lead for all significant future revisions to their Specification but ~~going forward but he or she~~ will not have the exclusive right to decide when a significant revision will take place (see section ~~12~~1.1.1).

~~The PMO will provide a publicly archived Maintenance feedback alias through which the public may submit requests for clarification, interpretation, and enhancements to the Specification.~~ The public may submit requests for clarification, interpretation, and enhancements to the Specification by logging issues through the JSR's issue-tracking mechanism.

The ML will consider all requests and will decide how and if the Specification should be updated in response. The ML is not required to do all these tasks alone, but is free to consult with the former members of the Expert Group, or any other sources, to assist with the Maintenance duties.

All changes proposed by the ML will make their way into the Specification by either the Maintenance Release process (described below) or through a new JSR. Changes appropriate for a Maintenance Release include bug-fixes, clarifications of the Specification, changes to the implementation of existing APIs, and implementation-specific enhancements. Modifications to existing APIs or the addition of new APIs should be deferred to a new JSR.

11.1.1 RELINQUISHING OWNERSHIP

~~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 cycles.~~

~~**definition - Transfer Ballot**: The EC ballot to approve transfer of ownership of a Specification, RI, and TCK from one Member to another Member.~~

If the ML decides to discontinue his or her work ~~f~~at any time~~for whatever reason~~ (including discontinuing maintenance activities or declining to take on the role of Spec Lead during a significant revision initiated by a JSR) the ML, with the assistance of the PMO, ~~should~~ make a reasonable effort to locate another Member who is willing to take on the task. If a replacement is identified, the PMO must initiate a Transfer Ballot within one month to enable EC members to approve the transfer of responsibilities. If the ballot succeeds, the new ML must assume his or her responsibilities within 30 days. If no replacement can be found, or if the Transfer Ballot fails, then ~~to find a replacement, sIf the ML failthe~~ ~~the ML fails to find a replacement, the~~ PMO will declare the Specification to be Dormant~~. N~~ and no ~~. No~~ further maintenance ~~will~~can~~will~~ be carried out~~.~~. No further Transfer Ballots will be initiated by the PMO unless a Member volunteers as ML, in which case the PMO will have again a month to initiate a Transfer Ballot ~~on it until a new ML is identified and ownership of the Specification, RI, and TCK is transferred to the new ML's organization (subject to a successful Transfer ballot by the EC). on it until a new ML is identified and ownership of the Specification, RI, and TCK is transferred to the new ML's organization (subject to a successful Transfer ballot by the EC).~~

11.2 MAINTENANCE REVIEW

~~4.2 THE MAINTENANCE CYCLE~~

~~The PMO will provide a publicly archived Maintenance feedback email address for requests for Specification clarifications, corrections or changes from the public. The ML will review all comments, identify common themes, and arrange with the PMO to make a list of frequently raised issues available from the document's Spec 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 change items 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 JSR.~~

~~4.2.1 MINOR REVISION PROCESS~~

~~definition - Minor Revision: Minor changes made to a Specification by the ML.~~

~~definition - Change Log: An area accessible from the Spec 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 (change items to be considered in a new JSR).~~

~~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 change items listed in the PROPOSED section of the Change Log.~~

The ML will document all proposed Specification changes in ~~arrange to have all change items placed into~~ **the PROPOSED section of the Change Log and then send a request to the PMO to initiate a Maintenance Review. Before the Maintenance Review begins, the ML must summarize comments received through the** ~~Maintenance feedback alias~~**issue tracker and must** ~~at the Maintenance feedback email address (similar comments may be consolidated) and~~ **indicate the disposition of**~~for~~ **each comment (e.g. deferred with a brief explanation, rejected with a brief explanation, included in the Change Log proposal.) This summary** ~~). This~~ **will be posted along with the Change Log on the JSR**~~Spec~~ **Page. The PMO will then make a public announcement and begin the review.**~~-~~

The ML may choose to modify one or more of the proposed changes based on comments received during the review.

At the close of the Maintenance Review the PMO will initiate a 7-day Maintenance Review Ballot. During this ballot EC members should vote "yes" if they agree that the Maintenance Release should go ahead as the Spec Lead has proposed, and "no" if they believe that one or more of the changes proposed by the ML is inappropriate for a Maintenance Release and should be deferred to a follow-on JSR. "No" votes must be accompanied by comments in which the offending ~~items~~changes are identified and the reasons for the objection are explained.

If there are any "no" votes the PMO will within two weeks initiate an Item Exception Ballot for each change that EC members have objected to.

NOTE: there is no minimum number of "yes" votes required to move forward with the proposed Maintenance Release, and "no" votes cannot prevent a R~~r~~elease unless the ML is unwilling to defer items subsequently disallowed in an Item Exception Ballot.

At the end of Maintenance Review and any subsequent Item Exception Ballots~~The ML may choose to modify one or more of the proposed changes based on comments received during review. All comments will be available from the Spec Page. At the end of Maintenance Review~~, the ML will update the Specification, moving all approved revisions from the PROPOSED to the ~~document all revisions in the~~ ACCEPTED section of the Change Log. Items voted down in an Item Exception Ballot must be moved to the DEFERRED section of the log. Other~~, 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 at the ML's discretion.~~-~~

11.3 MAINTENANCE RELEASE

~~4.2.2 THE EC MAY DEFER MINOR REVISION ITEMS~~

At any time after a Maintenance Review Ballot and possible Item Exception Ballot the Spec Lead will update the Specification, RI, TCK, and Change Log as necessary and submit them to the PMO for publication in a Maintenance Release. The PMO verifies that the necessary changes have been made, and publishes the Specification, the Change Log, and pointers to the RI and TCK on the JSR Web Page.

NOTE: until the Maintenance Release stage is reached any proposed changes should be considered preliminary and subject to change, and therefore should not be implemented in shipping products.

~~definition - Item Exception Ballot : The EC ballot to determine whether or not to include~~

specific change items in a Minor Revision.

During Maintenance Review an EC member may request that specific proposed change items be deferred to the next JSR. Any such request must be made to the PMO no later than the close of Maintenance Review. If requests are received, the PMO will circulate the requests to all EC members and initiate a 7 day Item Exception Ballot within 2 weeks after the close of the Maintenance Review. At the close of the Item Exception Ballot, the PMO will post the ballot results to the Change Log. The ML will place all proposed changes that were disapproved into the DEFERRED section. The ML will need to initiate a JSR to carry out any of those changes. The ML must post an updated version of the Specification within one month of the completion of the Review and any Item Exception Ballot.

4.2.3 KEEPING 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.

EXECUTIVE COMMITTEE POLICIES AND PROCEDURES

4.3 THE TCK APPEALS PROCESS

SCOPE

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

11.4 MEMBERSHIP

There are currently two Executive Committees: one responsible for Java ME and one for Java SE and EE together. Each EC is composed of 16 Java Community Process Members. Oracle America, Inc. has a permanent voting seat on each EC. (Oracle representatives must not be members of the PMO.) The ECs are led by a non-voting Chair from the Program Management Office.

Should one Member on the EC acquire a majority ownership of another EC member, one of those members must resign his or her seat by the effective date of the acquisition.

NOTE: In the near future the EC intends to merge the two ECs, and modify the number of members and possibly their terms of office.

As noted in section 3.2.2, the TCK documentation must identify and specify a First-Level TCK Appeals Process by which challenges to the TCK will be addressed. An implementer of a Specification can challenge a TCK test using the First-Level TCK Appeals Process. Implementers 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 : The EC ballot to override a first-level decision on a TCK test challenge.

Implementers 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, along with any information received from the ML concerning the rationale for the first-level

995 ~~decision, and initiate an Appeal Ballot.~~

996 EC DUTIES AND RESPONSIBILITIES

997 ### ~~4.3.2 UPDATE THE RI TO MATCH THE TCK AND THE SPECIFICATION~~

998 ## Select JSRs for development within the JCP.

999   1. Review and provide guidance on proposed licensing terms of proposed JSRs.

1000   2. Approve draft Specifications ~~for~~after Public Review.

1001   3. Ensure that publicly expressed issues/concerns with a JSR are addressed by the Expert

1002   Group.

1003   4. Give final approval to completed Specifications and their associated RIs and TCKs.

1004 ~~If the Appeal Ballot is successful, the ML will update the TCK and/or the Specification in accordance~~

1005 ~~with the EC decision and update the RI if necessary.~~

1006 Decide appeals of first-level TCK test challenges.

1007   5. Review proposed maintenance revisions and possibly require some to be carried out in a new

1008   JSR.

1009   6. Approve the transfer of maintenance duties between Members.

1010   7. Decide when JSRs that have not made sufficient progress through the Process should be

1011   withdrawn.

1012   8. Provide guidance to the PMO and JCP Community to promote the efficient operations of the

1013   organization and to guide the evolution of Java platforms and technologies. Such guidance

1014   may be provided by mechanisms such as publishing white papers, reports, or comments as the

1015   EC deems appropriate to express the opinions of one or both Executive Committees.

1016

1017 9.

1018 10. Members of the Executive Committee shall be dedicated to the principles of full and open competition,

1019 in full compliance with all applicable laws, including all antitrust laws of the United States and other

1020 nations and governmental bodies as appropriate. Violations of such laws can result in criminal as well

1021 as civil penalties for individuals as well as employers, depending on the jurisdiction. In particular, any

1022 discussion related to product pricing, methods or channels of distribution, division of markets or

1023 allocation of customers, among other subjects, should be avoided.

1024 ## 11.5 EC SELECTION PROCESS AND LENGTH OF TERM

1025 EC members serve three-year terms, which are staggered so that a third of the seats are up for

1026 election each year.

1027 On each EC there are two Ratified Seats for every Elected Seat (currently 10 Ratified Seats and 5

1028 Elected Seats) plus one permanent seat held by Oracle America, Inc.

1029 ### 11.5.1 RESIGNATION OF EC SEATS

1030 EC Members may resign their seats at any time during their term.

1031 EC members who fail to remain Java Community Members forfeit their EC seat.

1032 Vacated seats will be filled for the remainder of their term by a special election ballot that will be held

1033 no later than two months after the resignation (unless the resignation is less than six months before

1034 the next scheduled annual election ballot).

11.5.2 ELECTION PROCESSES

All JCP Members are eligible to vote in ballots for Ratified and Elected Seats subject to the provision that if a Member has majority-ownership of, or is the employer of, one or more other Members, then that group of Members will collectively have 1 vote, which will be cast by the person they designate to be their representative for the ballot in question.

Annual elections for Ratified and Elected Seats will be held simultaneously. Voting in these elections will start in the third week of October.

II

In the interests of promoting transparency and participation in the election process the PMO shall organize teleconferences at which the Members have an opportunity to hear from and to ask questions of the candidates. If a suitable venue such as JavaOne is available the PMO shall also organize a public meeting with the same purpose.

1.1.1 SELECTION PROCESS FOR RATIFIED SEATS

Members are selected for the Ratified Seats using a ratification ballot which is carried out as follows:

- The PMO nominates Members to fill the vacant Ratified Seats with due regard for balanced community and regional representation.
- Eligible Members will vote to ratify each nominee over a 14-day ~~voting~~ballot period.
- A nominee is ratified by a simple majority of those who cast a vote.
- If one or more of the nominees are not ratified by the vote, the PMO will nominate additional Members as needed and hold additional ratification ballots until the vacant seats are filled.

1.1.2 SELECTION PROCESS FOR ELECTED SEATS

Members are selected for the Elected Seats using an open election process that is carried out as follows:

- Four weeks before the voting period the PMO will post on the public JCP site a complete description of all materials that will be provided to voters (e.g. any candidate statements, position papers, candidate forums, etc. that will be posted during the election).
- Four weeks before the ~~voting~~ballot period the PMO will accept nominations from the Community for a period of 14 days. Any Member may nominate themselves except that employees of JCP Members cannot run for Elected Seats as individuals and the PMO shall reject such nominations.
- Eligible Members may vote for as many nominees as there are vacant Elected Seats over a 14-day ~~voting~~ballot period.
- The nominees who receive the most votes will fill the vacant Elected Seats.
- If there is only one nominee for an Elected Seat voters will be given the opportunity to vote "yes" or "no" for that candidate. To be elected, the candidate must obtain a simple majority.
- Ties will be decided by following the procedure defined in http://www.ietf.org/rfc/rfc2777.txt and using the calculator provided by W3C in http://www.w3.org/2001/05/rfc2777.

2. EXECUTIVE COMMITTEE JSR VOTING RULES

1. All JSR ballots will be conducted electronically and the results made public.
2. JSR balloting periods last 14 days except where noted in this document.
3. EC Members may cast three types of votes: "yes", "no" and "abstain". Explicit abstentions are

strongly discouraged. In the extreme and most undesirable case, an EC Member may not vote at all.

4. Any vote may be accompanied by comments. When comments include specific suggestions for change these should be logged in the issue-tracking mechanism to ensure that they are addressed.
5. Only "yes" and "no" votes count in determining the result of a JSR ballot.
6. JSR ballots are approved if (a) a majority of the votes cast are "yes" votes, and (b) a minimum of 5 "yes" votes are cast. Ballots are otherwise rejected.
7. Ballots to approve UJSRs for newthat define the initial version of a new Platform Edition Specifications or JSRs that propose changes to the Java language are approved if (a) at least a two-thirds majority of the votes cast are "yes" votes, (b) a minimum of 5 "yes" votes are cast, and (c) Oracle casts one of the "yes" votes. Ballots are otherwise rejected.
8. Maintenance Review ballots are advisory only, as indicated in section 45.1.
9. "No" votes must be accompanied by an explanation of the changes (if any) thatreferences to the issue tracker items (if any) that if resolved would persuade the member to change the vote to "yes".
10. It is highly recommended that abstentions be accompanied by comments.
11. When a failed JSR ballot results in the closing of a JSR, at least 1 month must pass before the JSR can be reinitiated.
12. EC ballots to override a first-level decision on a TCK challenge are approved if (a) at least a two-thirds majority of the votes cast are "yes" votes, and (b) a minimum of 5 "yes" votes are cast.
13. An item listed in an Item Exception Ballot will be deferred to the next JSR if at least one-third of the EC Members cast "no" votes for that item.
14. When more than one EC is voting on any JSR ballot, the ballot will be approved only if each EC approves it separately.

III APPENDIX AB: REVISING THE JCP AND THE JSPA

Revisions to the Java Community Process (this document) and the Java Specification Participation Agreement will be carried out using the Java Community Process with the following changes:

1. Only EC members can initiate a JSR to revise one of these documents.
2. Each EC must approve the JSR.
3. The Expert Group consists of both ECs with a member of the PMO as SpecSpecification Lead.
4. There is no Reference Implementation or Technology Compatibility Kit to be delivered and no TCK appeals process to be defined.
5.