

Annex 1: Policy on Intellectual Property Rights

1. INTRODUCTION

The TM Forum Intellectual Property Rights (IPR) Policy governs the treatment of intellectual property in the production of deliverables by the TM Forum.

This Policy applies to all Members of the TM Forum and their Affiliates (defined below). The TM Forum Board of Directors may amend this Policy at any time in its sole discretion. In the event of such change to this Policy, the Board will provide instructions for transition of membership and Collaboration Project Teams to the new Policy; however, no amendment to this Policy will be effective in less than 60 calendar days from the date that written notice of such amendment is given to the Member at its address of record with the TM Forum.

2. DEFINITIONS

Each capitalized term within this document shall have the meaning provided below:

- 2.1 Affiliate - any entity that directly or indirectly controls, is controlled by, or is under common control with, another entity, so long as such control exists. In the event that such control ceases to exist, such Affiliate will be deemed to have withdrawn from TM Forum pursuant to the terms set forth in the withdrawal provisions in Section 11. For purposes of this definition, with respect to a business entity, control means direct or indirect beneficial ownership of or the right to exercise (i) greater than fifty percent (50%) of the voting stock or equity in an entity; or (ii) greater than fifty percent (50%) of the ownership interest representing the right to make the decisions for the subject entity in the event that there is no voting stock or equity.
- 2.2 Apache 2.0 License Mode Team - a TM Forum Team that is chartered under the Apache 2.0 License Mode described in Section 4.4 and Section 10.4 to develop a TM Forum API Deliverable.
- 2.3 Apache 2.0 Contribution – a TM Forum API Deliverable submitted by a Member of an Apache 2.0 License Mode Team. The provisions applicable to a “Contribution” as defined in the Apache 2.0 License apply, but the provisions applicable to a “Contribution” as defined herein do not apply to an Apache 2.0 Contribution.
- 2.4 Apache 2.0 Contributor - a Member on whose behalf an Apache 2.0 Contribution is made by the Member’s Team Participant. The provisions applicable to a “Contributor” as defined in the Apache 2.0 License apply, but the provisions applicable to a “Contributor” as defined herein do not apply to a Member in their role as an “Apache 2.0 Contributor”.
- 2.5 Collaboration Project Team (Team) - has the meaning set forth in Part A, Article 1.1 of the TM Forum By-laws.
- 2.6 Collaboration Project Team Process - has the meaning set forth in Part A, Article 1.1 of the TM Forum By-laws.
- 2.7 Continuing Licensing Obligation - a licensing obligation, of the types defined by Section 9 of this Policy, which survives a Member’s withdrawal from a TM Forum Collaboration Project Team.
- 2.8 Contribution - any material submitted to a TM Forum Collaboration Project Team by a Team Participant in writing or electronically, whether in an in-person meeting or in any electronic conference or mailing list maintained by the TM Forum for the TM Forum Collaboration Project Team and which is or was proposed for inclusion in a TM Forum Deliverable. The provisions applicable to an “Apache 2.0 Contribution” as defined herein do not apply to a Contribution.
- 2.9 Contribution Obligation - a licensing requirement, as described in Section 10.1, 10.2 or 10.3 that results from making a Contribution as described in Section 9.1.

- 2.10 Contributor - a Member on whose behalf a Contribution is made by the Member's Team Participant. The provisions applicable to an "Apache 2.0 Contributor" as defined herein do not apply to a Member in their role as a "Contributor".
- 2.11 Deliverable - works of authorship regardless of the nature of the material objects in which such works are embodied and includes, but is not limited to, computer programs, whether in source or object code, documentation, models, diagrams and designs, pictures, tapes, discs, audio-visual works, motion pictures, paper, phone records or works of authorship embodied in any other medium now known or later developed. There are three types of Deliverables defined in this Policy.
- 2.11.1 TM Forum Deliverable - a Deliverable developed by a Collaboration Project Team within the scope of its charter which is enumerated in and developed in accordance with the TM Forum Collaboration Project Team Process.
- 2.11.2 TM Forum Standards Draft Deliverable - a TM Forum Deliverable that has been designated and approved by a Collaboration Project Team as a TM Forum Standards Draft Deliverable and which is enumerated in and developed in accordance with the TM Forum Collaboration Project Process.
- 2.11.3 TM Forum Standards Final Deliverable - a TM Forum Deliverable that has been designated and approved by a Collaboration Project Team as a TM Forum Standards Final Deliverable and which has been approved as a TM Forum Approved Deliverable by the corporate Members of TM Forum as provided in the By-laws of TM Forum.
- 2.11.4 TM Forum API Deliverable – source, object or any machine-executable code, developed by an Apache 2.0 License Mode Team, which implements an Application Programming Interface ("API"), such interface being defined in and compliant with either a TM Forum Standards Draft Deliverable or a TM Forum Standards Final Deliverable (the code in an API implementation of a TM Forum Standards Final Deliverable only to be made available in a public repository owned, hosted or sponsored by the TM Forum). The term "TM Forum API Deliverable" only applies to the application programming interface itself as embodied in such source, object or machine-executable code and any code generated by a documentation generation tool to display the interface, such as OpenAPI code, and does not include any Deliverable or related functionality upstream or downstream of such interface.
- 2.12 Designated Representative - has the meaning set forth in Part B, Article 4.6.4(d) of the TM Forum By-laws.
- 2.13 Eligible Person - employees or Designees of Members of the TM Forum, and such other persons as may be designated by the TM Forum Board of Directors.
- 2.14 Essential Claims - those claims in any patent or patent application that now, or at any time in the future, are owned or controlled by an Obligated Party and granted in any jurisdiction in the world that would necessarily be infringed by an implementation of those portions of a particular TM Forum Standards Final Deliverable created within the scope of the Team charter in effect at the time such deliverable was developed. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no non-infringing alternative for implementing a TM Forum Standards Final Deliverable. Existence of a non-infringing alternative shall be judged based on the state of the art at the time the TM Forum Standards Final Deliverable is approved.

The following are expressly excluded from and shall not be deemed to constitute Essential Claims:

- 2.14.1 any claims other than as set forth above even if contained in the same patent as Essential Claims; and
- 2.14.2 claims which would be infringed only by: enabling technologies that may be necessary to make or use any product or portion thereof that complies with a Deliverable and are not themselves expressly set forth in the Deliverable (e.g., semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, and the like); or

the implementation of standards or specifications developed elsewhere and merely incorporated by reference in the body of the Deliverable.

2.14.3 design patents and design registrations.

- 2.15 Feedback - any written or electronic input provided to a TM Forum Collaboration Project Team by individuals who are not Team Participants, and which is proposed for inclusion in a TM Forum Deliverable. All such Feedback must be made under the terms of the Feedback License (Appendix A).
- 2.16 Final Maintenance Deliverable - Any TM Forum Standards Final Deliverable that results entirely from Maintenance Activity.
- 2.17 FORUM Click-Through Licenses (FCTL) – the licenses set forth in Appendix C and Appendix D.
- 2.18 FORUM Click-Through License (FCTL) Mode Team – a TM Forum Team that is chartered under the FORUM Click-Through License IPR Mode described in Section 4.3 and Section 10.3.
- 2.19 IPR Mode - an element of a TM Forum Project Charter, which specifies the type of licenses associated with the output produced by a given TM Forum Collaboration Project Team. This is further described in Section 4 and Section 10.
- 2.20 Licensed Products - means only those specific portions of Licensee's (including Affiliates') products (hardware, software or combinations thereof) that (a) implement and comply with all required portions of or inclusion in an implementation of the Standards Final Deliverable created within the scope of the Team Charter, and (b) to the extent that Licensee's products implement one or more optional portions of such Standards Final Deliverable, those portions of Licensee's (including Affiliates') products that implement and comply with all required portions that must be implemented to comply with such optional portions of the Standards Final Deliverable.
- 2.21 Licensee - any organization, including its Affiliates as defined in this Policy that receives a license to Essential Claims from Obligated Parties for a particular TM Forum Standards Final Deliverable. Licensees need not be TM Forum Members.
- 2.22 Maintenance Activity - Any drafting or development work to modify a TM Forum Standards Final Deliverable that (a) constitutes only error corrections, bug fixes or editorial formatting changes to a TM FORUM Standards Final Deliverable; and (b) does not add any feature; and (c) is within the scope of the Team that approved the TM Forum Standards Final Deliverable (whether or not the work is conducted by the same Team).
- 2.23 Obligated Party - a TM Forum Member, and its Affiliates that incurs a licensing obligation for its Essential Claims by either a Contribution Obligation or a Participation Obligation.
- 2.24 Participation Obligation - a licensing requirement, as described in Section 10, that arises from membership in a TM Forum Collaboration Project Team, as described in Section 9.2.
- 2.25 Project Charter – A formal description of a Collaboration Project Team's objectives and other relevant criteria including the names of Team Participants and the applicable IPR mode.
- 2.26 RAND Mode Team - a TM Forum Team that is chartered under the RAND IPR Mode described in Section 4 and Section 10. (RAND shall mean on fair, reasonable, and non-discriminatory terms which may include a reasonable royalty).
- 2.27 RF RAND Mode Team – a TM Forum Team that is chartered under the RF RAND Mode described in Section 4 and Section 10. (RF RAND shall mean without payment of royalties or fees, but may include other reasonable, and non-discriminatory license terms).
- 2.28 Team Participant - an Eligible Person who has completed the requirements as set forth herein and in accordance with the TM Forum By-laws to join a Collaboration Project Team during the period in which s/he maintains his or her membership as described by the TM Forum Collaboration Project Team Process and named in the Project Charter.

2.29 Team Administrator - the person(s) appointed to represent the TM Forum in administrative matters relating to Collaboration Project Teams as provided by the TM Forum Collaboration Project Team Process.

3. CONFIDENTIALITY

Contributions or Feedback that are subject to any requirement of confidentiality should not be submitted to the TM Forum Collaboration Project Team Process. All Contributions and Feedback will therefore be deemed to have been submitted on a non-confidential basis, notwithstanding any markings or representations to the contrary, and the TM Forum shall have no obligation to treat any such material as confidential.

4. TEAM OPERATION

Prior to the time a Team is chartered, the proposal to form the Team must specify in its Project Charter the IPR Mode under which the Collaboration Project Team will operate. The following IPR Modes shall be available:

- 4.1 RAND - requires all Obligated Parties to license their Essential Claims using the RAND licensing elements described in Section 10.1. The RAND IPR Mode shall be the default IPR Mode for the TM Forum.
- 4.2 RF on RAND Terms - requires all Obligated Parties to license their Essential Claims on a RF on RAND Terms basis using the RF licensing elements described in Section 10.2.
- 4.3 Forum Click-Through License ("FCTL") - requires all Obligated Parties to execute the FCTL and to license their Essential Claims pursuant to the terms therein as further described in Section 10.3.
- 4.4 Apache 2.0 License – requires an Apache 2.0 Contributor to license their Apache 2.0 Contribution of source code, object code or machine-executable code in a TM Forum API Deliverable under the Apache 2.0 license as further described in Section 10.4. This IPR Mode shall only be used for TM Forum API Deliverables.

A Team may not change its IPR Mode without closing and submitting a new Project Charter.

An Eligible Person may become a Team Participant only upon the approval of a Designated Representative of the TM Forum Member for which said Eligible Person is employed.

5. CONTRIBUTIONS

5.1 General

At the time of submission of a Contribution for consideration by a TM Forum Collaboration Project Team, each named co-Contributor (and its respective Affiliates) is deemed to agree to the following terms and conditions and to make the following representations (based on the actual knowledge of the Team Participant(s) making the Contribution, with respect to items 3 - 5 below, inclusive):

- 5.1.1 The TM Forum has no duty to publish or otherwise use or disseminate any Contribution.
- 5.1.2 The TM Forum may reference the name(s) of the Contributor(s) for the purpose of acknowledging and publishing the Contribution.
- 5.1.3 The Contribution properly identifies any holders of copyright interests in the Contribution.
- 5.1.4 No information in the Contribution is confidential, and the TM Forum may freely disclose any information in the Contribution.
- 5.1.5 There are no limits to the Contributor's ability to make the grants, acknowledgments, and agreements required by this Policy with respect to such Contribution.

5.2 Limited Copyright Licenses

- 5.2.1 To the extent that a Contributor (and its respective Affiliates) holds a copyright interest in its Contribution, such Contributor grants to the TM Forum a perpetual, irrevocable, non-exclusive,

royalty-free, worldwide copyright license, with the right to directly and indirectly license, to copy, publish, and distribute the Contribution in any way, and to prepare derivative works that are based on or incorporate all or part of the Contribution solely for the purpose of developing and promoting the TM Forum Deliverable and enabling (subject to the rights of the owners of any Essential Claims) the implementation of the same by Licensees.

The TM Forum hereby grants a limited license to all Apache 2.0 Contributors and users of a TM Forum API Deliverable a perpetual, irrevocable, non-exclusive, royalty-free, worldwide copyright license, with the right to directly and indirectly license, to copy, publish, and distribute the Contribution to a TM Forum Final Standards Deliverable in any way, and to prepare derivative works that are based on or incorporate all or part of the Contribution solely for the purpose of developing and using a TM Forum API Deliverable. TM Forum provides such license on an "AS IS" BASIS, WITHOUT REPRESENTATIONS, WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT (INCLUDING OF ANY PATENTS, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHTS), MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. All Apache 2.0 Contributors and users of a TM Forum API Deliverable relying on this license acknowledge and agree that use of the TM Forum API Deliverable may infringe a TM Forum Member's or third party's patent rights, copyright or other intellectual property rights, unless licensed by the Apache 2.0 license under which the TM Forum API Deliverable is made available to them.

No representation or warranty, express or implied, is made by the TM Forum or its Members concerning the completeness, accuracy, or applicability of any information contained in the Contribution and no liability of any kind shall be assumed by the TM Forum as a result of reliance upon such information.

- 5.2.2 To the extent that a Contribution is subject to copyright by parties that are not Contributors, the submitter(s) must provide the TM Forum with a signed "Copyright License Grant" (Appendix B) from each such copyright owner whose permission would be required to permit the TM Forum to exercise the rights described in Appendix B.

5.3 Trademarks

- 5.3.1 Trademarks or service marks that are not owned by the TM Forum shall not be used by the TM Forum, except as approved by the TM Forum Board of Directors, to refer to work conducted at the TM Forum, including the use in the name of a TM Forum Team, a TM Forum Deliverable, or incorporated into such work.
- 5.3.2 No TM Forum Member may use a TM Forum trademark or service mark in connection with a TM Forum Deliverable or otherwise, except in compliance with such license and usage guidelines as the TM Forum may from time to time require.
- 5.3.3 For avoidance of doubt, TM Forum shall not use any trademarks or service marks of an TM Forum Member in connection with a TM Forum Deliverable or otherwise without express written permission of that Member.

6. LIMITED PATENT COVENANT FOR DELIVERABLE DEVELOPMENT

In order to accelerate availability of implementations by TM Forum Members of TM Forum Standards Draft Deliverables being developed by a Team, each TM Forum Member on joining a Team, grants to TM Forum Members automatically and without further action on its part, and on an ongoing basis, a limited covenant, on a reciprocal basis, not to assert any Essential Claims against other TM Forum Members implementing such TM Forum Standards Draft Deliverable for the purpose of making, using, testing, field trialing such an implementation during a period of 12 months until either the 12 month trial period elapses; the TM Forum Standards Draft Deliverable is approved as a TM Forum Standards Final Deliverable, or the Collaboration Project Team is closed, whichever occurs first. Upon approval of the TM Forum President, the 12month trial period may be extended for an additional 6 months. In addition, nothing herein shall prevent a TM Forum Member from waiving its rights in its Contribution to permit TM Forum Members to use such contributions at any stage in the evolution of a TM Forum Deliverable.

For the avoidance of doubt for RAND Mode Teams, Members would be permitted to collect reasonable royalties for commercial application of draft implementations.

7. FEEDBACK

- 7.1 The TM Forum encourages Feedback to the TM Forum Deliverables from both the TM Forum Members who do not have representatives that are participating on that Collaboration Project Team and, where appropriate, non-TM Forum Members. Feedback will be accepted only under the "Feedback License" (Appendix A).
- 7.2 The TM Forum will require that submitters of Feedback agree to the terms of the Feedback License in writing before transmitting submitted Feedback to the Collaboration Project Team.
- 7.3 Feedback from Eligible Persons will be accepted only upon the approval of a Designated Representative of the TM Forum Member for which said Eligible Person is employed.

8. DISCLOSURE

- 8.1 Disclosure Obligations - Each Member of a Collaboration Project Team through its Team Participant shall disclose to the TM Forum in writing the existence of all patents and/or published patent applications owned or claimed by such Member that are actually known to the Member's Team Participant directly participating in the Collaboration Project Team, and which such Team Participant believes may contain any Essential Claims or claims that might become Essential Claims upon approval of a TM Forum Standards Final Deliverable as such deliverable then exists (collectively, "Disclosed Claims").
- 8.2 Disclosure of Third Party Patent Claims - Each Member whose Team Participants become aware of patents or patent applications owned or claimed by a third party that contain claims that might become Essential Claims upon approval of a TM Forum Standards Final Deliverable should disclose them, provided that such disclosure is not prohibited by any confidentiality obligation binding upon them. It is understood that any Member that discloses third party patent claims to the TM Forum does not take a position on the essentiality or relevance of the third party claims to the TM Forum Standards Final Deliverable in its then-current form.

In both cases (Sections 8.1 and 8.2), it is understood and agreed that such Team Participant(s) do not represent that they know of all potentially pertinent claims of patents and patent applications owned or claimed by a Member or any third parties. For the avoidance of doubt, while the disclosure obligation under Sections 8.1 and 8.2 applies directly to all Members with Team Participants in the Collaboration Project Team, this obligation is triggered based on the actual knowledge of the Team Participants regarding the Team Participants patents or patent applications that may contain Essential Claims.

- 8.3 Disclosure Requests - Disclosure requests will be included as described in Section 12 with all public review copies of the TM Forum Standards Final Deliverables. All the TM Forum Team Participants are encouraged to review such TM Forum Standards Final Deliverables and make appropriate disclosures.
- 8.4 Limitations - A disclosure request and the obligation to disclose set forth above do not imply any obligations on the recipients of disclosure requests (collectively or individually) or on any Member to perform or conduct patent searches. Nothing in this Policy nor the act of receiving a disclosure request for a TM Forum Standards Final Deliverable, regardless of whether it is responded to, shall be construed or otherwise interpreted as any kind of express or implied representation with respect to the existence or non-existence of patents or patent applications which contain Essential Claims, other than that such Member has acted in good faith with respect to its disclosure obligations.
- 8.5 Information - Any disclosure of Disclosed Claims shall include (a) in the case of issued patents and published patent applications, the patent or patent application publication number, the associated country and, as reasonably practicable, the relevant portions of the applicable TM Forum Standards Final Deliverable; and (b) in the case of unpublished patent applications, the existence of the unpublished application and, as reasonably practicable, the relevant portions of the applicable TM Forum Standards Final Deliverable.

9. TYPES OF OBLIGATIONS

9.1 Contribution Obligations

A Member with Team Participant(s) in a Collaboration Project Team has a Contribution Obligation, which arises at the time its Contribution is submitted to the Team, to license pursuant to the applicable IPR mode any claims under its patents or published patent applications that become Essential Claims when such Contribution is incorporated (either in whole or in part) into (a) the TM Forum Standards Final Deliverable produced by the Team that received the Contribution, or (b) any Final Maintenance Deliverable with respect to that TM Forum Standards Final Deliverable. Notwithstanding the foregoing, an Apache 2.0 Contributor shall make such Apache 2.0 Contribution available solely pursuant to the terms of the Apache 2.0 license. To the extent any provision of the Bylaws or this Policy is inconsistent or incompatible with the Apache 2.0 license as applied to a TM Forum API Deliverable, the terms of the Apache 2.0 license shall apply.

9.2 Participation Obligation

A Member with Team Participant(s) in a Collaboration Project Team has a Participation Obligation to license pursuant to the applicable IPR Mode as described in Sections 10.1, 10.2 or 10.3, any claims under its patents or patent applications that would be Essential Claims in the then current TM Forum Standards Draft Deliverable, if that draft subsequently becomes a TM Forum Standards Final Deliverable, even if the Team Participant is not a Contributor, when all of the following conditions are met:

A TM Forum Standards Final Deliverable is finally approved that incorporates such TM Forum Standards Draft Deliverable, either in whole or in part;

The Member has been on, or has been represented by Team Participant(s) on such Team for a total of sixty (60) calendar days, which need not be continuous;

The Member is on, or is represented by Team Participant (s) on such Team after a period of seven (7) calendar days after the ballot to approve such TM Forum Standards Draft Deliverable has elapsed.

Once the foregoing conditions are met, that Member's Participation Obligation to license continues with respect to that TM Forum Standards Final Deliverable, and any Final Maintenance Deliverable subsequently approved with respect to that TM Forum Standards Final Deliverable.

For Members, the membership threshold is met by one or more employees or organizational designees of such Parties having been a Team Participant on any 60 calendar days, although any given calendar day is only one day of membership, regardless of the number of Team Participants on that day.

Each time a new TM Forum Standards Draft Deliverable is approved by the Collaboration Project Team, the Participation Obligation adjusts to encompass the material in the latest TM Forum Standards Draft Deliverable seven days after such draft has been approved for publication.

9.3 TM Forum Member Obligation

Each TM Forum Member (including its Affiliates), who does not otherwise have a licensing obligation arising from Section 10, agrees to make available to anyone who receives a TM Forum Standard Final Deliverable(s) for implementation, a license of its Essential Claims in the TM Forum Standards Deliverable(s) on reasonable terms and conditions defined in Section 10.1 as if the Member were an Obligated Party provided, however, that such Member shall not seek any payment for the use or practice of a TM Forum Standard Final Deliverable by anyone prior to notification to TM Forum by that Member of such Essential Claims as set forth above.

10. LICENSING REQUIREMENTS

10.1 RAND Mode Team Requirements

For a TM Forum Standards Final Deliverable developed by a RAND IPR Mode Team, except where a Licensee has a separate, signed agreement under which the Essential Claims are licensed to such

Licensee on more favorable terms and conditions than set forth in this section (in which case such separate signed agreement shall supersede this Limited Patent License), each Obligated Party in such Team hereby covenants that, upon request and subject to Section 11, it will grant to any TM Forum Member or third party: a nonexclusive, worldwide, non-sub licensable, perpetual patent license (or an equivalent non-assertion covenant) under its Essential Claims covered by its Contribution Obligations or Participation Obligations on fair, reasonable, and non-discriminatory terms to make, have made, use, market, import, offer to sell, and sell, and to otherwise directly or indirectly distribute (a) Licensed Products that implement such TM Forum Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to that TM Forum Standards Final Deliverable. For the sake of clarity, the rights set forth above include the right to directly or indirectly authorize a third party to make unmodified copies of the Licensee's Licensed Products and to license (optionally under the third party's license) the Licensee's Licensed Products within the scope of, and subject to the terms of, the Obligated Party's license.

At the election of the Obligated Party, such license may include a term requiring the Licensee to grant a reciprocal license to its Essential Claims (if any) covering the same TM Forum Standards Final Deliverable and any such Final Maintenance Deliverable. Such term may require the Licensee to grant licenses to all implementers of such deliverable. The Obligated Party may also include a term providing that such license may be suspended with respect to the Licensee if that Licensee first sues the Obligated Party for infringement by the Obligated Party of any of the Licensee's Essential Claims covering the same TM Forum Standards Final Deliverable or any such Final Maintenance Deliverable.

License terms that are fair, reasonable, and non-discriminatory beyond those specifically mentioned above are left to the Licensees and Obligated Parties involved.

Current and former TM Forum Members and Feedback providers shall not seek a patent royalty payment or infringement damages for any entity's acts of alleged infringement of their Essential Claims used in implementing a TM Forum Standards Final Deliverable, where such acts occur prior to notification to the entity or the TM Forum by that TM Forum Member or Feedback provider of such Essential Claims. Also, a Member or Feedback provider cannot seek payments when asserting an Essential Claim against a TM Forum Standards Final Deliverable itself until it discloses such Essential Claim to TM Forum.

The foregoing provision applies only where the TM Forum Member has incurred or incurs a Contribution or Participation or Feedback Obligation (including continuing obligations) with respect to such Essential Claims.

10.2 RF Mode Team Requirements

For a TM Forum Standards Final Deliverable developed by an RF Mode Team, except where a Licensee has a separate, signed agreement under which the Essential Claims are licensed to such Licensee on more favorable terms and conditions than set forth in this section (in which case such separate signed agreement shall supersede this Limited Patent License), each Obligated Party in such Team hereby covenants that, upon request and subject to Section 11, it will grant to any TM Forum Member or third party: a nonexclusive, worldwide, non-sub licensable, perpetual patent license (or an equivalent non-assertion covenant) under its Essential Claims covered by its Contribution Obligations or Participation Obligations without payment of royalties or fees, to make, have made, use, market, import, offer to sell, and sell, and to otherwise directly or indirectly distribute (a) Licensed Products that implement such TM Forum Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to that TM Forum Standards Final Deliverable. For the sake of clarity, the rights set forth above include the right to directly or indirectly authorize a third party to make unmodified copies of the Licensee's Licensed Products and to license (optionally under the third party's license) the Licensee's Licensed Products, within the scope of, and subject to the terms of, the Obligated Party's license.

At the election of the Obligated Party, such license may include a term requiring the Licensee to grant a reciprocal license to its Essential Claims (if any) covering the same TM Forum Standards Final

Deliverable. Such term may require the Licensee to grant licenses to all implementers of such deliverable. The Obligated Party may also include a term providing that such license may be suspended with respect to the Licensee if that Licensee first sues the Obligated Party for infringement by the Obligated Party of any of the Licensee's Essential Claims covering the same TM Forum Standards Final Deliverable.

The licensing obligations under the RF on RAND Terms IPR Mode may be fulfilled by agreeing to offer the FCTL in lieu of the licensing obligations under the RF on RAND Terms IPR Mode.

10.3. FORUM Click-Through License (FCTL) Mode Team Requirements

10.3.1 For a TM Forum Standards Final Deliverable developed by an FCTL Mode Team that is chartered pursuant to Section 4.3 hereof, each Obligated Party hereby covenants that, subject to Sections 11 and Section 4 as a condition of participating in such FCTL Mode Team shall execute the FCTL in effect at the time the FCTL Mode Team is chartered and subject to section 10.3.2 below.

10.3.2 Opt-Out Solely for Forum Click-Through License (FCTL) Mode

At any time up to the end of a sixty (60) day period following the date of publication by the TM Forum of a proposed TM Forum Standards Final Deliverable under this Section 10.3 of the Policy, all TM Forum Members other than the Team Participants in that TM Forum Click-Through License (FCTL) Mode Team, but including any such Team Participant who withdrew according to the provisions of Section 11.1.1, shall have the right to review the document and exclude any of its Essential Claims relating to that Deliverable from the terms of the Forum Click-Through License for Implementation. This will allow the Member to execute the Forum Click-Through License for Implementation as defined in Appendix D of the Policy while negotiating another license under RAND terms and conditions for its excluded Essential Claims.

In order to achieve this, the Member shall identify itself and the subject matter of such Claim or Claims it reasonably believes at the time may have Essential Claim(s). The Member statement shall specifically state that the Essential Claim or Claims will be licensed under either RF RAND or RAND terms. If a Member states it will not license under RF RAND terms, then such Member shall specifically identify the patents (by patent number) or patent applications (by application number) to TM Forum. It shall not seek any payment for the use or practice of a TM Forum Standards Final Deliverable by anyone prior to notification to TM FORUM by that Member of such Essential Claims as set forth above.

The election of a Member to furnish the statement provided herein, or not to furnish such statement as well as the licensing option incorporated in the statement, shall be irrevocable and not subject to revision or change, after the expiration of the sixty (60) day period.

If a TM Forum Member that did not participate in that TM Forum Click-Through License (FCTL) Mode Team, or which had timely withdrawn from such Team pursuant to Section 11.1.1 as provided above, did not provide an exclusion notice within such sixty (60) day period, and does not execute the FCTL License for Implementation as defined in Appendix D of the Policy, such Member's patents and/or patent applications shall remain subject to the RAND commitment under Section 9.3.1 with respect to said Deliverable.

10.4 Apache 2.0 License Mode Team Requirements.

TM Forum API Deliverables shall be developed exclusively by an Apache 2.0 License Mode Team. Each Apache 2.0 Contributor agrees that their Apache 2.0 Contribution shall be subject to the terms and conditions of the Apache 2.0 license found at <https://www.apache.org/licenses/LICENSE-2.0>.

11. WITHDRAWAL AND TERMINATION

A Member may withdraw from a TM Forum Collaboration Project Team at any time by notifying the TM FORUM Team Administrator in writing. Withdrawal is effective when such written notice is sent.

11.1 Withdrawal from a Collaboration Project Team

A Member that withdraws from a TM Forum Collaboration Project Team shall have Continuing Licensing Obligations based on its Contribution Obligations and Participation Obligations as follows:

11.1.1 A Member that has incurred neither a Contribution Obligation nor a Participation Obligation prior to withdrawal has no licensing obligations for the TM Forum Standards Final Deliverable(s) originating from that TM Forum Team.

11.1.2 A Member that has incurred a Contribution Obligation prior to withdrawal continues to be subject to its Contribution Obligation.

11.1.3 A Member that has incurred a Participation Obligation prior to withdrawal continues to be subject to its Participation Obligation but only with respect to the TM Forum Standards Draft Deliverable(s) approved more than seven (7) calendar days prior to its withdrawal.

11.2 Termination of TM Forum Membership

A TM Forum Member that terminates its TM Forum membership (voluntarily or involuntarily) is deemed to withdraw from all TM Forum Collaboration Project Teams in which that Member has a Team Participant (s) representing it, and such Member remains subject to Continuing Licensing Obligations for each such Team based on its Obligated Party status in that Team on the date that its membership termination becomes effective.

12. LIMITATIONS OF LIABILITY

All the TM Forum Deliverables and TM Forum API Deliverables are provided "as is", without warranty of any kind, express or implied, and the TM Forum, as well as all the TM Forum Members and Team Participants, expressly disclaim any warranty of merchantability, fitness for a particular or intended purpose, accuracy, completeness, non-infringement of third party rights, or any other warranty.

In no event shall the TM Forum or any of its constituent parts (including, but not limited to, the TM Forum Board of Directors, Officers and Employees), be liable to any other person or entity for any loss of profits, loss of use, direct, indirect, incidental, consequential, punitive, or special damages, whether under contract, tort, warranty, or otherwise, arising in any way out of this Policy, whether or not such party had advance notice of the possibility of such damages.

In addition, except for grossly negligent or intentionally fraudulent acts, the TM Forum Members and Team Participants (or their representatives), shall not be liable to any other person or entity for any loss of profits, loss of use, direct, indirect, incidental, consequential, punitive, or special damages, whether under contract, tort, warranty, or otherwise, arising in any way out of this Policy, whether or not such party had advance notice of the possibility of such damages.

The TM Forum assumes no responsibility to compile, confirm, update or make public any assertions of Essential Claims or other intellectual property rights that might be infringed by an implementation of a TM Forum Deliverable or TM Forum API Deliverable.

If the TM Forum at any time refers to any such assertions by any owner of such claims, the TM Forum takes no position as to the validity or invalidity of such assertions, or that all such assertions that have been or may be made in the future.

Each TM Forum Member and its Affiliates acknowledge and agree that: (i) any license ~~or license~~ relating to a TM Forum API Deliverable may be subject to patent, copyright or other intellectual property claims, demands, causes of action, suits or proceedings from other TM Forum Members and their Affiliates unless licensed under the Apache 2.0 license to which a TM Forum API Deliverable is made available; and (ii) TM Forum Members and non-members may not be bound to provide a royalty free license or any other license to any entity with respect to any patent, copyright or other intellectual property right relating to any TM Forum API Deliverable, unless licensed under the Apache 2.0 license to which a TM Forum API Deliverable is made available to which they have contributed.

Each TM Forum Member and its Affiliates agree that they will not assert any claims, demands, causes of action, suits, or proceedings relating to any TM Forum API Deliverable against the TM Forum, its Affiliates, officers, directors or employees provided the TM Forum, its Affiliates, officers, directors or employees are acting in accordance with applicable laws, this IPR Policy and Bylaws. The foregoing sentence shall be strictly construed to benefit the TM Forum, its Affiliates, Officers, Directors and Employees only, and shall not be construed to create third party beneficiary rights in any Member or any other party.

13. GENERAL

13.1 By ratifying this document, the TM Forum warrants that it will not inhibit the traditional open and free access to the TM Forum Deliverables for which a copyright license and right have been assigned or obtained according to the procedures set forth in this section. This warranty is perpetual and will not be revoked by the TM Forum or its successors or assigns as to any already adopted TM Forum Standards Final Deliverable; provided, however, that neither the TM Forum nor its assigns shall be obligated to:

13.1.1 Perpetually maintain its existence; nor

13.1.2 Provide for the perpetual existence of a website or other public means of accessing the TM Forum Standards Final Deliverables; nor

13.1.3 Maintain the public availability of any given TM Forum Standards Final Deliverable that has been retired or superseded, or which is no longer being actively utilized in the marketplace.

13.2 Where any copyrights, trademarks, patents, patent applications, or other proprietary rights are known, or claimed, with respect to any TM Forum Deliverable and are formally brought to the attention of the TM Forum Team Administrator, the TM Forum shall consider appropriate action, which may include disclosure of the existence of such rights, or claimed rights. The TM Forum Collaboration Project Team Process shall prescribe the method for providing this information.

13.2.1 The TM Forum disclaims any responsibility for identifying the existence of or for evaluating the applicability of any claimed copyrights, trademarks, patents, patent applications, or other rights, and will make no assurances on the validity or scope of any such rights.

13.2.2 Where the TM Forum Team Administrator is formally notified of rights, or claimed rights under Section 8 with respect to entities other than Obligated Parties, the TM Forum President shall attempt to obtain from the claimant of such rights a written assurance that any Licensee will be able to obtain the right to utilize, use, and distribute the technology or works when implementing, using, or distributing technology based upon the specific TM Forum Standards Final Deliverable (or, in the case of a TM Forum Standards Draft Deliverable, that any Licensee will then be able to obtain such a right) under terms that are consistent with this Policy. All such information will be made available to the Team that produced such deliverable, but the failure to obtain such written assurance shall not prevent votes from being conducted, except that the TM Forum Team Administrator may defer approval for a reasonable period of time where a delay may facilitate the obtaining of such assurances. The results will, however, be recorded by the TM Forum Team Administrator, and made available to the public. The TM Forum Board of Directors may also direct that a summary of the results be included in any published TM Forum Standards Final Deliverable.

13.2.3 Except for the rights expressly provided herein, neither the TM Forum nor any TM Forum Member grants or receives, by implication, estoppel, nor otherwise, any rights under any patents or other intellectual property rights of the Member, the TM Forum, any other Member, or any third party.

13.2.4 Transfer of Essential Claims - Any agreement in which a Member transfers, or grants an exclusive license to, an Essential Claim (or patent or patent application that includes it) must provide that such transferees and exclusive licensees are bound by the license obligations of this Policy (specifically or in a general statement about standards commitments), including this section.

A Member may choose the manner in which it complies with this section, provided that any agreement for transferring or assigning Essential Claims includes a provision that such transfer or assignment is subject to existing licenses and obligations to license imposed on the Member by standards bodies, specification development organizations, or similar organizations (or language of similar import).

13.2.5 No Member shall sell or otherwise distribute for a monetary consideration any TM Forum Standards Final Deliverable itself.

13.3 Solely for purposes of Section 365(n) of Title 11, United States Bankruptcy Code, and any equivalent law in any foreign jurisdiction, the promises under Section 10 will be treated as if they were a license and any Member or third-party may elect to retain its rights under this promise if Obligated Party, as a debtor in possession, or a bankruptcy trustee in a case under the United States Bankruptcy Code, rejects any obligations stated in Section 10.

13.4 Governing Law. This Policy shall be governed by, interpreted and construed in accordance with the laws of the State of New Jersey and the laws of the United States, without reference to their conflict of laws principles or rules.

14. NOTICES

14.1 Documents

Any document produced by a Collaboration Project Team, other than TM Forum API Deliverables, shall include the following notices replacing [copyright year] with the year or range of years of publication (bracketed language, other than the date, need only appear in the TM Forum Standards Final Deliverable documents):

Copyright © TM Forum [copyright year]. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the TM Forum Intellectual Property Rights Policy ("the TM Forum IPR Policy"). The full Policy may be found at the TM Forum website.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to TM Forum, except as needed for the purpose of developing any document or deliverable produced by a TM Forum Collaboration Project Team (in which case the rules applicable to copyrights, as set forth in the TM Forum IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by TM Forum or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and TM Forum DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

[TM Forum invites any TM Forum Member or any other party that believes it has patent claims that would necessarily be infringed by implementations of this TM Forum Standards Final Deliverable, to notify the TM Forum Team Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the TM Forum Collaboration Project Team that produced this deliverable.]

[The TM Forum invites any party to contact the TM Forum Team Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this TM Forum Standards Final Deliverable by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the TM Forum Collaboration Project Team

that produced this TM Forum Standards Final Deliverable. TM Forum may include such claims on its website, but disclaims any obligation to do so.]

[TM Forum takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this TM Forum Standards Final Deliverable or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on TM Forum's procedures with respect to rights in any document or deliverable produced by a TM Forum Collaboration Project Team can be found on the TM Forum website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this TM Forum Standards Final Deliverable, can be obtained from the TM Forum Team Administrator. TM Forum makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.]

14.2 Other Deliverables

Other TM Forum Deliverables, other than TM Forum API Deliverables, may include just the copyright notice as follows replacing [copyright year] with the year or year range of publication:

Copyright © TM Forum [copyright year]. All Rights Reserved.

14.3 Additional Copyright Notices

Additional copyright notices identifying Contributors may also be included with the TM Forum copyright notice.

14.4 Apache 2.0 License Mode Copyright Notice

14.4.1 Notice Applicable to the code developed as a TM Forum API Deliverable:

To apply the Apache 2.0 License to a TM Forum API Deliverable, attach the following notice. The text should be enclosed in the appropriate comment syntax for the file format. It is recommended that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives:

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Copyright © [copyright year] [Contributor Name]

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

14.4.2 Notice applicable to the packaging of TM Forum API Deliverables:

In addition to the notices required by Section 14.4.1, above, any package containing a set of TM Forum API Deliverables produced by an Apache 2.0 License Mode Team shall include the following notice replacing [copyright year] with the year or range of years of publication:

Copyright © [copyright year] TM Forum and Apache 2.0 Contributors. The TM Forum API Deliverables contained herein were contributed to the TM Forum by an Apache 2.0 License Mode Team and are subject to an Apache 2.0 License Mode Copyright Notice. All capitalized terms in the text above have the meanings assigned to them in the TM Forum Intellectual Property Rights Policy ("the TM Forum IPR Policy"). The full Policy may be found at the TM Forum website.

15. ACKNOWLEDGEMENTS

Several features of this TM Forum Intellectual Rights Policy have been inspired by or adapted from the OASIS Intellectual Rights Policy. TM Forum gratefully acknowledges the support and permission received from OASIS management in the design of this Policy and is pleased to build upon the OASIS Policy.

Appendix A. Feedback License

The "TM Forum _____ Collaboration Project Team" is developing technology (the "TM Forum _____ Deliverable") as defined by its Project Charter and welcomes input, suggestions and other feedback ("Feedback") on the TM Forum _____ Deliverable in either written or electronic. By the act of submitting, you (on behalf of yourself if you are an individual, and your organization and its Affiliates if you are providing Feedback on behalf of that organization) agree to the following terms (all capitalized terms are defined in the TM Forum Intellectual Property Rights ("IPR") Policy, see [insert hyperlink to By-laws Annex 1, Policy on Intellectual Property Rights]):

1. Copyright - You (and your represented organization and its Affiliates) grant to the TM Forum a perpetual, irrevocable, non-exclusive, royalty-free, worldwide copyright license, with the right to directly and indirectly license, to copy, publish, and distribute the Feedback in any way, and to prepare derivative works that are based on or incorporate all or part of the Feedback, solely for the purpose of developing and promoting the TM Forum Deliverable and enabling the implementation of the same by Licensees or Beneficiaries.
2. Essential Claims - You (and your represented organization and its Affiliates) covenant to grant a patent license pursuant to the IPR mode of the Collaboration Project Team to which the Standards Final Deliverable relates under any patent claims that you (or your represented organization or its Affiliates) own or control that become Essential Claims because of the incorporation of such Feedback into the TM Forum Standards Final Deliverable, and any Final Maintenance Deliverable. With respect to Collaboration Teams chartered under the FCTL mode, you hereby grant to any implementer who has signed the FCTL agreement and its Affiliates [collectively referred to as "Licensee"], a nonexclusive, worldwide, non-sub licensable, perpetual royalty free license under any patent claims that you (or your represented organization or its Affiliates) own or control that become Essential Claims because of the incorporation of such Feedback into the TM Forum Standards Final Deliverable, and any Final Maintenance Deliverable, to make, have made, use, import, offer to sell, and sell, and to otherwise distribute (a) Licensed Products that implement the Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to the Standards Final Deliverable.
3. Past Royalties and Damages - With respect to teams chartered under the RAND mode, you shall not seek a patent royalty payment or infringement damages for any entity's acts of alleged infringement of your Essential Claims used in implementing a TM Forum Standards Final Deliverable, where such acts occur prior to notification to the entity or the TM Forum by you of such Essential Claims. Also, you cannot seek payments when asserting an Essential Claim against a TM Forum Standards Final Deliverable itself until you disclose such Essential Claim to TM Forum.
4. Right to Provide - You warrant to the best of your knowledge that you have rights to provide this Feedback, and if you are providing Feedback on behalf of an organization, you warrant that you have the rights to provide Feedback on behalf of your organization and to bind your organization and its Affiliates to the licensing or non-assertion obligations provided above. FEEDBACK FROM EMPLOYEES AND DESIGNEES OF A TM FORUM MEMBER WILL BE ACCEPTED ONLY UPON THE APPROVAL OF A DESIGNATED REPRESENTATIVE OF THE TM FORUM MEMBER.
5. Confidentiality - You further warrant that no information in this Feedback is confidential, and that the TM FORUM may freely disclose any information in the Feedback.
6. No requirement to Use - You also acknowledge that the TM Forum is not required to incorporate your Feedback into any version of this TM Forum Deliverable.

Assent of Feedback Provider:

By: _____ (Signature)

Name: _____

Title: _____ Organization: _____

Date: _____

Email: _____

Appendix B. Copyright License Grant

The undersigned, on its own behalf and on behalf of its represented organization and its Affiliates, if any, with respect to their collective copyright ownership rights in the Contribution "_____", grants to the TM Forum a perpetual, irrevocable, non-exclusive, royalty-free, world-wide copyright license, with the right to directly and indirectly license, to copy, publish, and distribute the Contribution in any way, and to prepare derivative works that are based on or incorporate all or part of the Contribution solely for the purpose of developing and promoting the TM Forum Deliverable and enabling the implementation of the same by Licensees or Beneficiaries (all above capitalized terms are defined in the TM Forum Intellectual Property Rights ("IPR") Policy, see [insert hyperlink to By-laws Annex 1, Policy on Intellectual Property Rights]).

Assent of the Undersigned:

By: _____ (Signature)

Name: _____

Title: _____ Organization: _____

Date: _____ Email: _____

Appendix C. FORUM Click-Through License (“FCTL”) for Review

1. License. When you click the “I ACCEPT” button, each Obligated Party and party that has executed an Implementation license with respect to Standards Final Deliverable [listed at [URL]], on behalf of itself and its Affiliates hereby grants a patent license under its and its Affiliates (other than Excluded Affiliates) Essential Claims, solely for the making or using of an implementation of such Standards Final Deliverable for testing or internal review purposes but not to make, have made, use, sell, import or distribute for commercial or internal productivity purposes. These rights expire after 12 months and cannot be renewed or reinitiated. If you wish to implement the Standards Final Deliverable commercially, you must accept the Implementation license (at URL). If you do not click the “I Accept” button for implementation, you do not have a license to implement the Standards Final Deliverable. Reviewers that execute this Agreement are hereinafter referred to as “Licensee.”
2. Copyright License. Obligated parties also grant Licensee a perpetual, irrevocable, non-exclusive, royalty-free, worldwide copyright license in the Standards Final Deliverable, with the right to copy internally the Standards Final Deliverable in any way solely for the purpose of enabling (subject to patent rights that might apply) the internal review and testing of the same by Licensees.
3. Termination. A Grantor may terminate a license it grants hereunder to any party that implements the Standards Final Deliverable for review (such party is hereinafter referred to as “Licensee”) if such Licensee or its agent files, maintains, or voluntarily participates in a lawsuit against Grantor asserting that Essential Claim(s) of Licensee (or its Affiliates) are infringed by the Standards Final Deliverable.
4. Continuation. This License is intended to bind any future owner, assignee, or exclusive licensee who is given the right to enforce any Essential Claims against third parties, provided that Grantor’s obligations under this Section 3 are satisfied if Grantor provides in any agreement, in which it transfers, or grants an exclusive license to, an Essential Claim (or patent or patent application that includes it) that such transferees and exclusive licensees are bound by the prior patent license (granted in this FCTL) covering such Essential Claims specifically or in a general statement about standards commitments.
5. No Other Rights. The rights granted are only those expressly stated in this Review Agreement; no other rights of any kind are granted to you by implication, waiver, estoppel, or otherwise, nor do you grant any license rights under this Review Agreement.
6. Disclaimer. PARTIES GRANTING THE LICENSE HEREUNDER EXPRESSLY DISCLAIM ANY WARRANTIES (EXPRESS, IMPLIED OR OTHERWISE), INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION IN THE STANDARDS FINAL DELIVERABLE WILL NOT INFRINGE INTELLECTUAL PROPERTY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY GRANTING PARTY BE LIABLE TO YOU FOR LOST PROFITS OR ANY FORM OF INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER FROM ANY CAUSES OF ACTION OF ANY KIND WITH RESPECT TO THE REVIEW OR TESTING OF THE STANDARDS FINAL DELIVERABLE, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, AND WHETHER OR NOT THE GRANTING PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE
7. Definitions. Capitalized terms, not defined herein, have the same meaning as in the TM Forum Policy on Intellectual Property Rights (“TM Forum IPR Policy”).
 - 7.1 Affiliate. “Affiliate” means any entity that directly or indirectly controls, is controlled by, or is under common control with, another entity, so long as such control exists. For purposes of this definition, with respect to a business entity, control means direct or indirect beneficial ownership of or the right to exercise (i) greater than fifty percent (50%) of the voting stock or equity in an entity; or (ii) greater than fifty percent (50%) of the ownership interest representing the right to make the decisions for the subject entity in the event that there is no voting stock or equity.
 - 7.2 Review Essential Claims. “Review Essential Claims” means those claims in any patent or patent application that now, or at any time in the future, are owned or controlled by an Obligated Party and granted in any jurisdiction in the world that would necessarily be infringed by an implementation of those portions of a particular Standards Final Deliverable created within the scope of the Team Charter in effect at the time such deliverable was approved [or within the Scope (defined term)]. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no technically feasible non-infringing alternative for implementing a Standards Final Deliverable. Existence of a non-infringing alternative shall be judged based on the state of the art at the time the TM Forum Standards Final Deliverable is approved. The following are expressly excluded from and shall not be deemed to constitute Essential Claims:
 - (a) any claims other than as set forth above even if contained in the same patent as Essential Claims; and

- (b) claims which would be infringed only by: enabling technologies that may be necessary to make or use any product or portion thereof that complies with a Deliverable and are not themselves expressly set forth in the Standards Final Deliverable (e.g., semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, and the like); or the implementation of standards or specifications developed elsewhere and merely incorporated by reference in the body of the Standards Final Deliverable.
- (c) design patents and design registrations.

7.3 Obligated Party. "Obligated Party" means a TM Forum Member, and its Affiliates that incurs a licensing obligation for its Essential Claims by either a Contribution Obligation or a Participation Obligation.

7.4 Standards Final Deliverable. "Standards Final Deliverable" means the Standards Final Deliverable identified below.

8. Governing Law. This FCTL and all disputes arising hereunder shall be governed by, interpreted, and construed in accordance with the laws of the State of New Jersey and the laws of the United States, without reference to conflict of laws principles. This FCTL is intended to be consistent with the TM FORUM IP Policy and By-laws. In the event of a conflict between the TM Forum IP Policy and By-laws and this Agreement the TM Forum IP Policy and By-laws shall govern.

Name of the TM Forum Standard Final Deliverable: <to be completed automatically by TM Forum >

Name of Individual Downloading [or Otherwise Received] Standards Final Deliverable

NAME OF COMPANY OR ENTITY REPRESENTED (MUST BE IDENTIFIED IF DOWNLOADING INDIVIDUAL IS EMPLOYED BY, AND /OR IS SPONSORED FOR ITS TM FORUM ACTIVITIES BY ANOTHER ENTITY OR ORGANIZATION):

By clicking [HERE](#), _____ I AND MY ORGANIZATION (IF APPLICABLE) ACCEPT AND ARE BOUND BY THE TERMS HEREIN FOR REVIEWING THE TM FORUM STANDARD FINAL DELIVERABLE LISTED ABOVE.

Appendix D. FORUM Click-Through License ("FCTL") for Implementation

1. License. Each party that executes this Agreement (individually a "Grantor"), on behalf of itself and its Affiliates, hereby grants to any other party that executes this Agreement and its Affiliates, a nonexclusive, worldwide, non-sub-licensable, perpetual (subject to the terms of this Agreement) royalty free patent license under its Essential Claims to make, have made, use, import, offer to sell, and sell, and to otherwise distribute (a) Licensed Products that implement the Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to the Standards Final Deliverable, including implementations made prior to the execution of this license. For the avoidance of doubt, the Grantors include TM Forum Members that are Obligated Parties with respect to the Standards Final Deliverable and implementers who execute this Agreement. Implementers that execute this Agreement are hereinafter referred to as "Licensee."
2. Copyright License. Grantors also grant Licensee a perpetual, irrevocable, non-exclusive, royalty-free, worldwide copyright license in the Standards Final Deliverable, with the right to directly and indirectly license, to copy, publish, and distribute the Standards Final Deliverable in any way, and to prepare derivative works that are based on or incorporate all or part of the Standards Final

Deliverable solely for the purpose of enabling (subject to patent rights that might apply) the implementation of the Standards Final Deliverable by Licensees.

3. Termination. Subject to the cure provision below, a Grantor may among the remedies otherwise available terminate a license it grants hereunder to any party that files, maintains, or voluntarily participates in a lawsuit against Grantor asserting that Essential Claim(s) of Licensee (or its Affiliates) are infringed by the Standards Final Deliverable. This right of termination does not apply if the action is in response to a suit first brought against Licensee with respect to a Licensed Product that implements the same Standards Final Deliverable or any Final Maintenance Deliverable thereof. Action by the Grantor will be avoided if Licensee accepts the FCTL for Implementation up to 60 days following the sending of written notice to the Licensee or the filing of an infringement action against it by the Grantor, whichever is earlier.
4. Continuation. This License is intended to bind any future owner, assignee, or exclusive licensee who is given the right to enforce any Essential Claims against third parties, provided that Grantor's obligations under this Section 4 are satisfied if Grantor provides in any agreement, in which it transfers, or grants an exclusive license to, an Essential Claim (or patent or patent application that includes it) that such transferees and exclusive licensees are bound by the obligations and rights granted pursuant to this FCTL, covering such Essential Claims specifically or in a general statement about standards commitments.
5. No Other Rights. The rights granted are only those expressly stated in this FCTL; no other rights of any kind are granted by implication, waiver, estoppel, or otherwise.
6. Disclaimer. GRANTOR EXPRESSLY DISCLAIMS ANY WARRANTIES (EXPRESS, IMPLIED OR OTHERWISE), INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION IN THE STANDARDS FINAL DELIVERABLE WILL NOT INFRINGE OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY PARTY BE LIABLE TO ANY OTHER PARTY FOR LOST PROFITS OR ANY FORM OF INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER FROM ANY CAUSES OF ACTION OF ANY KIND WITH RESPECT TO THE IMPLEMENTATION OF THE STANDARDS FINAL DELIVERABLE, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, AND WHETHER OR NOT THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
7. Definitions. Capitalized terms, not defined herein, have the same meaning as in the TM Forum Policy on Intellectual Property Rights ("TM Forum IPR Policy").
 - 7.1 Affiliate. "Affiliate" means any entity that directly or indirectly controls, is controlled by, or is under common control with, another entity, so long as such control exists. For purposes of this definition, with respect to a business entity, control means direct or indirect beneficial ownership of or the right to exercise (i) greater than fifty percent (50%) of the voting stock or equity in an entity; or (ii) greater than fifty percent (50%) of the ownership interest representing the right to make the decisions for the subject entity in the event that there is no voting stock or equity.
 - 7.2 Implementation Essential Claims. "Implementation Essential Claims" means those claims in any patent or patent application that now, or at any time, are owned or controlled by an Grantor and granted in any jurisdiction in the world, and that would necessarily be infringed by an implementation of those portions of a particular TM Forum Standards Final Deliverable created within the scope of the Team Project Charter in effect at the time such deliverable was approved. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no non-infringing alternative for implementing a TM Forum Standards Final Deliverable. Existence of a non-infringing alternative shall be judged based on the state of the art at the time the TM Forum Standards Final Deliverable is approved. The following are expressly excluded from and shall not be deemed to constitute Essential Claims:
 - (a) any claims other than as set forth above even if contained in the same patent as Essential Claims; and
 - (b) claims which would be infringed only by: enabling technologies that may be necessary to make or use any product or portion thereof that complies with a Deliverable and are not themselves expressly set forth in the Standards Final Deliverable (e.g., semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, and the like); or the implementation of standards or specifications developed elsewhere and merely incorporated by reference in the body of the Standards Final Deliverable.
 - (c) design patents and design registrations.
 - 7.3 Licensed Product. "Licensed Product" means only those specific portions of Licensee's (including Affiliates') products (hardware, software or combinations thereof) that (a) implement and comply with all required portion of for inclusion in an implementation of all required portions of) the Standards Final Deliverable created within the scope of the Team Charter and

(b) to the extent that Licensee's products implement one or more optional portions of such Standards Final Deliverable, those portions of Licensee's (including Affiliates') products that implement and comply with all required portions that must be implemented to comply with such optional portions of the Standards Final Deliverable.

7.4 Obligated Party. "Obligated Party" means a TM Forum Member that incurs a licensing obligation for its Essential Claims by either making a contribution that is incorporated into a Standards Final Deliverable or by participating on a Collaboration Project Team for the time period prescribed in the TM Forum IPR Policy and the Affiliates of such Member.

7.5 Standards Final Deliverable. "Standards Final Deliverable" means a work of authorship regardless of the nature or medium (now or later created) that is (i) developed by a Collaboration Project Team within the scope of its charter which is enumerated in and developed in accordance with the Forum Collaboration Project Team Process and (ii) has been designated and approved by a Collaboration Project Team as a TM Forum Standards Final Deliverable and which has been approved as a TM Forum approved deliverable by the corporate Members of TM Forum as provided in the By-laws of TM Forum.

8. Governing Law. This FCTL and all disputes arising hereunder shall be governed by, interpreted, and construed in accordance with the laws of the State of New Jersey and the laws of the United States, without reference to conflict of laws principles. This FCTL is intended to be consistent with the TM Forum IP Policy and By-laws. In the event of a conflict between the TM Forum IP Policy and By-laws and this Agreement the TM Forum IP Policy and By-laws shall govern.

9. Execution of the License. Parties that are implementing the Standards Final Deliverable shall indicate their agreement of the terms of the FCTL by clicking "I ACCEPT" below. For purposes of clarity, an entity or person that has not executed this Agreement does not receive any rights [and is not authorized to make a compliant implementation of the Standards Final Deliverable.] All Obligated Parties must execute this Agreement. EXECUTION OF THIS AGREEMENT BY AN EMPLOYEE OR DESIGNEE OF A TM FORUM MEMBER WILL BE ACCEPTED ONLY UPON THE APPROVAL OF A DESIGNATED REPRESENTATIVE OF THE TM FORUM MEMBER.

Name of the TM Forum Standard Final Deliverable: <to be completed automatically by TM Forum >

Name of Individual Downloading [or Otherwise Received] Standards Final Deliverable

NAME OF COMPANY OR ENTITY REPRESENTED (MUST BE IDENTIFIED IF DOWNLOADING INDIVIDUAL IS EMPLOYED BY, AND /OR IS SPONSORED FOR ITS TM FORUM ACTIVITIES BY ANOTHER ENTITY OR ORGANIZATION):

By clicking HERE, _____ I AND MY ORGANIZATION (IF APPLICABLE) ACCEPT AND ARE BOUND BY THE TERMS AND CONDITIONS HEREIN FOR IMPLEMENTING THE TM FORUM STANDARD FINAL DELIVERABLE LISTED ABOVE.