JCP 2: Process Document **■**

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- 5 Comments to: pmo@jcp.org
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I EXECUTIVE SUMMARY

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- The international Java community develops and evolves Java™ technology specifications using \(\begin{align*} 11
- Java Community Process (JCP). The JCP produces high-quality specifications in "Internet time" 12
- an inclusive, consensus building approach that produces a specification Specification, a Rreference 13
- 14 ilmplementation (to prove the specification Specification can be implemented), and a <u>T</u>technology
- Ceompatibility Kkit (a suite of tests, tools, and documentation that is used to test implementations for 15
- compliance with the specification Specification). 16
- Experience has shown that the best way to produce a technology specification is to gather a group of 17
- industry experts who have a deep understanding of the technology in question and then have a strong 18
- 19 technical lead work with that group to create a first draft. Consensus around the form and content of
- 20 the draft is then built using an iterative review process that allows an ever-widening audience to review
- and comment on the document. 21
- 22 This version of the JCP was developed through the JCP by means of JSR XXX348, led by Oracle and
- 23 the combined Executive Committees as the expert group Expert Group.
- 24 An Executive Committee (EC) representing a cross-section of both major stakeholders and other
- 25 members of the Java community is responsible for approving the passage of
- specification Specifications through key points of the JCP's various stages and for reconciling 26
- discrepancies between specification Specifications and their associated test suites. There are two ECs: 27
- 28 one to oversee the Java technologies for the desktop/server space (with responsibility for the Java
- 29 SE™ and Java EE™ specificationSpecifications) and the other to oversee the Java technologies for
- 30 the consumer/embedded space (with responsibility for the Java ME™ specification). The
- EC's are considering merging the two bodies into a single one in the near future, so newly elected EC 31
- members should be aware that their terms y vary from what is specified in section 65.4, "EC 32
- 33 SELECTION PROCESS AND LENGTH OF TERM"
- There are fourfive four major stepsages in this version of the JCP: 34
 - 1. INITIATION: A specification Specification targeted at the desktop/server or consumer/embedded space is initiated by community member(s) and approved for development by the responsible EC.
 - 2. A group of experts is formed to assist the Spec Lead with the development of the Specification.
 - 3. EARLY 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 on whether the JSR should proceed to the Final Release stage. A group of experts is formed to develop a preliminary draft of the specification that both the community and the public Members, Any with an Internet connectionwill then review. and comment on, reviewreadthen can draft. The expert group uses feedback from the review to revise and refine the draft.
 - 4. 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, proceed to the Final Release stage. review. The EG revises the document on the basis of feedback received from the public. At the end of the review period the EC votes on whether the JSR should The Expert Group submits a draft of the specification to the PMO, who publish it for public

- 5. FINAL RELEASE: The Spec Lead finalizes submits the Specification and submits it to the PMO for publication as the Proposed Final Draft. When the RI and TCK are completed, and the ehtRI passes the TCK, the Specification, the RI, and the TCK all three deliverables submitted to the PMO, who circulate them to the responsible EC for final approval.
 - 6. **MAINTENANCE**: The specificationcompleted Specification, rReference ilmplementation, and tTechnology eCompatibility kKit are updated in response to ongoing requests for clarification, interpretation, enhancements, and revisions. The responsible EC can reviews all proposed changes to the specification Specification and indicates which ones can be carried out immediately and which will require the specificationchanges to be Challenges to one or more tests in a specification's technology compatibility kit are ultimately decided by the responsible EC if they cannot be otherwise resolved. .expert grouprevised by an implemented in a new JSR.

II GENERAL FUNDAMENTAL DEFINITIONS

- Appeal Ballot: The EC ballot to override a first-level decision on a TCK test challenge.
- Change Log: And area accessible from the JSR Page that lists all changes made to the Specification, RI, TCK, and licenses since the previous release. 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 TCK) and LICENSING (changes to

74 the licensing terms

- Dormant Specification (Dormant): A Specification that does not have an identified
 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.
- 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 Public and Procedures are in Section 5. The EC Standing Rules are found in, which is parate document.
- Expert: A Member or Member Representative who has expert knowledge and is an active practitioner in the technology covered by the JSR.
- 89 Expert Group (EG): The group of Experts who develop or make significant revisions to a Specification.

92 Final Approval Ballot: The 14-day EC ballot to approve the Final Draft along with its

93	associated RI and TCK.
94 95	Final Approval Reconsideration Ballot: The 14-day EC ballot to reconsider an initial rejection of a Final Draft, RI, and TCK.
96	Final Draft: The final draft of the Specification that will be put forward for EC approval.
97 98	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.
99 100 101	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.
102 103	Item Exception Ballot: The EC ballot to determine whether or not to include specific change items in a Maintenance Release.
104 105	Java Community Process (JCP): The formal process described in this document for developing or revising Java technology specification Specifications.
106 107	Java Community Process Member (Member): A company, organization, or individual that has signed the JSPA and is abiding by its terms.
108 109 110	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.
111 112 113	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.
114 115 116	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.
117 118 119	JCP Web Site: The web site where anyone with an Internet connection stay informed about JCP activities, download draft and final Specifications, and follow the progress of Specifications through the JCP.
120	JSR Approval Ballot: The EC ballot to determine if the JSR should be approved.
121 122	JSR Reconsideration Ballot: The EC ballot to determine if a revised JSR should be approved.
123 124 125 126 127	JCP Specification Page (Spec Page) JSR Page: Each JSR Specification will have approved for development or revision has a dedicated public web page established on the JCP Web Site where to the JSR's history of the passage of the Specification through the JCP, is recorded by the EC with respect to the draft Specification. and where other relevant information about the JSR is published.

129	JSR Renewal Ballot: An EC ballot to confirm that a JSR should continue in its work.
130 131	JSR Renewal Reconsideration Ballot: An EC ballot to determine if a revised JSR should continue its work.
132 133	JSR Review: A 4 week period during which the public review and comment on a new JSR.
134	Maintenance Lead (ML): The Expert responsible for maintaining the Specification.
135 136	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.
137 138 139	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.
140 141	Maintenance Review Ballot: An EC ballot to determine whether the changes proposed by a Maintenance Lead are appropriate for a Maintenance Release.
142 143 144	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.
145 146 147 148	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 SE, Java EE, and Java ME.
149 150 151 152 153 154	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 specification s must be referenced in their entirety.
155 156	Program Management Office (PMO): The group within Oracle America that is responsible for administering the JCP and chairing the EC.
157 158	Proposed Final Draft: The version of the draft Specification that will be used as the basis for the RI and TCK.
159 160	Public Draft Specification Approval Ballot : The EC ballot to determine if a draft should proceed after Public Review.
161 162	Public Draft Specification Reconsideration Ballot: The EC ballot to determine if a revised draft should proceed after Public Review.
163 164	Public Review: A 30 to 90 day period when the public can review and comment on the draft Specification.

165	Ratified Seat: An EC seat filled by the ratification process described in section 5.3.3.
166 167	Reference Implementation (RI): The prototype or "proof of concept" implementation of a Specification.
168 169 170 171	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.
172 173	Spec Lead Member: The individual JCP member who is a Spec Lead, or other see the company or organization that employs, and is represented by, the Spec Lead.
174 175 176	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.
177 178	Transfer Ballot: The EC ballot to approve transfer of ownership of a Specification, RI, and TCK from one Member to another Member. ¹
179 180	<u>Umbrella Java Specification Request (UJSR):</u> A JSR that defines or revises a Platform Edition or Profile Specification. A UJSR proceeds through the JCP like any other JSR.
181 182	The use of the term "day" or "days" in this document refers to calendar days unless otherwise specified.
183	III THE JAVA COMMUNITY PROCESS ™ PROGRAM
184	0. GENERAL PROCEDURES ₩
185	0.0 EXPERT GROUP TRANSPARENCY
186 187 188	Each Expert Group is free to use the working style that it finds most productive and appropriate, so long as this is compatible with the requirements specified in this document. For example, EGs may choose to operate by seeking consensus or by voting on issues where there is disagreement.
189 190 191 192 193 194 195 196	As specified below, Expert Groups must operate in a transparent manner, enabling the public to observe their deliberations and to provide feedback. All reedback which must be taken into consideration, and to which public responses must be provided. In the initial JSR submission the Spec Lead must specify the transparency mechanisms (for example, the mailing lists and issue trackers) that the Expert Group intends to adopt, and must provide the URLs for accessing the chosen collaboration tools. The PMO will publish this information on the public JSR Page. The Spec Lead must also provide a pointer to any Terms of Use required to use the collaboration tools so that the EC and prospective EG members can judge whether they are compatible with the JSPA.
197 198 199	If the EG changes its collaboration tools during the life of the JSR these changes must be reported to the PMO, who will updated the relevant information on the JSR Page. Any such changes must ensure that previously-published information is incorporated into the new tools. When voting to approve a

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.

- 200 JSR's transition to the next stage EC members are expected to take into consideration the extent to
- which the Spec Lead is meeting the transparency requirements.
- 202 Spec Leads should be aware of their obligations under the JSPA to license the output of their JSR on
- 203 Fair, Reasonable, and Non Discriminatory terms, and to make certain patent grants. Incorporating
- 204 <u>feedback provided through public email aliases or forums without ensuring that the provider has</u>
- 205 signed the JSPA or an equivalent Contribution Agreement may violate make it impossible meet
- 206 these requirements and or may thereby expose the Spec Lead Member to legal liability.
- 207 The use of Confidential materials (as defined in the JSPA) by Expert Groups limits transparency, is
- 208 strongly discouraged, and will be prohibited in a future version of the Process. If the Spec Lead
- 209 intends to permit the use of Confidential materials (such as emails, drafts or submissions marked as
- 210 Confidential), this must be specified in the initial Java Specification Request. Expert Groups may also
- 211 choose to keep information private by means other than marking it as Confidential (for example, by not
- 212 publishing it on a publicly available site).-2

213 **0.0.1 Mailing Lists**

- 214 All substantive business must be carried out on aoff_icial_public mailing lists_designated by the Spec_
- Lead. The purpose of the official mailing his lists is to keep observers aware of important issues and
- 216 therefore, minor administrative issues that distract from substantive business should therefore be kept
- 217 private. The expertA group priprivate mailing list should be used for minor administrative matters.
- 218 Significant business includes, for example, (a) eliminating or adding new features to the JSR, (b)
- 219 changes to the membership of the expert group Expert Group, (c) modifications to changes to the
- reference implementation or the TCK, (d) changes to the TCK, (e) publication of the agenda, and (f)
- and on-going debate about JSR specifics. Non-substantive administrative matters such as (a) back-
- 222 and forth details notifications of meeting schedules, (b) messages directing expert group Expert Group
- members to particular documents or URLs, and members about voting or task assignments should
- be excluded from the official public mailing lists.
- 225 If the official EG public mailing list is writable only by the Expert Group members, only the Expert
- 226 Group EG must also provide a publicly readable and writable email list, or a forum, to enable for
- 227 feedback and comments from the public.

228 0.0.2 Issue Tracking

- 229 Issues must be tracked through a publicly view readable issue tracking mechanism. A formalized issue
- 230 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. The specific issue tracking mechanism will-
- 232 be proposed as part of the Working Group Style by the specific expert group prior to the JSR
- 233 Specification Review process. The main JSR page will explicitly describe the issue tracking
- mechanism including the URL for all issues. The issue tracking mechanism can be changed the plan a
- 235 majority vote of the expert group as long as all issues are incorporated into the new system.

236 **0.0.3 Comments Response to Comments**

- 237 Expert Groups must respond publicly respond ylcilbup to all comments before Ja JSRs 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.
- 240 Responses to similar comments can be consolidated. Comments that are substantively the same as-
- 241 previously responded to comments (duplicate comments) can be answered through reference to the
- 242 previous comment. Comments that are off-topic do not require a comment response but should be
- 243 denoted as such. The eExecutive eCommittee reserves the right to require that a comment deemed by

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

the eExpert gGroup as off-topic be addressed prior to d before the JSR review. See to the next 244

245 stage.

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0.0.4 Changes to Licensing Terms Changes

- 247 If the licensing terms for a JSR change substantially from one release to the next, the changes must
- 248 be explicitly listed explicitly and explained. Such eChanges to the licensing terms must be disclosed
- 249 during JSR submission (in the case of a new JSR) or in the Change Log for Maintenance Releases.
- Subsequent Additional cchanges to licensing terms during the life of the JSR must be disclosed when 250
- 251 the Specification is next submitted to the PMO for public posting or review.
- 252 Existing licensees who not wish to accept a modified license when required to adopt a newer TCK will
- 253 have the option to accept the updated TCK under the previous licensing terms.

0.1 EXPERT GROUP MEMBERSHIP

0.1.1 WITHDRAWAL OF AN EXPERT FROM THE EXPERT GROUP

- 256 An Expert may withdraw from the Expert Group at any time. When this happens, the Spec Lead
- 257 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 258
- another Member. If the departing pert is the Spec Lead, the Expert Group should choose one of its members as the new Spec Lead. 259
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0.1.2 DISRUPTIVE, UNCOOPERATIVE OR UNRESPONSIVE EXPERT GROUP MEMBERS 261

- 262 There may be rare instances when members of the Expert Group feel that one of their fellow Experts
- 263 is not acting in ways that advance the work of the Expert Group, and is being disruptive,
- 264 uncooperative or unresponsive. EG members are expected to make a reasonable effort to resolve any
- 265 such issues among themselves, with the active help of the Spec Lead. However, if the situation cannot
- 266 be resolved in a timely manner, any three members of the EG can approach the Spec Lead and
- 267 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 268
- Associate Member Representative, the Spec Lead must first request that the Member replace 269
- 270 its representative. If the Member does not do so in a timely manner, the Spec Lead can exclude the
- 271 Member itself from further EG participation. The Spec Lead's decision as to whether or not to exclude
- 272 can be appealed to the EC by following the process outlined in Section 0.26, "Escalation and Appeals"

0.1.3 UNRESPONSIVE OR INACTIVE SPEC LEAD 273

- 274 There may be rare instances when members of the Expert Group feel that the Spec Lead is not acting
- 275 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 276
- 277 proactively addressed and resolved. The EC is expected to make a reasonable effort to resolve any
- 278 such issues in a timely manner. However, if the situation cannot be resolved in a timely manner, any
- 279 three members of the EG may request the EC to replace the Spec Lead for cause (which should be
- 280 made clear and documented to the EC). If the EC agrees that there is cause, it may ask the PMO to
- 281 replace the Spec Lead. In the case where the Spec Lead is an Associate Member Member
- 282 Representative the PMO should ask the Member to replace the Spec Lead, or it may seek to put in
- 283 place an alternative Spec Lead, in which case the EC must conduct a transfer ballot as specified in
- 284 section 5.1.2 of this document. If no Spec Lead replacement can be found, the EC may disband the
- 285 Expert Group.

286 **0.2 JSR DEADLINES**

- 287 If a JSR does not begin Early Draft Review within the first 12 months following the completion of its
- 288 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
- 290 may initiate a JSR Renewal Ballot. The PMO will inform the Spec Lead and Expert Group of theis
- decision of the EC to hold this ballot and will request that the Spec Lead and Expert Group to prepare
- a public statement to the EQ—The JSR Renewal Ballot will start 30 days after the request. If the JSR
- 293 Renewal Ballot is approved the EC, then another renewal ballot cannot be initiated for that JSR for
- an additional year.

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- 295 If the JSR Renewal Ballot fails, the Expert Group will have 30 days to update the JSR in response to
- 296 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
- 298 closed revision is received, then the PMO will forward it to the EC and initiate a JSR Renewal
- 299 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
- 301 closed and the Expert Group will disband. If the JSR was a revision to an existing Specification,
- 302 Spec Lead will resume the role of Maintenance Lead of the current Specification (see section 5).

0.3 COMPATIBILITY TESTING

- 304 The Spec Lead is responsible for defining the process whereby the TCK is used to certify
- implementations of the JSR as compatible. The Spec 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
- 308 JCP website. If the Spec Lead submits the information in the form of a pointer to an already published
- 309 list the PMO may choose simply to reference that list rather than duplicate it.
- 310 TCK license terms must permit implementors to discuss detailed TCK test results with their customers

311 0.4 EXECUTIVE COMMITTEE DUTIES

312 **0.4.1 Transparency**

- 313 All substantive Executive Committee business should be conducted in the most transparent manner
- 314 possible. EC transparency requirements are specified in a separate document, -name of standingEC
- 315 | Standing Rules. rules document>.

316 **0.4.2 Draft Reviews**

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

0.5 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.

327	0.6 ESCALATION AND APPEALS
328 329 330 331 332 333 334 335 336	Unless otherwise specified in this document, any one EG member can-initiate an 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. Such appeal shall be 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 into support of the appeal, either by copy or by reference. The PMO shall transmit the message to the EC no later than seven days of receipt. The EC shall then respond to the appellant within 30 days, either with a resolution or with a request for clarification and/or further documentation.
337	MES STATE OF THE S
338 339 340	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 website and announce their availability to Members and the public within seven days of receipt. NAROUND TI
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342 343	1. INITIATE A NEW OR REVISED SPECIFICATION review and comment on a new JSR.
344 345 346 347	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.
348 349	Spec Lead Member: The individual JCP member who is a Spec Lead, or other see the company or organization that employs, and is represented by, the Spec Lead.
350 351 352 353	2. 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. with an internet connectionanyone (EG): The group of Experts who develop or make significant revisions to a Specification.
354 355 356	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.
357	JSR Approval Ballot: The EC ballot to determine if the JSR should be approved.
358	JSR Reconsideration Ballot: The EC ballot to determine if a revised JSR should be approved.
359 360 361	JSR Review: A 4 week period when representative Expert: A Member representative who has expert knowledge and is an active practitioner in the technology covered by the JSR.
362	Export Group

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2.1 INITIATE A JAVA SPECIFICATION REQUEST

- 366 One or more Members can initiate a request to develop a new Specification, or carry out a significant
- revision to an existing one, by sending a JSR to the PMO. The JSR must use the template available at
- the JCP Web Site. Any JSR under consideration can be withdrawn by its submitter(s) without
- explanation at any time prior to the completion of the JSR approval vote (see section 1.3) upon
- request by the submitter(s) to the PMO.
- 371 The following is some of the information required to be included with each JSR:
- the Members making the request (the submitters), athe proposed Specification dinitial members of the Expert Group.
 - a description of the proposed specification Specification.
 - the reason(s) for developing or revising it.
 - the primary Platform Edition, as well as any consideration given to other Platform Editions.
- an estimated development schedule.
 - any preexisting documents, technology descriptions, or implementations that might be used as a starting point.
 - a transparency plan, which outlines the tools and techniques that the Spec Lead will use, during the creation and development of the specification, and for communicating the progress within the Expert Group to Community Members, EC Members and the public. The EC will expect the Spec Lead to operate the JSR in accordance with this plan.

2.1.1 REVISE EXISTING SPECIFICATIONS

385 Existing Specifications, along together with their associated RIs and TCKs, are maintained by a 386 designated Maintenance Lead using the processes described in section 544 of this document. 387 Maintenance Lead Members are expected to assume long term ownership of the Specification, RI, 388 and TCK while respecting the wishes of the Java Community Members with regard to evolution. Thismeans that are expected to assume long term ownership of their Specifications, Page and TCKs with 389 due respect of the will of the Community Members with regard to evolution. their host companies or organizations) aintenance Leads will automatically therefore be the Spec Leads for 390 391 392 all significant revisions to their Specifications, going forward but they will not have the exclusive right 393 to decide when a significant revision will take place. That will be decided by the EC in response to a 394 revision JSR that can be initiated by any Java Community Member (or Members). The only provision 395 is that the sSubmitter(s) should make a reasonable effort to get some of the members of the previous 396 Expert Group to join the revision effort.

2.1.2 PROTECT THE INSTALLED BASE AND GUARD AGAINST FRAGMENTATION

- 398 Changes to the Java programming language, the Java virtual machine (JVM), the Java Native
- 399 Interface (JNI), packages in the "java.*" space, or other packages delivered as part of Java SE, have
- 400 the potential to seriously disrupt the installed base if carried out inconsistently across the Platform
- 401 Editions. In order to protect the installed base, any such changes can only be accepted and carried
- 402 out within a UJSR for Java SE.
- 403 In order to guard against fragmentation, new Platform Edition Specifications will not substantially
- 404 duplicate existing Platform Editions or Profiles.

405 2.1.3 PROFILES AND API SPECIFICATIONS TARGET CURRENT PLATFORM EDITIONS

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

410 2.1.4 PLATFORM INCLUSION 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
- 413 | Platform Edition while previous versions were not. The submitter of a JSR will be required, via the JSR
- submission form requires the submitter, to indicate state whether if it is the submitter's goal to deliver
- 415 | the JSR's RI and TCK should be delivered as part of a Profile or Platform Edition, in stand-alone
- 416 manner, or both. The final decision whether a specific JSR is included in a Profile or a Platform Edition
- 417 is made by the Spec Lead and Expert Group of that Platform Edition JSR or Profile JSR, and
- confirmed by the EC ballots on those JSRs. If the Platform Edition or Profile JSR turns down the
- request for inclusion, then the JSR for the API will be required to deliver a stand-alone RI and TCK.
- 420 Tehnologies may be incorporated into a Profile or Platform Edition after having been initially delivered
- 421 standalone. A JSR for a new version of an API that proposes to become part of a Profile or Platform
- 422 Edition and is considering discontinuing stand-alone availability must state the rationale for this
- 423 change. The public must be informed of the intention to discontinue the availability of the standalone
- 424 RI and TCK one release in advance. The final decision whether a specific JSR is included in a Profile
- 425 or a Platform Edition is made by the Spec Lead and Expert Group of that Platform Edition JSR or
- 426 Profile JSR, and confirmed by the EC ballots on those JSRs. If the Platform Edition or Profile JSR
- 427 turns down the request for inclusion, then the JSR for the API will be required to deliver a stand-alone
- 428 RI and TCK. intent in the JSR's submission. describe this Platform Edition or a Profile should the
- 429 definition of a in udedincto be

430 | 2.1.5 PLATFORM INCLUSION

- 431 | JSRs that want to be considered A JSR for a new version of an API that proposes to become part of
- 432 a Profile or Platform Edition and is considering discontinuing stand-alone availability where the
- 433 previous JSR for this API did not indicate this plan, must make that proposal to discontinue stand-
- 434 alone availability one version ahead.
- 435 Also in this case the JSR Review (see section 1.2) will be 4 weeks instead of 14 days. and not
- delivering these separately and where the RI and TCK of previous versions were available separately,
- the submitter must state the rationale. Profile or Platform EditionWhen delivering the JSR's RI and
- 438 TCK integrated into a

2.2 JSR REVIEW definition - JSR Page: Each initiated JSR will be published on a public area of the JCP Web Site.

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- When a JSR is received, the PMO will give it a tracking number, assign the JSR to the appropriate EC
- 443 (or to both ECs if so requested by the submitter), create its JSR Page, announce the proposed JSR to
- 444 the public, and begin JSR Review. Comments on the JSR should be sent to the JSR's public feedback
- 445 <u>aliase-mail address listed on the JSR Page. Comments will be forwarded to the EC for its</u>
- 446 consideration and will be . All comments received will be made available from the JSR Page (similar
- comments may be consolidated.) and forwarded to the EC for its consideration. Members who are
- interested in joining the Expert Group (should the JSR be approved) should identify themselves by

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2.3.1 EARLY WARNING AND FEEDBACK ON DISCLOSURE OF LICENSING TERMS FOR THE RI AND TCK

The Spec Lead's company or organization Member sponsible for developing the the Reference 452 Implementation (RI) and Technology Compatibility Kit TCK)(and for licensing them its licensing as 453 454 described in the JSPAunder terms compatible with the licensing guidelines established for use within-455 the JCP. The Spec Lead Member willmust provide the EC with the terms complete copies of the 456 proposed RI and TCK licenses under which the RI and TCK will be licensed no later than the start of 457 JSR Review. y of some of the terms. summara , not simply_complete copies of the licenses th<mark>≓</mark> 458 intend to useThe Spec Lead Member must provide The licenses must be offered in perpetuity. 459 licenses will be published for public access with links on the public JSR page, shall provide both the 460 revised licenses and the reasons for the changes to the EC. Member subsequently determines that 461 circumstances require a change to one or more of the licenses it provided, the Spec Lead Member If 462 the Spec Lead-EC members willshould provide feedback on the terms as an indication of how the 463 community as a whole might react as a whole to the terms. Existing licensees who not wish to accept the modified license when required to admin a newer TCK will have the option to accept the updated TCK under the previous licensing terms. The EC consensus is that the proposed licensing terms are 464 465 not compatible with the licensing guidelines established for use within the JCP, then balloting on the 466 467 proposed JSR will be delayed until Oracle legal provides an opinion on the matter. The opinion of 468 Oracle legal will be the final decision on the matter.

469 If Expert Group members are required to enter into an agreement (other than the JSPA) for access to 470 Expert Group infrastructure (such as Expert Group mail lists, document or code repositories, etc.), the 471 Spec Lead must include references to the licenses for use of these services in the Java Specification-472 Request. Since hosting services may impose licensing requirements on Expert Group members, this information may be considered by the EC during the JSR Approval Ballot. If the Expert Group switches 473 474 to a different hosting service after the JSR Approval Ballot, the Spec Lead must obtain EC approval 475 and update the public Spec PageIf the EC consensus is that the proposed revised terms are not 476 compatible with the licensing guidelines established for use within the JCP, then balloting on the proposed JSR will be delayed until Oracle legal propinion on the matter. The opinion of 477 Oracle legal will be the final decision on the matter. the JCP Web site. JSR Page 478

2.4 JSR APPROVAL BALLOT

- After the JSR Review, EC members swill when the JSR (with its proposed Spec Lead and initial Expert Group) and any comments and nominations received, and cast their ballot as perspecified in
- 482 | Section 6.5 below to decide if the JSR should be approved.
- 483 If the JSR Approval Ballot fails, the PMO will send all EC comments to the JSR submitter(s) who
- 484 willmay ve the option of harevisinge the JSR and resubmitting it to the PMO within 14 days. If a
- 485 revised JSR is not received in that time, the original EC decision will stand and the JSR will be closed.
- 486 If a revised JSR is received, the PMO will post it to the JSR Page, announce the revised JSR to the
- 487 public, and send it to all EC members for a JSR Reconsideration Ballot. If that ballot fails, the JSR will
- 488 be closed. CREATE THE EARLY DRAFT

2.5 FORM THE EXPERT GROUP

- 490 Within 14 days of a a JSR being approved, the PMO will notifyinstructs the identified Spec Lead to
- 491 form the Expert Group. If the Member contributing the Spec Lead withdraws from the Community
- 492 before the JSR is approved, the PMO will request the initial preliminary Expert Group to choose a
- replacement from among themselves who is willing to take on the duties defined in this document). 54
- 494 (including taking responsibility for the RI and TCK, working towards the estimated schedule given in

- 495 the JSR, and assuming the position of Maintenance Lead as described in section. 496 There is no size limit on the Expert Group. The Spec Lead may add additional Experts at any time 497 provided the existing Expert Group existing EG members is are consulted first. New members may be 498 added, for example, to increase diversity of opinion. A Spec Lead recruits new Experts by approaching 499 other Members directly and working with them to identify an expert and bring him or her into the 500 Expert Group. 501 Any JCP mMember or emberemployee of a JCP mMember Representative can request to join an Expert Group at any time by sending an email to the Spec Lead of such the EG. The request, together 502 with the Spec Lead's official response, substantive deliberations within the EG about this matter, and 503 any other official decision related to EG composition, including decisions to remove or replace EG 504 505 members must be made public via a publicly readable (and publicly archived) email list the EG's public 506 aliast. 507 Spec Leads are encouraged to choose a style that provides maximal transparency to the Expert 508 Group, community, the EC members and the public. The PMO provides Spec Leads with tools and 509 techniques for making the actions of their Expert Groups transparent, and the EC members expect 510 Spec Leads to carefully choose which tools are best for their Expert Groups and commit to using 511 them. Transparency is valuable to everyone in the community, especially the Expert Group, because it 512 offers broader feedback to the group and helps build broader support for the final spec. The public-513 JSR page must contain information on what transparency techniques are being used by the Expert-Group and this information must be current before any JSR Ballot. 514 515 The use of JSPA Confidential materials (as defined in the JSPA) by Expert Groups limits transparency 516 and is strongly discouraged. If the Spec Lead intends to permit the use of JSPA Confidential materials (such as emails, drafts or submissions marked as Confidentia is must be specified in the initial 517 Java Specification Request before the JSR Approval Ballot. 3 teed to coordinate schedules, travel 518 519 restrictions and In-person group meetings are useful but they tend to slow down work considerably 520 due to Electronic and phone communication is encouraged. Use of the Internet is encouraged. E-mail-521 exchanges on mailing lists established for the use by the Expert Group, along with conference calls-522 and group meetings, have been used by past Expert Groups to discuss and resolve issues raised as the draft evolves.FREEDOM OF WORKING STYLE 523 524 Each Expert Group is free to define and follow whatever working style it finds most productive and 525 appropriate as long as it is compatible with the JCP. 526 3. COMPLETE THE SPECIFICATION PUBLIC REVIEWDRAFT 527 **RELEASES** 528 **DEFINITIONS** 529 530 Proposed Final Draft: The version of the draft Specification that will be used as the basis for 531 the RI and TCK. Public Draft Specification Approval Ballot: The EC ballot to determine if a draft should 532 533 proceed after Public Review.
- Public Draft Specification Reconsideration Ballot: The EC ballot to determine if a 535 revised draft should proceed after Public Review.
- 536 Public Review: A 30 to 90 day period when the public can review and comment on the

³ The EC intends to remove the confidentiality language from the JSPA in the near future.

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3.0 WRITE THE FIRST DRAFT OF THE SPECIFICATION

- 539 The Expert Group should begin work by considering the requirements set forth in the JSR, any
- 540 contributed documents or technology descriptions, comments received during JSR Review and, if this
- 541 is a revision of an existing Specification, the Change Log kept by the Maintenance Lead (see section
- 542 4). Additional input can be obtained from discussions with other Members, industry groups, software
- 543 developers, end-users, and academics. The goal is to define requirements and then write a draft
- 544 specification Specification suitable for review by the Community and the public.
- 545 When the Expert Group decides that the first draft is ready for review, the Spec Lead will send the
- 546 draft, along with any additional files required for review, to the PMO. The Spec Lead should also
- 547 suggest the length of the Early Draft Review period if the Expert Group feels it should go beyond the
- 548 minimum 30 days.
- Multiple Early Draft (and Early Draft Reviews) are encouraged where the Expert Group feels that this would be helpful. 549
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3.1 EARLY DRAFT REVIEW

- 552 Refinement of the draft Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins when the PMO posts it to the JCP Web Standard and Specification begins to the JCP Web Standard and Specification begins when the JCP Web Standard and Specification begins which the JCP Web Standard and Specification begins when the JCP Web Standard and Specification begins which the JCP Web Standard
- 553 announces the start of Early Draft Review to all the Members and the public. Anyone download
- 554 and comment on the draft. The goal of Early Draft Review is to get the draft Specification into a form
- 555 suitable for Public Review as quickly as possible by uncovering and correcting major problems with
- 556 the draft. Early Draft Review is an early access review, designed to and should ideally take place
- 557 when the specification Specification 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 558
- 559 fundamental architectural and technological issues that have considerably improved some
- Specifications. 560

3.1.1 UPDATING THE DRAFT DURING EARLY DRAFT REVIEW

- 562 If the Expert Group makes major revisions to the draft during Early Draft Review, the Spec Lead
- 563 should send the revised draft, along with a synopsis of the changes, to the PMO. The PMO who will-
- 564 immediately notify Members and the public of any updated drafts and change synopses-
- 565 received by lish these online and make them available for download by Members and the public by the
- public. 566
- 567 After the Early Draft Review period has ended, the Expert Group can make any additional changes to
- 568 the draft it deems necessary in response to comments before submitting the draft to the PMO for
- 569 Public Review.

570 3.2 PUBLIC REVIEW

- 571 Public Review begins when the PMO posts a new draft Specification on the JCP Web Site and
- 572 punces its availability to both Members and thefor public can download and comment on the draft.
- 573 access to the Internet. Anyone review and comment.
- 574 All comments from Members and the public should be sent to the e-mail feedback address listed in the
- 575 draft. The Spec Lead is responsible for ensuring that all comments are read and considered. If those
- 576 comments result in revisions to the draft, those revisions result in major changes (in the opinion of
- 577 the Expert Group), then the Specficationi wilmust send an updated draft (with a summary
- 578 synopsis of the changes) to the PMO at any time up until before the the last day of the rreview period

579 ends. The PMO will post both the new draft and the change synopsis summary toon the JCP Web Site 580 and will notify both Members and the public EC members are strongly encouraged to have one or more 581 technical members of their organizations carry out a review of the draft early on in Public Review, in-582 order to uncover possible negative changes since Early Draft Review. EC members should inform the 583 Expert Group of any such discoveries using the Member e-mail feedback address listed in the draft so-584 they can be considered and responded to during the review period, like all Member comments. EC-585 member feedback is important to the Expert Group, and EC members are encouraged not to wait until-586 ballot periods to voice concerns and issues. All comments received must be made available from the 587 JSR Page before the end of the Review so that they can be considered by the EC during the ballot-588 (similar comments may be consolidated). Before the Proposed Final Draft, a brief Expert Groupresponse to each of the Public Review comments must be made available from the JSR page. 589 590

- that the new draft is available.

3.3 PUBLIC DRAFT SPECIFICATION APPROVAL BALLOT

- The Public Draft Specification Approval Ballot starts when the Public Review closes. At the close of 592
- 593 balloting, all comments submitted by EC members with their ballots will be circulated to the Expert
- 594 Group by the PMO.

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- 595 If the Public Draft Specification Ballot fails, the Expert Group will have 30 days to update the draft in
- 596 response to the concerns raised by the EC and to submit a revised version to the PMO. If a revised
- 597 draft is not received by the end of the within 30 days, the original decision by the EC will stand and the
- JSR will be closed. If a revision is received, the PMO will forward it to the EC and initiate a Public Draft 598
- 599 Specification Reconsideration Ballot. At the close of balloting, all comments submitted by EC members
- 600 with their ballots will be circulated to the Expert Group by the PMO. If this ballot fails, the JSR will be
- 601 closed and the Expert Group will disband. If the JSR was a revision to an existing Specification, the
- 602 Spec Lead will resume the role of Maintenance Lead of the current Specification (see section 4).

4. FINAL RELEASE 603

- 604 **DEFINITIONS**
- 605 Appeal Ballot: The EC ballot to override a first-level decision on a TCK test-
- 606 challenge.
- Final Draft: The final draft of the Specification that will be put forward for EC approval. 607
- 608 Final Approval Ballot: The 14-day EC ballot to approve the Final Draft along with its-
- 609 associated RI and TCK.
- 610 Final Approval Reconsideration Ballot: The 14-day EC ballot to reconsider an initial
- 611 rejection of a Final Draft, RI, and TCK.
- 612 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 613
- 614 Specification's TCK.

4.0 PROPOSED FINAL DRAFT

- 617 If the Public Draft Specification Approval Ballot (or Reconsideration Ballot) is successful, the Expert
- Group will prepare the Proposed Final Draft of the Specification by completing any revisions it deems 618
- 619 necessary in response to comments received. The Spec Lead will then send the Proposed Final Draft
- 620 to the PMO, who will announce it to both Members and the public and post it on the JCP Web Site for
- 621 public download within seven days of receipt.

4.0.1 COMPLETE THE RI AND TCK

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- 623 The Spec Lead Member is responsible for the completion of both the Reference Implementation (RI)
- 624 and the Technology Compatibility Kit (TCK). JSRs which that are assigned to both ECs are required to
- deliver an RI and TCK that are applicable to the Java ME support both environments and to the Java 625
- 626 SE or Java EE environment, which . This may require a separate RI and TCK for each environment. If
- 627 the RI and TCK uncover areas of the Specification that were under-defined, incomplete, or
- ambiguous, the Spec Lead will work with the Expert Group to correct those deficiencies and then send 628
- 629 a revised Specification (together with a summary synopsis of the changes) to the PMO. All such
- 630 Information will revisions and change synopses received will be posted to the JCP Web Site and
- 631 announced to both Members and the publice.. The Expert Group will continue to consider any further
- 632 comments received during this time.

633 4.0.2 ESTABLISH A FIRST-LEVEL TCK APPEALS PROCESS The Spec Lead is also

- responsible for establishing a clearly defined First Level TCK Appeals Process 634
- to address challenges to the tests contained in the TCK. This process must be 635 described in the documentation included in the TCK (see Section 4.3 for
- 636 information on the full TCK Appeals Process). Examples of First Level TCK 637
- Appeals Process applicable to situations ranging from simple API 638
- Specifications all the way up to Platform Edition Specifications can be found in 639
- the TCK section of the JCP Web Site. 640
- 642 The Spec Lead is also responsible for establishing a clearly defined First Level TCK Appeals Process
- 643 to address challenges to the tests contained in the TCK. This process must be described in the TCK
- 644 documentation. Implementers who are not satisfied with a first level decision should appeal to the EC
- by documenting their concerns in an email message to the PMO. The PMO will circulate the request to 645
- 646 the EC, alongtogether with any information received from the ML concerning the rationale for the first-
- 647 level decision, and initiate a 7-day Appeal Ballot. UPDATE THE RI TO MATCH THE TCK AND THE
- 648 **SPECIFICATION**
- 649 If the Appeal Ballot is successful, the ML will, within one month of the close of Ballot, update the TCK
- 650 and/or the Specification in accordance with the EC decision, update the RI if necessary, and record-
- the changes in the RI and TCK Change Logs.4.3.2 651

4.0.3 UPDATE THE DELIVERABLES IN RESPONSE TO THE APPEAL BALLOT

- Depending on the nature of the problem, a successful TCK challenge will require updating one or 654
- 655 more of the TCK, the Specification, or the RI. Within one month of the close of a successful TCK
- 656 Appeal Bballot 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 657
- changed,) and URLs for tland/or TCK must be delivered to the PMO, who will publish 658
- 659 them on the JCP website.

660 4.1 FINAL APPROVAL BALLOT

- When the Expert Group is satisfied that the TCK provides adequate test coverage, the RI
- adequatelycorrectly 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.

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- 667 Each The 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).
 - 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 for the EC members to use in evaluating theto evaluate the TCK's quality. sufficiency of the TCK. TThis executive summary of the TCKdocument 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 measure TCK test coverage of the Specification, test coverage numbers achieved, and a justification for the adequacy of TCK quality and its test coverage.
 - Provide 100% signature test coverage. These tests must ensure that all of the required API signatures of the spec are completely implemented.
 <u>and that no non-specified APIs are included in the JSR's namespace.</u>
- 683 | If the Final Approval Ballot fails, the Spec Lead will have 30 days to revise the Specification, RI, and
- 684 and/or_TCK in response to any EC concerns and to resubmit modified materials. At the same time,
- the Expert Group will have 30 days to revise the Final Draft in response to any EC concerns and send
- 686 | it to the PMO.
- If no responses are received by the end of the within 30 days, the original decision of the EC will
- stand, the PMO will close the JSR, and the Expert Group will disband. If the JSR was a revision to an
- 689 existing Specification, the Spec Lead will resume the role of Maintenance Lead of the current
- 690 Specification (see section 4).
- 691 If a response is received, the PMO will circulate it to all EC members for a Final Approval
- 692 Reconsideration Ballot. At the close of balloting, all ballot comments submitted by EC members will be
- 693 circulated to the Expert Group by the PMO. If the reconsideration 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
- 695 Lead will resume the role of Maintenance Lead of the current Specification.

4.2 FINAL RELEASE

- 697 Within 14 days of a successful Final Approval Ballot (or a-Reconsideration Ballot), the PMO will
- 698 publish on the JCP website the Specification and links to information on how to obtain the RI and TCK
- 699 on the JCP Web Site and anwill announcement will be made the availability of these materials to both
- Members and the public. The published TCK information must indeed a means for any interested
- 701 party to obtain a copy of the TCK documentation at no charge. Final Release, the Expert Group
- 702 will have completed its work and disbands. The Spec Lead will typically be the Maintenance Lead and
- 703 may call upon Expert Group members and others for aid in that role.
- 704 The Maintenance Lead must ensure that the links to the RI and TCK remain valid through the lifetime

- of the Specification. If the links become broken or non-functional, the Maintenance Lead will have 30 days following notification from the PMO of the invalid links to correct them. If the problems are not corrected within the 30 days, the Specification must reenter the Process at the Proposed Final Draft or Maintenance Review stages appropriate, and complete the Final Approva Release or Maintenance Release process again.
- 712 definition JSR Renewal Reconsideration Ballot: An EC ballot to determine if a revised JSR should continue its work.
- 714 If the JSR Renewal Ballot fails, the Expert Group will have 30 days to update the JSR in response to
- 715 the concerns raised by the EC and submit a revised version to the PMO. If a revised JSR is not
- received the end of the 30 days, the original decision by the EC will stand and the JSR will be
- 717 closed revision is received, then the PMO will forward it to the EC and initiate a JSR Renewal
- 718 Reconsideration Ballot. At the close of balloting, all comments submitted by EC members with their
- 719 ballots will be circulated to the Expert Group by the PMO. If this ballot fails, the JSR will be closed and
- 720 the Expert Group will disband. If the JSR was a revision to an existing Specification, the Spec Lead-
- 721 will resume the role of Maintenance Lead of the current Specification (see section 5).
- 722 definition JSR Renewal Ballot: An EC ballot to confirm that a JSR should continue in its work.
- 723 If a JSR does not begin Early Draft Review within the first 12 months following the completion of its-
- 724 initial JSR Approval Ballot (JSR Approval), or does not begin Public Review within 2 years of JSR
- 725 Approval or has not achieved Final Release within 3 years of JSR Approval, then a JSR Renewal
- 726 Ballot may be initiated at the request of a majority of the EC. The PMO will inform the Spec Lead and
- 727 Expert Group of the decision of the EC to hold this ballot and request that the Spec Lead and Expert
- 728 Group prepare a public statement to the EC. The JSR Renewal Ballot will start 30 days following the
- 729 majority recent The JSR Renewal Ballot is carried out for 7 days. If the JSR Renewal Ballot is
- 730 approved RENEWAL BALLOT

731 COMPATIBILITY TESTING

- 732 The Spec Lead is responsible for defining the process whereby the TCK is used to certify
- 733 implementations of the JSR as compatible. The Spec Lead must submit to the PMO at least quarterly,
- 734 and at every Maintenance Release, a list of all implementations that have been certified as compatible
- 735 and that have been released publicly or commercially. The PMO will publish this information on the
- 736 JCP website. If the Spec Lead submits the information in the form of a pointer to an already published
- 737 | list the PMO may choose simply to reference that list rather than duplicate it.
- NOTE: IP rights granted when the JSR made any previous releases are not affected by such a change
- 739 in status.

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5. MAINTENANCE

5.0 MAINTENANCE LEAD RESPONSIBILITIES

- 742 Dormant Specification (Dormant): A Specification that does not have an identified
- 743 Maintenance Lead. All Specifications become Dormant at the end of their life cycles.
- 744 Item Exception Ballot : The EC ballot to determine whether or not to include specific
- 745 change items in a Minor Revision.

746	Maintenance Lead (ML): The Expert responsible for maintaining the Specification.
747 748 749	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.
750	Minor Revision: Minor changes made to a Specification by the ML.
751 752	Transfer Ballot: The EC ballot to approve transfer of ownership of a Specification, RI, and TCK from one Member to another Member. 4
753	5.1
754	DEFINITIONSMAINTENANCE
755 756 757 758 759	The Maintenance Lead Member is expected to assume long term ownership of the Specification, RI, and TCK while respecting the wishes of the Java Community Members with regard to evolution. A Maintenance Lead will therefore automatically be the Spec Lead for all significant future revisions to their Specification but will not have the exclusive right to decide when a significant revision will take place (see section 1.1.1). KEEP THE SPECIFICATION UP TO DATE
760 761 762 763 764	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. — from both Members and the public via an e-mail address listed in the Specificationrequests for clarification, interpretation, and enhancements to the Specificationthe Specification and dealing with errata by fielding on ce enanmaintearrying out he Maintenance Lead is responsible for T
765 766 767 768 769 770	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. , but is free to consult with the former members of the Expert Group, or any other sources, to assist with the Maintenance duties. The ML may find it very helpful to recruit members of the Expert Group that helped to develop the Specification
771 772 773 774 775	The Maintenance Lead (and his or her host company or organization) is expected to assume long term ownership of the Specification, RI, and TCK with due respect of the will of the Java Community Members with regard to evolution. This means that a Maintenance Lead will automatically be the Spec Lead for all significant revisions to their Specification going forward but he or she will not have the exclusive right to decide when a significant revision will take place (see section 1.1.1).
776	THE MAINTENANCE LEAD MAKES A LONG TERM COMMITMENT
777 778	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. RELINQUISHING OWNERSHIP
779 780 781 782 783 784 785	If the ML decides to discontinue his or her work 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 should make a reasonable effort to locate another Member who 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, RI, and TCK is transferred to the new ML's organization (subject to a successful Transfer ballot by the EC).

⁴ 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.

- 786 Changes appropriate for a Maintenance Release include bug-fixes, clarifications of the Specification,
- 787 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.

789 **5.1.1 RELINQUISHING OWNERSHIP**

- 790 a JSR. by) or .2.14in section 5 process (described inor RevisionJSR Page. The ML is free to consult-
- 791 with the former members of the Expert Group, or any other sources, for advice on how to revise the
- 792 Specification. All change items proposed by the ML will make their way into the Specification by either-
- 793 the MSpec Page
- 794 The PMO will provide a publicly archived Maintenance feedback email address for requests for
- 795 Specification clarifications, corrections or changes from the public. The ML will review all comments,
- 796 identify common themes, and arrange with the PMO to make a list of frequently raised issues
- 797 available from the document's CYCLE
 - 5.2 THE MAINTENANCE If the ML decides to discontinue his or her work fat any time (including discontinuing maintenance activities or declining to take on the role of Spec Lead during a significant revision initiated by a JSR) the ML should make a reasonable effort to locate another Member who 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, RI, and TCK is transferred to the new ML's organization (subject to a successful Transfer ballot by the EC).

5.3 MINOR REVISIONAINTENANCE PROCESSREVIEW

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).

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- 813 The ML will arrange to harmonic all change items placed intodocument all suggested proposed
- Specification changes in PROPOSED section of the Change Log and then send a request to the
- 815 PMO to initiate a Maintenance Review. Before the Maintenance Review begins, the ML must
- 816 summarize comments received atthrough the Maintenance feedback alias (similar comments may be
- 817 consolidated) email address and must indicate the disposition for of each comment (e.g. deferred with
- a brief explanation, rejected with a brief explanation, included in the Change Log proposal.). This
- 819 <u>summary will be posted along with the Change Log on the Spec Page JSR Page</u>. The PMO will then
- 820 make a public announcement and begin the review-within 14 days of receipt of the request.
- 821 The ML may choose to modify one or more of the proposed changes based on comments received
- 822 during the review.
- 823 At the close of the Maintenance Review the PMO will initiate a 7-day Maintenance Review Ballot.
- 24 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
- 826 proposed by the ML is inappropriate for a Maintenance Release and should be deferred to a follow-on
- 827 JSR. "No" votes must be accompanied by comments in which the offending items are identified and
- 828 the reasons for the objection are explained.

829 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. 830 831 NOTE: there is no minimum number of "yes" votes required to move forward with the proposed Maintenance Release, and "no" votes cannot prevent a release unless the ML is unwilling to defer 832 833 items subsequently disallowed in an Item Exception Ballot. 834 JSR Page. Spec PageAll comments will be available from the At the end of Maintenance Review and 835 any subsequent Item Exception Ballots, 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 836 837 Log, and delete the corresponding entries in the PROPOSED section. Items voted down in an Item 838 Exception Ballot must be moved to the DEFERRED section of the log. AOther H-changes not 839 incorporated into the Specification may be ay be either left in the PROPOSED section or moved to the 840 **DEFERRED** section 841 During Maintenance Review an EC member may request that specific proposed change items be 842 deferred to the next JSR. Any such request must be made to the PMO no later than the close of 843 Maintenance Review. If requests are received, the PMO will circulate the requests to all EC members-844 and initiate a 7 day Item Exception Ballot within 2 weeks after the close of the Maintenance Review. At-845 the close of the Item Exception Ballot, the PMO will post the ballot results to the Change Log. The ML 846 will place all proposed changes that were disapproved into the DEFERRED section. The ML will need 847 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. 848 849 850 5.3.1 THE EC MAY DEFER MINOR REVISION ITEMS. at the ML's discretion. 5.4 KEEPING THE RI AND TCK SYNCHRONIZED WITH THE 851 SPECIFICATION MAINTENANCE RELEASE 852 853 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 854 publication in a Maintenance Release. The PMO verifies that the necessary changes have been 855 made, and publishes the Specification, the Change Log, and pointers to the RI and TCK on the JSR 856 857 Web Page. 858 UPDATE THE RI TO MATCH THE TCK AND THE SPECIFICATION 859 860 If the Appeal Ballot is successful, the ML will, within one month of the close of Ballot, update the TCK-861 and/or the Specification in accordance with the EC decision, update the RI if necessary, and recordthe changes in the RI and TCK Change Logs. 862 863 definition - Appeal Ballot: The EC ballot to override a first-level decision on a TCK test-864 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

869 4.3.1 APPEALING A FIRST-LEVEL DECISION TO THE EC-

decision, and initiate a 7-day Appeal Ballot.

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4.3 THE TCK APPEALS PROCESS 870 871 As noted in section 3.2.2, the TCK documentation must identify and specify a First-Level TCK Appeals 872 Process by which challenges to the TCK will be addressed. An implementer of a Specification can 873 challenge a TCK test using the First-Level TCK Appeals Process. Implementers who are not satisfied 874 with a first level decision can appeal it to the EC. 875 e maintenance changes will be considered final when the RI and TCK are synchronized with the 876 Specification., respectivelyrecord all RI and TCK updates in the Change Log to each of 877 themudpateskeep a Change Log for the RI and one for the TCK, recording all Whenever the 878 Specification is updated, the ML is responsible for reviewing the current RI and TCK to determine what 879 revisions (if any) are needed to keep the RI and TCK synchronized with the Specification. The ML 880 must-NOTE: until the Maintenance Release stage is reached any proposed changes should be 881 considered preliminary and subject to change, and therefore should not be implemented in shipping 882 products. 6. EXECUTIVE COMMITTEE POLICIES AND PROCEDURES 4.3. 883 5.4.2. 884 885 definition - Elected Seat : An EC seat filled by the election process described in section 65definition - Ratified Seat : An EC seat filled by the ratification process described in 886 887 section 6 **6.0 DEFINITIONS** 888 889 6.1 SCOPE 890 891 The Executive Committee (EC) oversees the development and evolution of the Java technologies 892 within the JCP.-**6.2 MEMBERSHIP** 893 894 There are currently two Executive Committees: one responsible for Java ME and one for Java SE and 895 EE together. The Each - Executive Committee EC is is currently composed of 16 Java Community Process Members. Members Oracle America, Inc. has a permanent voting seat on each EC. (Oracle 896 representatives must not be members of the PMO.) The Cs are led by a non-voting Chair from theiswill plus a non-voting Chair. The Chair of the EC a member of the Processgram Management 897 898 899 Office. is not be a member of the PMO. willhas a permanent voting seat on the EC. That Oracle representative have willselected from Java Community Process Members. Oracle America, Inc. are-900 901 will be The 16 voting members 902 Should one Member on the EC acquire a majority ownership of another EC rember, one of those 903 members must resign his or her seat by the effective date of the acquisition. 904 No Member may hold more than one voting seat on the EC at any given time. For example, if a Member has majority-ownership of one or nother Members, then that group of Members can have only one seat on the EC at any given time. E: In the near future the EC intends to merge the two 905 906 ECs, and modify the number of members and possibly their terms of office. 907

6.3 EC DUTIES AND RESPONSIBILITIES

- 1. Select JSRs for development within the JCP.
- 2. Approve draft Specifications for Public Review.
- 3. Give final approval to completed Specifications and their associated RIs and TCKs.
 - 4. Decide appeals of first-level TCK test challenges.
 - 5. Review-w proposed maintenance revisions and possibly require some to be carried out in a new JSR.
 - 6. Approve the transfer of maintenance duties between Members.
 - 7. Decide when JSRs that have not made sufficient progress through the Process should be
 - 8. Provide guidance to the PMO and JCP Community to promote the efficient operations of the organization and to guide the evolution of Java platforms and technologies. Such guidance may be provided by mechanisms such as publishing white papers, reports, or comments as the EC deems appropriate to express the opinions of one or both Executive Committees.

Members of the Executive Committees liberall be dedicated to the principles of full and open competition, in full compliance with all applicable laws, including all antitrust laws of the United States and other nations and governmental bodies as appropriate. Violations of such laws can result in criminal as well as civil penalties for individuals as well as employers, depending on the jurisdiction. In particular, any discussion related to product pricing, methods or channels ef distribution, division of markets or allocation of customers, among other subjects, should be avoided.

6.4 EC SELECTION PROCESS AND LENGTH OF TERM

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

931 The cycle repeats every 3 years. Ratified or Elected Seats that are vacated prior to completion of the term will be filled as described sections in 5.4.2 and 5.4.3. 932

Voting Members on the EC serve 3-year terms. There are 10 Ratified Seats, 5 Elected Seats, and onepermanent seat held by Oracle America, Inc. The 3-year terms are staggered so that 5 of the 15 seats are normally up for ratification/election each year as follows:

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938 EC Voting Membrembers on the EC serve three-year terms. s, which are staggered so that a third of 939 the seats are up for election each year.

940 On each EC There are two 2-Ratified Seats for every Elected Seat, (currently 10 Ratified Seats and 5 Elected Seats) plus one permanent seat held by Oracle America, Ingate terms are staggered so that 941 a third of the Voting seats are normally up for election each year. 3. and 6.4Ratified or Elected 942

943 Seats that are vacated prior to completion of the term will be filled as described in sections-

⁵ There was more text here, it has been moved to Standing Rules

944 6.5.1 RESIGNATION OF EC SEATS

- 945 EC Members on the EC may resign their seats at any time during their term. Should one Member on
- 946 the EC acquire a majority ownership of another EC member, one of those members must resign his or
- 947 <u>her seat by the effective date of the acquisition.</u>
- 948 | 😾
- 949 | EC members who fail to remain Java Community Members forfeit their EC seat.
- 950 Vacated seats will be filled for the remainder of their term by a special election ballot that will be held
- 951 no later than two months after the resignation (unless the resignation is less than six months before
- 952 the next scheduled annual election ballot).

953 | **6.5.2 ELECTION PROCESSES**

- 954 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
- 956 that group of Members will collectively have 1 very which will be cast by the person they designate to
- 957 be their representative for the ballot in question
- 958 | ——ual elections for Ratified and Elected Seats will be held simultaneously. Voting in these elections
- 959 will start in the third week of October.
- 961 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
- 963 questions of the candidates. If a suitable venue such as JavaOne is available the PMO shall also
- 964 organize a public meeting with the same purpose.

6.5.3 SEELECTION PROCESS FOR RATIFIED SEATS

Members are selected for the 40-Ratified Seats using a ratification ballot-which is carried out as follows: The table given at the end of sequence 5.4 determines the number of Ratified Seats up for ratification each year of the 3-year cycle. CP Members are eligible to vote in a ratification ballot 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 ratification ballot in question.

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A Ratified Seat that was vacated by resignation will be filled for the remainder of its term by a ratification ballot that will be held no later than two months after the resignation (unless the resignation is less than six months before the next scheduled ratification ballot).

- The ratification ballot is carried out as follows:
- The PMO nominates Members to fill the vacant Ratified Seats with due regard for balanced community and regional representation.
- Voting begins starting in the third week of October each year.
- Eligible Members will vote to ratify each nominee over a 14-day voting 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.

984 6.5.4 SELECTION PROCESS FOR ELECTED SEATS

- 985 Members are selected for the 5-Elected Seats using an open election process that is carried out as
- 986 | follows:- The table given at the end of section 5.4 determines the number of Elected Seats up for

				_			
987	election each	year of the 3-	year cycle.	₩	tion ballot is	carried out a	s follows: e

ThAll JCP Members are eligible to vote in an election ballot 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 stable by the person they designate to be their representative for the ratification ballot in question ballot that will be held no later than two-months after the resignation (unless the resignation is less than six months before the next yearly election).

nAn Elected Seat that was vacated by resignation will be filled for the remainder of its term by a

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- 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 from the JCP election pages and ballot (e.g. any candidate statements, position papers, candidate forums, etc. that will be posted during the election).
- Starting fo Four weeks before the voting period, the PMO will accept nominations from the
 Community for a period of 14 days. Any Member may be nominated. 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.
- fourth week of October each year.
- third in thestarting
- Voting beging nnot run for election as individuals and the PMO shall reject such nominations. The members However, employees of Eligible Members may vote for as many nominees as there are vacant Elected Seats over a 14-day voting 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.

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7. EXECUTIVE COMMITTEE JSR VOTING RULES

- 1. All EC JJSR ballots will be conducted electronically and the results made public.
- 2. EC JSR balloting periods last 714 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.
- Only "yes" and "no" votes count in determining the result of an EC JSR ballot.
- 5. EC JJSR 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.

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- 7. EC bBallots to approve UJSRs for 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 4.1.
- 9. "No" votes must be accompanied by an explanation along withof the changes (if any) that are would persuade the member necessary to change the vote to "yes".
- 10. It is highly recommended that abstentions be accompanied by comments.

- 1034 | 11. When a failed—EC_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 of the above mentioned JSR ballots, the ballot will be approved only if each EC approves it separately.

IV APPENDIX A: 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 Specification ...d.
- 4. There is no Reference Implementation or Technology Compatibility Kit to be delivered and noTCK appeals process to be defined.
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