# 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 # 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
- 17 Experience has shown that the best way to produce a technology specification is to gather a group of
- industry experts who have a deep understanding of the technology in question and then have a strong 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 fivefour 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 wheth the JSR should proceed to the Final Release stage proceed to the Final Release stage. Proceed to the Final Release stage 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 publicThe draft goesout 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 itsassociated technology compatibility kit are completed before sending the specification to the responsible EC for final approval.
    - 4. **PUBLIC DRAFT**: . The expert group uses feedback from the review to revise and refine the draft. the draft and comment on, reviewreadthen can the review. Anyone with an Internet connection the community and the public Members, both A group of experts is formed to develop a preliminary draft of the specification that

- 54 5. FINAL RELEASE: The Spec Lead finalizes submits the Specification and submits it to the PMO 55 for publication as the Proposed Final Draft. When the RI and TCK are completed, and the the RI passes the TCK, all three delivership les are submitted to the PMO, who circulate them to the 56 responsible EC for final approval. 57
  - 6. MAINTENANCE: The completed specification Specification, rReference ilmplementation, and \*Technology 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 specification changes to be revised by an expert group. Challenges to one or more tests in a specification's technology compatibility kit are ultimately decided by the responsible EC if they cannot be otherwise resolved, implemented in a new JSR.

### II FUNDAMENTALGENERAL DEFINITIONS

- 68 Appeal Ballot: The EC ballot to override a first-level decision on a TCK test challenge.
- 69 Change Log: And area accessible from the JSR Page that lists all changes made to the 70 Specification, RI, TCK, and licenses since the previous release. A Change Log has six 71 sections: PROPOSED (changes not yet made to the Specification), ACCEPTED (changes 72 made to the Specification), DEFERRED (changes to be considered in a new JSR), RI (changes made to the TCK) and LICENSING (changes to 73
- the licensing terms) 74

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- 76 **Dormant Specification (Dormant):** A Specification that does not have an identified 77 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 78 79 on the draft Specification.
- **Elected Seat:** An EC seat filled by the election process described in section 5.3.4. 80
- 81 Executive Committee (EC): The Members who guide the evolution of the Java 82 technologies. The EC represents a cross-section of both major stakeholders and 83 other Members of the Java Community. EC members are approinted in an annual election process. Members must have signed the EC acceptance letter in order to serve-84 on the EC. The EC Palicies and Procedures are in Section 5. The EC Standing Rules 85 are found in, which is parate document.
- 87 **Expert:** A Member or Member Representative who has expert knowledge and is an active 88 practitioner in the technology covered by the JSR.
- 89 **Expert Group (EG)**: The group of Experts who develop or make significant revisions to a 90 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	<b>Final Release:</b> 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	Item Exception Ballot: The EC ballot to determine whether or not to include specific change items in a Maintenance Release.
104	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	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 _approved for development or revision will have ahas a dedicated public web page established on the JCP Web Site where to contain a the JSR's history of the passage of the Specification through the JCP, is recorded uding a record of the decisions, actions, and votes taken by the EC with respect to the draft Specification. and where all 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 <a href="mailto:specifications">specification</a> 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	<b>Proposed Final Draft</b> : 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 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	<b>Transfer Ballot:</b> The EC ballot to approve transfer of ownership of a Specification, RI, and TCK from one Member to another Member. <sup>1</sup>
179 180	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.
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 M 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

<sup>1</sup> 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 to meet
- 206 these requirements and or may thereby expose the Spec Lead 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
- 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
- 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).<sup>2</sup>

### 213 **0.0.1 Mailing Lists**

- 214 All substantive business must be carried out on a off 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)
- 221 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

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- 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.

### 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

<sup>2</sup> 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
- 289 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
- the concerns raised by the EC, and may submit a revised version to the PMO. If a revised JSR is not
- receive 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 standing
- 315 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	0.7 TURNAROUND TIMES
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.
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342	1. INITIATE A NEW OR REVISED SPECIFICATION
343	1.0 DEFINITIONS
344 345	<b>Expert:</b> A Member representative who has expert knowledge and is an active practitioner in the technology covered by the JSR.
346 347	<b>Expert Group</b> representative _(EG): The group of Experts who develop or make significant revisions to a Specification.
348 349 350	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.
351	JSR Approval Ballot: The EC ballot to determine if the JSR should be approved.
352	JSR Reconsideration Ballot: The EC ballot to determine if a revised JSR should be approved.
353 354	JSR Review: A 4 week period when anyone with an internet connection comment on a new JSR.
355 356 357 358	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.
359 360	Spec Lead Member: The individual JCP member who is a Spec Lead, or other the company or organization that employs, and is represented by, the Spec Lead.
361 362	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.

### 1.1 INITIATE A JAVA SPECIFICATION REQUEST

- 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.

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- 369 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 <u>specificationSpecification</u>, 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.

### 1.1.1 REVISE EXISTING SPECIFICATIONS

- Existing Specifications, along together with their associated RIs and TCKs, are maintained by a
- designated Maintenance Lead using the processes described in section 454 of this document.
- Maintenance Lead Members are 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. (and
- their host companies or organizations) expected to assume long term ownership of their
- 388 Specifications, RIs, and TCKs with drespect of the will of the Java Community Members with
- 389 regard to evolution. This means that aintenance Leads will automatically therefore be the Spec
- 390 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 (or Members). The
- 393 only provision is that the sSubmitter(s) should make a reasonable effort to get some of the members
- 394 of the previous Expert Group to join the revision effort.

### 395 1.1.2 PROTECT THE INSTALLED BASE AND GUARD AGAINST FRAGMENTATION

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

### 403 1.1.3 PROFILES AND API SPECIFICATIONS TARGET CURRENT PLATFORM EDITIONS

- 404 All new or revised Specifications must be compatible with the most recent versions of the targeted
- 405 Platform Edition Specifications. In order to achieve this, all UJSRs to define new Profile Specifications
- 406 or revise existing Profile Specifications must reference the latest version of the Platform Edition

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### 1.1.4 PLATFORM INCLUSION CONTINUED AVAILABILITY

- 409 The technology that a JSR defines can be delivered as part of a Profile or Platform Edition, it can be
- 410 delivered stand-alone, or both. Future versions of the technology may be integrated into a Profile or a
- 411 Platform Edition while previous versions were not. The submitter of a JSR will be required, via the JSR
- 412 submission form requires the submitter - to indicate state whether if it is the submitter's goal to deliver-
- 413 the JSR's RI and TCK should be delivered as part of a Profile or Platform Edition, in stand-alone
- 414 manner, or both. The final decision whether a specific JSR is included in a Profile or a Platform Edition
- is made by the Spec Lead and Expert Group of that Platform Edition JSR or Profile JSR, and 415
- 416 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. 417
- 418 Tehnologies may be incorporated into a Profile or Platform Edition after having been initially delivered
- 419 standalone. A JSR for a new version of an API that proposes to become part of a Profile or Platform
- 420 Edition and is considering discontinuing stand-alone availability must state the rationale for this
- 421 change. The public must be informed of the intention to discontinue the availability of the standalone
- 422 RI and TCK one release in advance. When delivering the JSR's RI and TCK integrated into a Profile or
- 423 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-424
- (see section 1.2) will be 4 weeks instead of 14 days. 425
- 426 A JSR for a new version of an API that proposes to become part of a Profile or Platform Edition and is-
- 427 considering discontinuing stand-alone availability where the previous JSR for this API did not indicate
- 428 this plan, must make that proposal to discontinue stand-alone availability one version ahead.

#### 429 1.1.5 PLATFORM INCLUSION

- 430 JSRs that want to be considered to be included in the definition of a Platform Edition or a Profile
- 431 should describe this intent in the JSR's submission. The final decision whether a specific JSR is
- 432 included in a Profile or a Platform Edition is made by the Spec Lead and Expert Group of that Platform
- 433 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 434
- 435 stand-alone RI and TCK.

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### 1.2 JSR REVIEW

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

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

## 447 1.3.1 EARLY WARNING AND FEEDBACK ON DISCLOSURE OF LICENSING TERMS FOR THE RI AND TCK

449 The Spec Lead's company or organization Member esponsible for developing the the Reference 450 Implementation (RI) and Technology Compatibility Kit (TCK) and for licensing them its licensing as 451 described in the JSPAunder terms compatible with the licensing guidelines established for use within-452 the JCP. The Spec Lead Member willmust provide the EC with the terms complete copies of the 453 proposed RI and TCK licenses under which the RI and TCK will be licensed no later than the start of 454 JSR Review. The Spec Lead Member must provide complete copies of the licenses that they into to-455 use, not simply a summary of some of the terms. The licenses must be offered in perpetuity. 456 licenses will be published for public access with links on the public JSR page. shall provide both the 457 revised licenses and the reasons for the changes to the EC. Member subsequently determines that 458 circumstances require a change to one or more of the licenses it provided, the Spec Lead Member If the Spec Lead EC members willshould provide feedback on terms as an indication of how the 459 community as a whole might react as a whole to the terms. 

sting licensees who not wish to accept 460 the modified license when required to adopt a newer TCK will have the option to accept the updated 461 462 TCK under the previous licensing terms. If the EC consensus is that the proposed licensing terms are 463 not compatible with the licensing guidelines established for use within the JCP, then balloting on the proposed JSR will be delayed until Oracle legal provides an opinion on the matter. The opinion of 464 465 Oracle legal will be the final decision on the matter. EC consensus is that the proposed revised 466 terms are not compatible with the licensing guidelines established for use within the JCP, then balloting on the proposed JSR will be delayed until Oracle legal provides an opinion on the matter. The 467 opinion of Oracle legal will be the final decision on the matter. the JCP Web site. JSR PageSpec-468 469 **Page** 

- 470 If Expert Group members are required to enter into an agreement (other than the JSPA) for access to 471 Expert Group infrastructure (such as Expert Group mail lists, document or code repositories, etc.), the
- 472 Spec Lead must include references to the licenses for use of these services in the Java Specification-
- 473 Request. Since hosting services may impose licensing requirements on Expert Group members, this
- 474 information may be considered by the EC during the JSR Approval Ballot. If the Expert Group switches
- 475 to a different hosting service after the JSR Approval Ballot, the Spec Lead must obtain EC approval
- 476 and update the public

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### 1.4 JSR APPROVAL BALLOT

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

### 1.5 FORM THE EXPERT GROUP

- 488 Within 14 days of a a JSR being approved, the PMO will notify instructs the identified Spec Lead to
- 489 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 initial preliminary Expert Group to choose a
- replacement from among themselves who is willing to take on the duties defined in this document
- 492 (including taking responsibility for the RI and TCK, working towards the estimated schedule given in
- 493 the JSR, and assuming the position of Maintenance Lead as described in section 4). 5.

- There is no size limit on the Expert Group. The Spec Lead may add additional Experts at any time
- 495 provided the existing Expert Group existing EG members is are consulted first. New members may be
- 496 added, for example, to increase diversity of opinion. A Spec Lead recruits new Experts by approaching
- 497 other Members directly and working with them to identify an expert and bring him or her into the
- 498 | Expert Group.
- 499 Any JCP mMember or employee of a JCP member Member Representative can request to join an
- 500 Expert Group at any time by sending an email to the Spec Lead of such the EG. The request, 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
- member must be made public via a publicly readable (and publicly archived) email listhe EG's public
- 504 aliast
- 505 | FREEDOM OF WORKING STYLE
- 506 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-
- 508 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
- 510 the draft evolves.
- 511 | Spec Leads are encouraged to choose a style that provides maximal transparency to the Expert
- 512 Group, community, the EC members and the public. The PMO provides Spec Leads with tools and
- 513 techniques for making the actions of their Expert Groups transparent, and the EC members expect
- 514 Spec Leads to carefully choose which tools are best for their Expert Groups and commit to using
- them. Transparency is valuable to everyone in the community, especially the Expert Group, because it
- offers broader feedback to the group and helps build broader support for the final spec. The public-
- 517 | JSR page must contain information on what transparency techniques are being used by the Expert
- 518 Group and this information must be current before any JSR Ballot.
- 519 The use of JSPA Confidential materials (as defined in the JSPA) by Expert Groups limits transparency
- 520 and is strongly discouraged. If the Spec Lead intends to permit the use of JSPA Confidential materials
- 521 (such as emails, drafts or submissions marked as Confidentia must be specified in the initial
- 522 Java Specification Request before the JSR Approval Ballot. 3 Lead to coordinate schedules. travel
- 523 restrictions and In-person group meetings are useful but they tend to slow down work considerably
- 524 due to Electronic and phone communication is encouraged.

# 2. REVIEWPUBLIC COMPLETE THE SPECIFICATION DRAFT RELEASES

### 527 | **2.0 DEFINITIONS**

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

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- 530 Public Draft Specification Approval Ballot : The EC ballot to determine if a draft should
- 531 proceed after Public Review.
- Public Draft Specification Reconsideration Ballot : The EC ballot to determine if a
- 533 revised draft should proceed after Public Review.
- 534 **Public Review**: A 30 to 90 day period when the public can review and comment on the draft
- 535 | Specification.
  - 3 The EC intends to remove the confidentiality language from the JSPA in the near future.

#### 2.1 WRITE THE FIRST DRAFT OF THE SPECIFICATION 536

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

#### 2.2 EARLY DRAFT REVIEW 549

- Refinement of the draft Specification begins when the PMO posts it to the JCP Web announces the start of Early Draft Review to all the Members and the public. Anyone download 550
- 551
- 552 and comment on the draft. The goal of Early Draft Review is to get the draft Specification into a form
- 553 suitable for Public Review as quickly as possible by uncovering and correcting major problems with
- 554 the draft. Early Draft Review is an early access review, designed to and should ideally take place
- 555 when the specification Specification still has some unresolved issues. The public's participation in Early
- 556 Draft Review is an important part of the JCP. In the past, comments from the public have raised
- 557 fundamental architectural and technological issues that have considerably improved some
- 558 Specifications.

### 2.2.1 UPDATING THE DRAFT DURING EARLY DRAFT REVIEW

- 560 If the Expert Group makes major revisions to the draft during Early Draft Review, the Spec Lead
- 561 should send the revised draft, along with a synopsis of the changes, to the PMO. The PMO who will
- 562 immediately notify Members and the public of any updated drafts and change synopses-
- received blish these online and make them available for download by Members and the public by the 563
- public. 564

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- 565 After the Early Draft Review period has ended, the Expert Group can make any additional changes to
- the draft it deems necessary in response to comments before submitting the draft to the PMO for 566
- Public Review. 567

### 2.3 PUBLIC REVIEW

- 569 Public Review begins when the PMO posts a new draft Specification on the JCP Web Site and
- 570 announces its availability to both Menters and thefor public. Anyone with access to the Internet can-
- download and comment on the draft. www and comment. 571
- 572 All comments from Members and the public should be sent to the e-mail feedback address listed in the
- 573 draft. The Spec Lead is responsible for ensuring that all comments are read and considered. If those
- 574
- comments result in revisions to the draft, those revisions result in major changes (in the opinion of the Expert Group), then the Specification described wilmust send an updated draft (with a summary 575
- 576 synopsis of the changes) to the PMO at any time up until before the the last day of the rreview period
- 577 ends. The PMO will post both the new draft and the change synopsis summary toon the JCP Web Site
- 578 and will notify both Members and the public. All comments received must be made available from the
- 579 JSR Page before the end of the Review so that they can be considered by the EC during the ballot

- (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.
- 582 EC members are strongly encouraged to have one or more technical members of their organizations
- 583 carry out a review of the draft early on in Public Review, in order to uncover possible negative changes
- 584 since Early Draft Review. 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
- 586 during the review period, like all Member comments. EC member feedback is important to the Expert-
- 587 Group, and EC members are puraged not to wait until ballot periods to voice concerns and issues.
- 588 that the new draft is available.

### 2.4 PUBLIC DRAFT SPECIFICATION APPROVAL BALLOT

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

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

## 601 3. FINAL RELEASE

### 602 **DEFINITIONS**

- Appeal Ballot: The EC ballot to override a first-level decision on a TCK test
- 604 **challenge.**
- Final Draft: The final draft of the Specification that will be put forward for EC approval.
- 606 Final Approval Ballot: The 14-day EC ballot to approve the Final Draft along with its
- 607 associated RI and TCK.
- Final Approval Reconsideration Ballot: The 14-day EC ballot to reconsider an initial
- 609 rejection of a Final Draft, RI, and TCK.
- 610 First-Level TCK Appeals Process : The process defined by the Spec Lead that allows
- 611 implementers of the Specification to appeal one or more tests defined by the
- 612 Specification's TCK.

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### 3.0 PROPOSED FINAL DRAFT

- 615 If the Public Draft Specification Approval Ballot (or Reconsideration Ballot) is successful, the Expert
- 616 Group will prepare the Proposed Final Draft of the Specification by completing any revisions it deems
- 617 necessary in response to comments received. The Spec Lead will then send the Proposed Final Draft

to the PMO, who will announce it to both Members and the public and post it on the JCP Web Site for public download within seven days of receipt.

### 3.0.1 COMPLETE THE RI AND TCK

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

### 631 3.0.2 ESTABLISH A FIRST-LEVEL TCK APPEALS PROCESS

- 632 3.0.3 The Spec Lead is also responsible for establishing a clearly defined First Level
- 633 TCK Appeals Process to address challenges to the tests contained in the TCK.
- This process must be described in the documentation included in the TCK (see
- 635 Section 4.3 for information on the full TCK Appeals Process). Examples of First
- 636 Level TCK Appeals Process applicable to situations ranging from simple API
- 637 Specifications all the way up to Platform Edition Specifications can be found in
- 638 the TCK section of the JCP Web Site.
- 639 The Spec Lead is also responsible for establishing a clearly defined First Level TCK Appeals Process
- 640 to address challenges to the tests contained in the TCK. This process must be described in the TCK
- 641 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
- the EC, alongtogether with any information received from the ML concerning the rationale for the first-
- level decision, and initiate a 7-day Appeal Ballot.
- 645 4.3.2 UPDATE THE RI TO MATCH THE TCK AND THE SPECIFICATION
- 646 If the Appeal Ballot is successful, the ML will, within one month of the close of Ballot, update the TCK
- and/or the Specification in accordance with the EC decision, update the RI if necessary, and record-
- 648 the changes in the RI and TCK Change Logs.

### 649 3.0.4 UPDATE THE DELIVERABLES IN RESPONSE TO THE APPEAL BALLOT

- 650 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 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
- 654 changed,) and URLs for the pdated RI and/or TCK must be delivered to the PMO, who will publish
- 655 them on the JCP website.

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### 3.1 FINAL APPROVAL BALLOT

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

663 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. This executive summary of the TCK document 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>
- If the Final Approval Ballot fails, the Spec Lead will have 30 days to revise the Specification, RI, and 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 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 existing Specification, the Spec Lead will resume the role of Maintenance Lead of the current Specification (see section 4).
- 687 If a response is received, the PMO will circulate it to all EC members for a Final Approval
- Reconsideration Ballot. At the close of balloting, all ballot comments submitted by EC members will be
- 689 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
- 691 Lead will resume the role of Maintenance Lead of the current Specification.

### 3.2 FINAL RELEASE

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- Within 14 days of a successful Final Approval Ballot (or a Reconsideration Ballot), the PMO will publish on the JCP website the Specification and links to information on how to obtain the RI and TCK
- 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 interested
- 697 party to obtain a copy of the TCK documentation at no charge. The public for any interested
- 698 will have completed its work and disbands. The Spec Lead will typically be the Maintenance Lead and
- 699 may call upon Expert Group members and others for aid in that role.
- 700 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
- 703 corrected within the 30 days, the Specification must reenter the Process at the Proportional Draft
- stage and complete the Final Approval or Maintenance Draft Approval process again.

### **COMPATIBILITY TESTING** 705 706 The Spec Lead is responsible for defining the process whereby the TCK is used to certify 707 implementations of the JSR as compatible. The Spec Lead must submit to the PMO at least quarterly, 708 and at every Maintenance Release, a list of all implementations that have been certified as compatible-709 and that have been released publicly or commercially. The PMO will publish this information on the 710 JCP website. If the Spec Lead submits the information in the form of a pointer to an already published 711 list the PMO may choose simply to reference that list rather than duplicate it. 712 JSR RENEWAL BALLOT definition - JSR Renewal Ballot: An EC ballot to confirm that a JSR should continue in its work. 713 714 If a JSR does not begin Early Draft Review within the first 12 months following the completion of its-715 initial JSR Approval Ballot (JSR Approval), or does not begin Public Review within 2 years of JSR 716 Approval or has not achieved Final Release within 3 years of JSR Approval, then a JSR Renewal Ballot may be initiated at the request of a majority of the EC. The PMO will inform the Spec Lead and 717 718 Expert Group of the decision of the EC to hold this ballot and request that the Spec Lead and Expert 719 Group prepare a public statement to the EC. The JSR Renewal Ballot will start 30 days following the 720 majority regent. The JSR Renewal Ballot is carried out for 7 days. If the JSR Renewal Ballot is 721 approved the EC, then another renewal ballot cannot be initiated for that JSR for an additional 722 vear. 723 definition - JSR Renewal Reconsideration Ballot: An EC ballot to determine if a revised JSR should 724 continue its work. 725 If the JSR Renewal Ballot fails, the Expert Group will have 30 days to update the JSR in response to 726 the concerns raised by the EC and submit a revised version to the PMO. If a revised JSR is not 727 received by the end of the 30 days, the original decision by the EC will stand and the JSR will be 728 closed revision is received, then the PMO will forward it to the EC and initiate a JSR Renewal-729 Reconsideration Ballot. At the close of balloting, all comments submitted by EC members with their ballots will be circulated to the Expert Group by the PMO. If this ballot fails, the JSR will be closed and 730 731 the Expert Group will disband. If the JSR was a revision to an existing Specification, the Spec Lead-732 will resume the role of Maintenance Lead of the current Specification (see section 5). 733 4. MAINTENANCE 4.0 MAINTENANCE LEAD RESPONSIBILITIES MAINTENANCE 735 736 DEFINITIONS 737 **Dormant Specification (Dormant):** A Specification that does not have an identified-738 Maintenance Lead. All Specifications become Dormant at the end of their life cycles. 739 Item Exception Ballot: The EC ballot to determine whether or not to include specific 740 change items in a Minor Revision.

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

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

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744 PROPOSED section of the Change Log. 745 Minor Revision: Minor changes made to a Specification by the ML. 746 Transfer Ballot: The EC ballot to approve transfer of ownership of a Specification, RI, and TCK from one Member to another Member. 4 747 748 749 The Maintenance Lead Member is expected to assume long term ownership of the Specification, RI, 750 and TCK while respecting the wishes of the Java Community Members with regard to evolution. A 751 Maintenance Lead will therefore automatically be the Spec Lead for all significant future revisions to 752 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 753 754 The PMO will provide a publicly archived Maintenance feedback alias through which the public may 755 submit requests for clarification, interpretation, and enhancements to the Specification. The 756 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 757 both Members and the public via an e-mail address listed in the Specification. 758 759 The ML will consider all requests and will decide how and if the Specification should be updated in 760 response. The ML will typically be the Spec Lead from the Expert Group that developed the 761 Specification. The ML is not required to do all these tasks alone. , but is free to consult with the former 762 members of the Expert Group, or any other sources, to assist with the Maintenance duties. The ML 763 may find it very helpful to recruit members of the Expert Group that helped to develop the Specification 764 to assist with the Maintenance duties. 765 THE MAINTENANCE LEAD MAKES A LONG TERM COMMITMENT 766 767 The Maintenance Lead (and his or her host company or organization) is expected to assume long-768 term ownership of the Specification, RI, and TCK with due respect of the will of the Java Community 769 Members with regard to evolution. This means that a Maintenance Lead will automatically be the Spec-770 Lead for all significant revisions to their Specification going forward but he or she will not have the 771 exclusive right to decide when a significant revision will take place (see section 1.1.1). All changes proposed by the ML will make their way into the Specification by either the Maintenance Release 772 773 process (described below) or through a new JSR. 774 RELINQUISHING OWNERSHIP 775 If the ML decides to discontinue his or her work for whatever reason (including discontinuing 776

maintenance activities or declining to take on the role of Spec Lead during a significant revision-777 initiated by a JSR) the ML should make a reasonable effort to locate another Member who is willing to-778 take on the task. If the ML fails to find a replacement, the PMO will declare the Specification to be-779 Dormant. No further maintenance will be carried out on it until a new ML is identified and ownership of 780 the Specification, RI, and TCK is transferred to the new ML's organization (subject to a successful-781 Transfer ballot by the EC). Changes appropriate for a Maintenance Release include bug-fixes, 782 clarifications of the Specification, changes to the implementation of existing APIs, and implementation-783 specific enhancements. Modifications to existing APIs or the addition of new APIs should be deferred to a new JSR. 784

<sup>4</sup> 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.

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### 4.1 THE MAINTENANCE CYCLE

788 The PMO will provide a publicly archived Maintenance feedback email address for requests for

789 Specification clarifications, corrections or changes from the public. The ML will review all comments,

790 identify common themes, and arrange with the PMO to make a list of frequently raised issues

791 available from the document's Spec PageJSR Page. The ML is free to consult with the former

792 members of the Expert Group, or any other sources, for advice on how to revise the Specification. All-

793 change items proposed by the ML will make their way into the Specification by either the Minor-

794 Revision process (described in section 54.2.1) or by a JSR. If the ML decides to discontinue his or her

795 work fat any time (including discontinuing maintenance activities or declining to take on the role of

796 Spec Lead during a significant revision initiated by a JSR) the ML should make a reasonable effort to

797 locate another Member who is willing to take on the task. If the ML fails to find a replacement, the

798 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

800 organization (subject to a successful Transfer ballot by the EC).

### 4.2 MINOR REVISIONAINTENANCE PROCESSREVIEW

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803 definition - Change Log: An area accessible from the Spec Page that lists all changes

804 made to the Specification after Final Release. There are three sections: PROPOSED 805

(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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The ML will arrange to he all change items placed intodocument all suggested proposed Specification changes in PROPOSED section of the Change Log and then send a request to the

810 PMO to initiate a Maintenance Review. Before the Maintenance Review begins, the ML must

811 summarize comments received atthrough the Maintenance feedback aliasemail address (similar

812 comments may be consolidated) and must indicate the disposition for each comment (e.g., deferred

813 with a brief explanation, rejected with a brief explanation, included in the Change Log proposal.). This

summary will be posted along with the Change Log on the Spec Page JSR Page. The PMO will then 814

815 make a public announcement and begin the review within 14 days of receipt of the request...

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

during the review. 817

818 At the close of the Maintenance Review the PMO will initiate a 7-day Maintenance Review Ballot.

819 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 820

proposed by the ML is inappropriate for a Maintenance Release and should be deferred to a follow-on 821

822 JSR. "No" votes must be accompanied by comments in which the offending items are identified and

the reasons for the objection are explained. 823

824 If there are any "no" votes the PMO will within two weeks initiate an Item Exception Ballot for each

825 change that EC members have objected to.

NOTE: there is no minimum number of "yes" votes required to move forward with the proposed 826

Maintenance Release, and "no" votes cannot prevent a release unless the ML is unwilling to defer 827

828 items subsequently disallowed in an Item Exception Ballot. 829 All comments will be available from the Spec PageJSR Page. At the end of Maintenance Review and 830 any subsequent Item Exception Ballots, the ML will update the Specification, moving all approved 831 revisions from the PROPOSED to the document all revisions in the ACCEPTED section of the Change 832 Log, and delete the corresponding entries in the PROPOSED section. Items voted down in an Item 833 Exception Ballot must be moved to the DEFERRED section of the log. AOther II-changes not incorporated into the Specification may be ay be either left in the PROPOSED section or moved to the 834 835 DEFERRED section-836 4.2.1 THE EC MAY DEFER MINOR REVISION ITEMS 837 838 During Maintenance Review an EC member may request that specific proposed change items be 839 deferred to the next JSR. Any such request must be made to the PMO no later than the close of 840 Maintenance Review. If requests are received, the PMO will circulate the requests to all EC members 841 and initiate a 7 day Item Exception Ballot within 2 weeks after the close of the Maintenance Review. At-842 the close of the Item Exception Ballot, the PMO will post the ballot results to the Change Log. The ML-843 will place all proposed changes that were disapproved into the DEFERRED section. The ML will need 844 to initiate a JSR to carry out any of those changes. The ML must post an updated version of the 845 Specification within one month of the completion of the Review and any Item Exception Ballot. at the 846 ML's discretion. 847 4.3 KEEPING THE RI AND TCK SYNCHRONIZED WITH THE **SPECIFICATION** MAINTENANCE RELEASE 848 849 At any time after a Maintenance Review Ballot and possible Item Exception Ballot the Spec Lead will 850 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 851 852 made, and publishes the Specification, the Change Log, and pointers to the RI and TCK on the JSR Web Page. 853 854 Whenever the Specification is updated, the ML is responsible for reviewing the current RI and TCK to 855 determine what revisions (if any) are needed to keep the RI and TCK synchronized with the Specification. The ML must keep a Change Log for the RI and one for the TCK\_\_\_\_\_pording all udpates-856 857 to each of themrecord all RI and TCK updates in the Change Log, respectively maintenance 858 changes will be considered final when the RI and TCK are synchronized with the Specification. 4.3 THE TCK APPEALS PROCESS 859 860 As noted in section 3.2.2, the TCK documentation must identify and specify a First-Level TCK Appeals 861 Process by which challenges to the TCK will be addressed. An implementer of a Specification can 862 challenge a TCK test using the First-Level TCK Appeals Process. Implementers who are not satisfied 863 with a first level decision can appeal it to the EC. 864 4.3.1 APPEALING A FIRST-LEVEL DECISION TO THE EC 865 definition - Appeal Ballot: The EC ballot to override a first-level decision on a TCK test 866 challenge. 867 Implementers appeal a first-level decision to the EC by filing a written request with the PMO using the 868 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

- 870 decision, and initiate a 7-day Appeal Ballot.
- 871 4.3.2 UPDATE THE RI TO MATCH THE TCK AND THE SPECIFICATION
- 872 If the Appeal Ballot is successful, the ML will, within one month of the close of Ballot, update the TCK
- 873 and/or the Specification in accordance with the 5 decision, update the RI if necessary, and record-
- 874 the changes in the RI and TCK Change Logs.
- 875 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. 876

### 5. EXECUTIVE COMMITTEE POLICIES AND PROCEDURES

#### 878 **5.0 DEFINITIONS**

- 879 definition - Ratified Seat : An EC seat filled by the ratification process described in section-
- 880 <del>65.4.2.</del>

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881 definition - Elected Seat : An EC seat filled by the election process described in section 65.4.3.

#### 5.1 SCOPE 882

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

#### 5.2 MEMBERSHIP 885

- 886 The Each of the two - Executive Committees is is currently composed of 16 Java Community Process
- 887 Members.<sup>5</sup> 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 plus a non-voting Chair. The Chair of the EC willist a member of the Processgram Management 888
- 889
- 890 Office. The 16 voting members will beare selected from Java Community Process Members. Oracle-
- 891 America, Inc. will havehas a permanent voting seat on the EC. That Oracle representative willis not be
- 892 a member of the PMO.
- 893 Should one Member on the EC acquire a majority ownership of another EC needs one of those
- 894 members must resign his or her seat by the effective date of the acquisition.
- 895 No Member may hold more than one voting seat on the EC at any given time. For example, if a
- 896 Member has majority-ownership of one or near other Members, then that group of Members can have
- 897 only one seat on the EC at any given time.

### 5.3 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.
- 903 5. Review-w proposed maintenance revisions and possibly require some to be carried out in a 904 new JSR.
  - 6. Approve the transfer of maintenance duties between Members.
- 906 7. Decide when JSRs that have not made sufficient progress through the Process should be

<sup>5</sup> The EC intends to merge the two ECs in the near future.

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.

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Members of the Executive Committees | I 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 discussion, division of markets or allocation of customers, among other subjects, should be avoided.

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### 5.4 EC SELECTION PROCESS AND LENGTH OF TERM

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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	Ratified Seats Replaced	Elected Seats Replaced
<del>Year 1</del>	3-	<del>2-</del>
<del>Year 2</del>	<del>3-</del>	<del>2-</del>
<del>Vear 3</del>	4-	<del>1</del>

926 The cycle repeats every 3 years. Ratified or Elected Seats that are vacated prior to completion of the 927

term will be filled as described sections in 5.4.2 and 5.4.3.

928 Voting Members on the EC serve three-year terms. There are 2 Ratified Seats for every Elected Seat,

929 (currently 10 Ratified Seats and 5 Elected Seats on each EC) plus one permanent seat held by Oracle

930 America, Inc. The terms are staggered so that a third of the Voting-seats are normally up for election

each year. Ratified or Elected Seats transpare vacated prior to completion of the term will be filled as 931

described in sections 6.4.2 and 6.4.3. 932

### **5.4.1 RESIGNATION OF EC SEATS**

- 934 EC Members on the EC may resign their seats at any time during their term.
- 935 Should one Member on the EC acquire a majority ownership of another EC needs those
- 936 members must resign his or her seat by the effective date of the acquisition.
- 937 EC members who fail to remain Java Community Members forfeit their EC seat.
- 938 Vacated seats will be filled for the remainder of their term by a special election ballot that will be held
- 939 no later than two months after the resignation (unless the resignation is less than six months before
- the next scheduled annual election ballot). 940

<sup>6</sup> There was more text here, it has been moved to Standing Rules

#### **5.4.2 ELECTION PROCESSES** 941

- 942 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 943
- 944 that group of Members will collectively have 1 very which will be cast by the person they designate to
- 945 be their representative for the ballot in question
- 946 ual elections for Ratified and Elected Seats will be held simultaneously. Voting in these elections
- 947 will start in the third week of October.

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

#### 953 5.4.3 SSEELECTION PROCESS FOR RATIFIED SEATS

- 954 Members are selected for the 10-Ratified Seats using a ratification ballot, which is carried out as
- follows: The table given at the end of section 5.4 determines the number of Ratified Seats up for ratification each year of the 3-year cycle. 955
- 956
- 957 A Ratified Seat that was vacated by resignation will be filled for the remainder of its term by a
- 958 ratification ballot that will be held no later than two months after the resignation (unless the resignation-
- 959 is less than six months before the next scheduled ratification ballot).
- 960 All JCP Members are eligible to vote in a ratification ballot subject to the provision that if a Member-
- 961 has majority ownership of, or is the employer of, one or more other Members, then that group of
- 962 Members will collectively have 1 vote, which will be their by the person they designate to be their
- representative for the ratification ballot in question. 963
- 964 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 970 971 Members as needed and hold additional ratification ballots until the vacant seats are filled.

#### 972 5.4.4 SSELECTION PROCESS FOR ELECTED SEATS

- 973 Members are selected for the 5-Elected Seats using an open election process that is carried out as
- 974 follows:- The table given at the end of section 5.4 determines the number of Elected Seats up for
- 975 election each year of the 3-year cycle.
- 976 An Elected Seat that was vacated by resignation will be filled for the remainder of its term by an
- 977 election ballot that will be held no later than two months after the resignation (unless the resignation is
- 978 less than six months before the next yearly election).
- 979 All JCP Members are eligible to vote in an election ballot subject to the provision that if a Member has
- 980 majority-ownership of, or is the employer of, one or more other Members, then that group of Members-
- will collectively have 1 vote, which person they designate to be their representative 981
- 982 for the ratification ballot in question.
- 983 The election ballot is carried out as follows:
- 984 • 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.
  - However, employees of members cannot run for election as individuals and the PMO shall reject such nominations.
  - Voting begins starting in the third fourth week of October each year.
  - 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 <a href="http://www.ietf.org/rfc/rfc2777.txt">http://www.ietf.org/rfc/rfc2777.txt</a> and using the calculator provided by W3C in <a href="http://www.w3.org/2001/05/rfc2777">http://www.w3.org/2001/05/rfc2777</a>.

### 6. EXECUTIVE COMMITTEE JSR VOTING RULES

- 1. All EC JJSR ballotsvotes 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.
- 4. 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. "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".
- 9. It is highly recommended that abstentions be accompanied by comments.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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

- 1032 Agreement will be carried out using the Java Community Process with the following changes: 1033
  - 1. Only EC members can initiate a JSR to revise one of these documents.
- 1034 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 no 1035
- 1036 1037 TCK appeals process to be defined.
- 1038 5.