

PRIME ALLIANCE

INTELLECTUAL PROPERTY RIGHTS POLICY

From and after the date that this intellectual property rights policy ("**IPR Policy**") is adopted, the IPR of the Association and its Members shall be governed prospectively by this IPR Policy, all in accordance with the terms of the Association's Articles of Association (the "**Articles of Association**").

Recognizing that the Association is an open participation organization whose activities are focused on developing a new public, open and non-proprietary telecommunications architecture that shall support the new AMM functionality and enable the building of the electricity networks of the future, or Smart Grids, this IPR Policy is designed to maximize the widespread adoption of PRIME specifications and standards. In furtherance of the objective of widespread adoption, the Association and its Members agree that barriers to industry use of Adopted Specifications should be limited as much as possible. Hence the Association wishes to make the IPR under its control available to the Members and non Members on a fair reasonable and non discriminatory (FRAND) basis, pursuant to the terms of the present IPR Policy. Capitalized terms used in this Addendum are defined in Section 14 of this Addendum or the applicable Participation Agreement.

1. IPR Categories.

IPR shall be categorized as follows:

- (a) Background;
- (b) Necessary IPRs; and
- (c) Foreground.

with each category subject to the further terms set forth in this IPR Policy.

2. Submission of Proposed Specifications and disclosure of Necessary IPRs by Submitters

Members jointly or singly are entitled to submit (the "**Submitter**") to the Technical Working Group one or more Proposed Specifications.

Proposed Specifications can be submitted to the Technical Working Group through a written statement in the form requested by the Association, detailing:

- (i) a list of the Necessary IPRs; being agreed that such list shall be provided together with the express statement of the Submitter(s) that (i) as a result of a Reasonable and Good Faith Inquiry such list is exhaustive and that (ii) to the knowledge of Submitter, implementation of the Proposed Specification would not infringe third parties' IPRs; and
- (ii) the (proof of) ownership of the listed Necessary IPRs.

Submissions can also be submitted orally during meetings of the Technical Working Group. Such submissions shall be listed in the minutes of the Technical Working Group where after the Submitter shall within forty-five (45) days after distribution of the minutes confirm his submission and provide to the Association a filled in form as provided under the second paragraph of the present Section 2.

3. Disclosure of Necessary IPRs by Members

Each Member shall, in the form requested by the Association, as soon as Proposed Specifications have been disclosed, as a result of a Reasonable and Good Faith Inquiry disclose, within sixty (60) days of this disclosure, whether such Member or non Member has any Necessary IPRs (but only to the extent determined by such Reasonable and Good Faith Inquiry) with regard to Proposed Specifications submitted by a Member and/or any Adopted Specifications (the "**Review Period**"). If any Necessary IPRs of a Member are identified, the Member shall upon written request grant a FRAND license to such Necessary IPRs and any Necessary IPRs which would be identified thereafter, to the Members and non Members pursuant to Section 4 below but subject to the exceptions provided in Section 5 of this IPR Policy.

For the sake of clarity, the Members and non Members acknowledge and agree that the present IPR Policy does not affect the actual ownership of the Background of each Member, unless a different written agreement is entered into among the Members, non Members and/or the Association. Nothing contained in this IPR Policy will be construed as granting or conferring any rights by licence, expressly, impliedly or otherwise, concerning each Member's Background other than Necessary IPRs, unless differently provided in this IPR Policy.

4. License from the Members for Necessary IPRs to Members and non-Members

4.1

a)

As a general rule, for Necessary IPRs owned by a Member, in case and as soon as the Proposed Specifications are adopted by the Board of Directors in accordance with Section 8 of the present IPR Policy and Section 15.4 of the Articles of Association, such Member is obligated to grant to the other Members and non Members, who are willing licensees acting in good faith, (hereafter "**Licensees**"), upon request in writing, a worldwide, non-exclusive, non transferable license under reasonable terms and conditions and on a non-discriminatory basis, for the duration of the Necessary IPRs, to make, use and sell the implementations of the Adopted Specifications under the FRAND Scope and of any ISO standard, ITU-T or ITU-R recommendation or IEC Deliverable covering Adopted Specifications. The obligation to license and each such license shall be conditional upon the Licensee granting to the Licensor a reciprocal license on this Licensee's Necessary IPR under the same terms. (together referred to as "**FRAND Licensing Obligations**")

b) In the event Necessary IPRs are identified which are not owned by a Member, the Board of Directors shall define the best solution, including the possible rejection with due reasons of the Proposed Specification.

5. New Member Reviews

If a person applies to become a Member in the Association, then subject to the execution of such confidentiality agreement based on the principles provided in Section 12 below, as the Association may determine necessary, such prospective member shall be permitted not less than sixty (60) days to review the Proposed Specification then under review and any previously Adopted Specifications of the Association for any and all Necessary IPRs and to agree in separate affirmative writing to be committed to the licensing provisions of Section 4.1 above, as to any Adopted Specifications or Proposed Specifications for which the Review Period has been completed. Failure to provide such written affirmation shall be deemed a

withdrawal of the prospective Member's application for participation. No Members shall be admitted during a Review Period.

6. Foreground

The Association may carry out through any of its Members or through third parties research and development activities in relation to Specifications, upon the approval of the Board of Directors or of the General Meeting.

6.1. Foreground developed by Members

If one or more Members have been commissioned by the Association to carry out, the activities set forth in Section 6 above, whether individually or in collaboration with the Association, the relevant collaboration agreement shall provide that the Foreground of the research and development activities shall be licensed to the Members and non Members upon request in accordance with Section 4.1 above as soon as reasonably possible, unless the Association and the Member(s) concerned otherwise agree in writing.

6.2. Foreground developed by the Association or by third parties

All right, title and interest in and to any and all Foreground created or developed by persons employed or retained by the Association shall vest in the Association and where this is not possible due to a legal or contractual restriction, the latter shall be licensed on a royalty free basis to the greatest extent possible, to the Association as soon as reasonably possible.

6.3. Joint Foreground

Foreground developed jointly by the Association and a Member (hereinafter referred to as the "*Contributors*") pursuant to a separate agreement with the Association defining the scope of the work to be performed by such Member shall be jointly owned by the Association and the applicable Member ("*Joint Foreground*"). For the purposes of the foregoing, the term "jointly" shall mean that at least one Member employee or contractor and one Association employee or contractor qualify as co-inventors or where applicable co-authors pursuant to the applicable law.

The Contributors might establish an agreement regarding the allocation and terms of exercise of their joint ownership provided that such agreement shall require that the Joint Foreground shall be licensed on FRAND terms.

However, where no joint ownership agreement has yet been concluded, each of the Contributors (as "Grantor") shall be entitled to use the Joint Foreground and to grant non-exclusive licenses to third parties on a FRAND basis, without any right to sub-license (other than to Grantor's affiliates), subject to giving at least forty-five (45) calendar days prior notice to the other joint owners, but without requiring the consent of the other joint owners.

The Members acknowledge and agree that the Members and the Association will make Joint Foreground available to all Members and non-Members pursuant to terms and conditions of respectively Section 4.1 for Members above and Section 7 below for the Association.

Within a reasonable period following creation of any Joint Foreground, the Contributors shall enter into good faith discussions in order to agree on an appropriate course of action for filing applications for IPR

protection, including the decision as to which of the Contributors is to be entrusted with the preparation, filing and prosecution of such applications and in which countries or territories such applications are to be filed. Except for any priority applications, the filing of any applications for Joint Foreground shall require mutual agreement between the Contributors (but excluding any Contributors who choose pursuant to the paragraph below not to contribute to the cost of such application). All external costs related to applications for patent protection or other protection resulting from such applications and the fees for maintaining such protection shall be shared equally between the Contributors, subject to the paragraph below.

If and when a Contributor decides not to contribute, or not to continue its contribution, as the case may be, to the costs of application for or maintenance of IPR protection for the Joint Foreground, for one or more countries or territories, it shall be entitled not to contribute, or to discontinue its contribution, provided however that:

- (a) it shall promptly notify the other Contributor(s) in writing of its decision;
- (b) it shall forthwith relinquish all its rights to participate in the prosecution and maintenance of such IPR Protection for the Joint Foreground for the countries or territories concerned to the other owner(s) who contribute or continue their contribution, as the case may be, to such costs in accordance with the paragraph above; and
- (c) it shall lose its rights under the present Section with respect to such Joint Foreground for the countries or territories concerned as of the moment of notification, but subject, however, to the retention of a non-transferable, non-exclusive, royalty-free and fully paid-up licence, without the right to grant sub-licences (other than to its affiliates), for the lifetime of such Joint Foreground for the countries or territories concerned in favour of, and for the use by, the relinquishing Contributor and until such license is terminated for breach.

Each joint owner of Joint Foreground shall have the right to bring an action for infringement of any such Joint Foreground only with the consent of the other owner(s), which shall not be unreasonably withheld. The foregoing is not intended to require such other owner(s) to engage in litigation. Thus, if such other owner is required, or would be required, to become a party to the action (such as, without limitation, if the court rules that such other owner is a necessary party to the action), then such other owner may elect that the action be terminated. Upon receiving written notice of such election, the joint owner bringing the action shall withdraw, dismiss, or otherwise terminate the action.

7. License from the Association to the Members & non Members

The Members agree that any Necessary IPRs or (Joint) Foreground owned by the Association shall be automatically licensed by the Association to the Members and non Members in accordance with the provisions set out below.

Necessary IPRs and (Joint) Foreground (co-)owned by the Association shall be automatically licensed to Members and non Members in accordance with Section 4.1 of the present IPR Policy (which shall apply *mutatis mutandis*), for the duration of the Necessary IPRs / IPRs on the Foreground.

8. Approval of Specifications / compliance of products with Adopted Specifications.

Proposed Specifications submitted to the Board of Directors for adoption in accordance with Section 15.4 of the Articles of Association shall require a seventy-five percent (75%) vote for final approval, and upon such approval shall become "**Adopted Specifications**". The Adopted Specifications constitute together the PRIME Specifications.

The use of the trademark “PRIME alliance” or any other applicable trademark of the Association by standardization organizations for referential purposes, is exempted from any certification or licensing obligation. Such exemption does not cover use by non-Members which requires an explicit license from the Association.

Each Member may submit its products to a Test Provider to evaluate the compliance of each such product with the Adopted Specifications. The Board of Directors shall take the decision to recognize products as Fully Certified products on the basis of the results of the evaluation carried out by the Test Provider. Such decision of the Board of Directors shall consist of a certification (the “**Certification**”) necessary for the Member concerned to market its Fully Certified products under the trademark “PRIME alliance” or any other applicable trademark of the Association. The Certification procedure shall be described more in detail in a separate document which may be updated from time to time by the Board of Directors.

An *ad hoc* agreement shall be entered into between the Test Provider and the Member concerned in order to lay down the relevant terms and conditions, including *inter alia* the definition of the relevant test compensation (the “**Test Compensation**”), to be determined on fair, reasonable and non discriminatory basis. Such Test Compensation shall include all costs and expenses (including administrative and general expenses) borne by the Test Provider in respect of the specific test process activity.

The Board of Directors shall appoint the Test Providers by means of a written document and shall impose to them specific rules to be respected in their test process activity, including the determination of their compensation in compliance with the provisions set forth in the present article; such written document shall be accepted in writing by each appointed Test Provider.

9. Consequences of resignation, termination or liquidation

In case of resignation of any Member, pursuant to Section 8 of the Articles of Association, the resigning Member maintains its Background in accordance with the provision set forth in Section 3 of the present IPR Policy; Resignation of any Member shall not affect any licenses (to be) granted (in the future) by that Member under the current IPR Policy.

In case of termination of any Member, pursuant to Section 8 of the Articles of Association, the terminated Member maintains its Background in accordance with the provision set forth in Section 3 of the present IPR Policy;

Termination of any Member shall not affect any licenses (to be) granted (in the future) by that Member under the current IPR Policy or to rights granted to or to which that Member is entitled at the time of resignation or other termination. For avoidance of doubt, such Member is not entitled to receive and not required to grant licenses for any Proposed Specification adopted after termination, except that: (i) unless such Member is terminated under Section 8.1.3 of the Articles of Association because of a material breach by such Member that is not cured under Section 8.2 of the Articles of Association, such Member shall be entitled to receive rights that may be available to any non-Member; and, (ii) such Member shall be required to grant licenses under any of its Necessary IPRs but only to the extent that such Necessary IPRs qualify as such by virtue of a contribution made by such Member to such Proposed Specification prior to such termination. In case of dissolution or liquidation of the Association, pursuant to Section 10 of the Articles of Association above, the General Meeting shall consider how best to deal with any IPRs owned by the Association or received by the Association by means of a license and shall, unless otherwise provided in the template of the license agreement with regard to IPR's licensed to the Association, have the option to require an assignment of such IPRs to another party to enable maintenance of such IPRs by that other party at its own cost.

Non execution of obligations contained herein by party (member or non member) towards another party allows the latter to suspend its obligations towards the other.

10. Trademarks

The Members are entitled to list the name, logo and other trademarks of the Association on the Members' website and on advertising in accordance with guidelines to be set by the Board of Directors. As long as such guidelines have not been established, the Association shall, upon written request, grant the Members licenses to use such name and logo or other trademarks of the Association, without any specific conditions except that such use shall not harm the reputation of the Association or its Members. The Association shall be entitled to list each Member's name and logo on the Association web site and on advertising materials.

11. Modifications to the IPR Policy

The IPR Policy may be modified from time to time by the General Meeting upon proposal of the Board of Directors, in accordance with Section 11 of the Articles of Association provided that such modifications do not adversely affect a Member's obligations, rights and/or protections (including but not limited to Background) under the current IPR Policy. The agenda of the meeting shall include the modified IPR Policy.

The modified IPR Policy will apply to all Members in lieu of the previous IPR Policy, from the date the modified IPR Policy is approved by the General Meeting.

12. Non-disclosure of information

12.1 Confidential Information

For the purpose of this clause, "*Confidential Information*" means all and any information, analyses, compilations, studies and documents, idea, concept, know-how, data, process, technique, algorithm, program, design, drawing, formula or test development, engineering, manufacturing, marketing, business plan, servicing, financial or legal matter with regard to the PRIME specification standard setting which shall be disclosed in words, in writing or by any other mean of transmission to a Member under this Agreement (hereinafter referred to as the "*Receiving Party*") or any of its directors, officers, employees, or Affiliates, representatives, including, without limitation, its attorneys, accountants and financial and other advisers, agents, or authorized subcontractors, as well as its third parties and subcontractors (collectively, the "*Representatives*"), by or on behalf of another Member (hereinafter referred to as the "*Disclosing Party*") or any of its Representatives.

It is not included within the scope of Confidential Information, if and in so far as the Receiving Party can show that:

- a) The Confidential Information becomes publicly available by means other than a breach of the Receiving Party's confidentiality obligations;
- b) The Confidential Information is communicated to the Receiving Party without any obligation of confidence by a third party who is in lawful possession thereof and under no obligation of confidence to the Disclosing Party;
- c) The Confidential Information, at any time, was or is subsequently developed by or for the Receiving Party completely independently of any such disclosure by the Disclosing Party; or
- d) The Confidential Information was already known to the Receiving Party prior to disclosure.

12.2 Confidentiality obligations

The Receiving Party and its Representatives undertake to:

- a) Keep the Confidential Information strictly confidential, ensuring all necessary measures aimed at properly safeguarding such Confidential Information; and

- b) Not to disclose to any third parties such Confidential Information as well as the fact that the Confidential Information exists or has been provided to the Receiving Party and/or its Representatives, unless they have obtained prior written consent from the Disclosing Party; and
- c) Use the Confidential Information exclusively for and within the purpose defined in this IPR Policy and not to use such Confidential Information in any way not authorized by this IPR Policy; and
- d) Restrict the disclosure of the Confidential Information to the Representatives that need to know it because of their involvement in the purpose for which such Confidential Information is disclosed and cause its Representatives to strictly comply with the confidentiality obligations; and
- e) Enter with its Affiliates, third parties and subcontractors into a confidentiality agreement containing no less stringent obligations than the confidentiality obligations set forth in this confidentiality undertaking; and
- f) Be responsible for any action or inaction of its Representatives resulting in a breach of such confidentiality obligations.

12.3 Exceptions to the confidentiality obligations

In the case the Receiving Party is required to disclose the Confidential Information to comply with applicable laws or pursuant to an order from a judicial, governmental or other competent authority, (a) the Receiving Party shall, to the extent permitted by law, give the Disclosing Party prompt written notice of any such requirement, as far in advance of disclosure as is reasonably practical, (b) the Receiving Party shall, to the extent permitted by law, consult with the Disclosing Party on the form, timing, nature and purpose of the disclosure, (c) the Receiving Party shall, to the extent permitted by law, use reasonable efforts to limit or prevent any further disclosure or dissemination of Confidential Information so required to be disclosed under this clause 12.3, and (d) the Disclosing Party shall, to the extent permitted by law, be allowed a reasonable opportunity to pursue legal remedies to maintain the confidentiality or limit the dissemination of such Confidential Information.

The Parties acknowledge that: (i) nothing in this Agreement limits the professional development of the Parties' employees (or those of any of their affiliated entities) and the ability of either Party (or any of its affiliated entities) to assign its employees (or contractors) to other projects; and (ii) during the course of the relationship between the Parties, each Party's employees (or contractors) (and those of its affiliated entities) who are authorized to access and use the Confidential Information will acquire experience retained in their unaided memories. Accordingly, notwithstanding anything to the contrary in this Agreement, the Parties (and their affiliated entities) may utilize such acquired experience in their respective business activities.

12.4 Use and accuracy of the Confidential Information

Each Member acknowledges that the Confidential Information is and shall remain the sole and exclusive property of the Disclosing Party. Except if otherwise provided, nothing contained in this IPR Policy shall be construed as granting or conferring any rights by licence or otherwise, expressly, impliedly, or otherwise for any intellectual property of the Disclosing Party, including but not limited to the Disclosing Party's rights in patent, copyright, invention, discovery or improvement made, conceived or acquired prior to or after the execution of this IPR Policy.

The Disclosing Party shall endeavour to include in its Confidential Information, information which it believes to be relevant for the purpose of the Receiving Party; nevertheless, the Receiving Party understands and agrees that neither the Disclosing Party, nor any of Disclosing Party's Representatives have made or make any representation or warranty as to the accuracy or completeness of the Confidential Information. Each Party agrees that neither the Disclosing Party, nor any of its Representatives shall have any liability to the Receiving Party or any of its Representatives resulting from or arising out of the use of the Confidential Information by the Receiving Party and/or the Receiving Party's Representatives.

The Disclosing Party shall be responsible for export license controls or any other licenses with regard to the Confidential Information it submits.

The Confidential Information shall be used by the Receiving Party, its Affiliates and Representatives exclusively and solely for the purpose for which such Confidential Information was disclosed.

The Receiving Party shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Association as with its own confidential and/or proprietary information, but in no case less than reasonable care.

12.5 Return of Confidential Information

The Receiving Party shall promptly deliver to the Disclosing Party any documents or other materials containing or reflecting any Confidential Information and any copies thereof which the Receiving Party may have made, have control of, or may receive or possess during the period of the discussions and/or business relationship between the Members within five (5) working days after requested by the Disclosing Party.

If the Confidential Information has been destroyed, each Member shall be required to provide a certificate for such destruction.

Save the destruction of such Confidential Information is prohibited by laws, the Receiving Party shall, and shall cause its Affiliates and Representatives to, redeliver to the Disclosing Party all copies of the written or other tangible Confidential Information in its possession or in possession of its Representatives and any related electronically held data.

Despite the return or destruction of Confidential Information, the Receiving Party, its Affiliates and Representatives shall remain bound to the obligations set forth in this IPR Policy until the dissolution of the Association and for a period of 5 (five) years thereafter.

This clause 12.5, shall not apply to Confidential Information which pursuant to applicable law, order, decree, regulation or rule may not be returned or destroyed or Confidential Information contained in any material prepared for or by the supervisory bodies of the Receiving Party or its Affiliates, provided, however, that the Receiving Party, its Affiliates and their representatives shall remain bound to the obligations set forth in this IPR Policy until the dissolution of the Association and for a period of 5 (five) years thereafter. The obligations of the Receiving Party set out in this Clause 12.5 shall further not apply to routine backup copies created by electronic data processing systems/programs provided, however, that the Receiving Party, its Affiliates and their representatives shall remain bound to the obligations set forth in this IPR Policy until the dissolution of the Association and for a period of 5 (five) years thereafter.

12.6 Responsibility

Each Member hereby acknowledges and agrees that, in the event of any breach of this clause, the Disclosing Party shall suffer irreparable injury, such that no remedy at law shall afford it adequate protection against, or appropriate compensation for, such injury.

Accordingly, each Member hereby agrees that the other shall be entitled to specific performance under this clause, as well as such further injunctive or other relief as may be granted by a court of competent jurisdiction.

The Receiving Party shall indemnify the Disclosing Party from and hold it harmless against losses and liabilities arising out of any of its and/or its Representatives' and Affiliates' breach of the confidentiality obligations.

Additionally, and with the character of a penalty clause different from the indemnification referred in the previous paragraphs, if the Receiving Party discloses Confidential Information without the previous written consent from the Disclosing Party or willingly or gross negligently breaches its confidential obligations, it shall pay to the Disclosing Party an amount of fifty thousands (50,000) Euros. In the event one breach of the present IPR Policy directly causes multiple subsequent breaches the total amount to be paid under this paragraph shall be limited to fifty thousands (50,000) Euros.

13. Third Party Infringement Proceedings

The Association recognizes that (i) companies that are non-practicing entities (entities whose main business is licensing IPR but who do not themselves develop, manufacture or sell products) and/or (ii) companies

that are not members of the Association, may claim IPR that is essential to comply with the Adopted Specifications. PRIME or Members may seek an assurance from non-Members as to whether they will agree to license their Necessary IPRs on a FRAND basis.

The Association recognizes and understands that such claims may create unexpected financial and legal burdens on companies which are developing and selling products compliant with the Adopted Specifications, and such claims thereby undermine the attractiveness of the Adopted Specification and undermine the purposes and goals of the Association. Accordingly, in the event such a claim is made, the Association agrees and commits to assess ways to minimize the effects of such claim, including but not limited to considering ways to modify the Adopted Specifications to work around or eliminate the feature on which the claim is targeted.

14. Definitions.

"Adopted Specifications" means the Specifications that have been approved or adopted by the Association pursuant to the procedures set forth in Section 8 of the present IPR Policy.

"Affiliate" shall mean, with respect to a Member of the Association, any entity controlling, controlled by or under common control with such Member, where "control" means direct or indirect ownership of or the right to exercise: (i) greater than fifty percent (50%) of the outstanding shares or securities entitled to vote for the election of directors or similar managing authority of the subject entity; or (ii) greater than fifty percent (50%) of the ownership interest representing the right to make decisions for the subject entity.

"Background" shall mean: (i) Works and IPRs thereon which are owned by a Member prior to its accession to the Association and IPRs, the application for which has been filed by a Member before its accession to the Association; and (ii) Works and IPRs thereon which are developed or otherwise acquired by a Member after its accession to the Association and out of the framework or execution of the activities of the Association.

"Certification" is defined in Section 8 of the present IPR Policy.

"Certification Compensation" is defined in Section 8 of the present IPR Policy.

"Contributor" is defined in Section 6.3 of the present IPR Policy.

"Foreground" means the Works and the IPRs thereon which are generated by research and development activities carried out by the Association and/or Members in the framework of executing the activities of the Association and/or in the execution by a Member of a license from another Member, with the exclusion of the Background.

"FRAND Licensing Obligation" is defined in Section 4 of the present IPR Policy.

"Fully Certified" means products or technology that meet all mandatory portions of the applicable Adopted Specifications and are accordingly Certified in accordance with Section 8. If the Adopted Specifications contain optional components, and the product or technology incorporates the optional components, then the products or technology must also meet the optional specifications of such Adopted Specifications.

"IPR" means any intellectual property rights, anywhere in the world, whether they can be registered or not, including but not limited to rights to know-how and trade secrets, copyrights, neighboring rights, sui generis

database rights, design rights, patents, semi-conductor topography rights and trademarks as well as all applications for the same anywhere in the world.

"Joint Foreground" is defined in Section 6.3 of the present IPR Policy.

"Licensee" is defined in Section 4 of the present IPR Policy.

"Licensor" means a Member granting a license on Necessary IPRs or where applicable Foreground.

"Member" means a general reference to all Principal Members and Regular Members, and their Affiliates as identified in Annex I to the present Articles of Association, who have so qualified for such classifications pursuant to the provision of the Articles of Association.

"Necessary IPRs" means those IPRs, including but not limited to claims of all patents and patent applications throughout the world, existing now or hereafter issued or filed, that a Member, as applicable, owns or otherwise has a right to license, and that: (a) cover or directly relate to one or more of the Proposed Specifications and/or the Adopted Specifications within the FRAND Scope, as applicable; and (b) would be infringed by an implementation of any Proposed Specifications and/or Adopted Specifications within the FRAND Scope, as applicable, where such infringement could not have been avoided by another commercially reasonable non-infringing implementation of such Proposed Specifications and/or Adopted Specifications, as applicable, and such infringement is necessary to meet the implementation requirements of the Proposed Specifications and/or Adopted Specifications, as applicable. Necessary IPRs shall not include any IPRs covering any enabling technologies that are used in the manufacture of products that comply with the Proposed Specifications and/or Adopted Specifications, but are not expressly designated in the Proposed Specifications and/or Adopted Specifications (*e.g.*, semiconductor manufacturing technology, compiler technology, object oriented technology, basic operating system technology, etc.). If a Member asserts that any IPR is not a Necessary IPR on the basis that there is a commercially reasonable alternative to the infringing implementation of the Adopted Specification, such Member shall provide the Technical Working Group with sufficient documentation evidencing the availability of such a commercially reasonable alternative.

"Principal Member" means any Participant in the Association which has executed the Articles of Association and those who, after the date of execution of these Articles of Association, adhere to a Participation Agreement

"Proposed Specifications" means proposals of Specifications and/or any additions and/or modifications to existing Adopted Specifications (but not the underlying Adopted Specifications) submitted for review by the Members to the Working Groups or by the Working Groups to the Board of Directors of the Association.

"Reasonable and Good Faith Inquiry" includes, but is not limited to, a Submitter using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the Submitter and who are known to the Submitter to be current or past participants in the development process of the Proposed / Adopted Specification. If the Submitter did not or does not have any participants, then a Reasonable and Good Faith Inquiry shall mean that the Submitter shall use reasonable efforts to contact individuals who are from, employed by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the technology covered by the Proposed / Adopted Specification.

"Regular Member" means any Member in the Association which has executed the PRIME Regular Member Participation Agreement.

"Review Period" is defined in Section 3 of the present IPR Policy.

"FRAND Scope" means the following items:

- 1) Physical layer (PHY, corresponding to the seven layer ISO-OSI model of networking stack) narrowband power line communication technology.
- 2) Media access protocol (MAC) that uses services of PHY layer to enable network formation, maintenance and scaling to facilitate data transport and other functionalities typical of the ISO-OSI model for this layer.
- 3) Logical link control (LLC) protocol or an adaptation layer for the same in order to facilitate use of an existing standard LLC, that makes use of underlying MAC layer. The technology in its present version includes the LLC and LLC-adaptation layers given below. The scope of PRIME technology, as defined here, leaves scope for future inclusion of additional LLC or LLC-adaptation layers (e.g. IPv6).
 - a. LLC-adaptation layer for IEC 61334-4-32
 - b. LLC definition, enabling convergence of IPv4 protocol stack on top of PRIME technology
- 4) Management plane which interfaces with all, PHY layer, MAC layer and LLC/LLC-adaptation layer for administrative and control functions.
- 5) Device management protocol (MGMT-Protocol). The technology in its present version specifies MGMT-Protocol that is designed to perform management within a PRIME network. The scope of technology, as defined here, leaves scope for future specification of MGMT-Protocol (or derivative adaptation to use an existing standard MGMT-Protocol) designed to perform PRIME device management from outside a PRIME network.
- 6) Data aggregation protocol (e.g webservice with relevant xml schema), reference architectures (e.g. DLMS) and data-schema (e.g. DLMS country specific companion specifications) for specific use in meter-reading applications that define aggregation services offered by a PRIME based data-concentrator.

with the exclusion of the following items:

- 1) any particular implementation of the specification such as Integrated Circuit Design (ICD) design, software code, reference design, schematics, circuitry; and
- 2) application extensions and internal device implementation algorithms that do not amount to any change to the specification but build on concepts/interfaces laid down in the specification

"Specification" means a technical and functional complete definition, and a complementary compliance test definition, of telecommunications architecture, protocols, messages and associated parameters, but with the specific exclusion of (i) any particular implementation of the specification such as IC design, SW code, reference design, schematics, circuitry, etc. and (ii) application extensions that do not amount to any change to the Specification but build on concepts/interfaces laid down in Specification.

"Submitter" shall mean the person defined in Section 2 of the present IPR Policy.

"Technical Working Group" shall mean a working group as defined in Section 15 of the Articles of Association responsible for evaluating specifications.

"Test Compensation" shall have the meaning in Section 8 of the present IPR Policy.

"Test Provider" means (a) Member(s) appointed by the Board of Directors to carry out the tests provided in Section 8 of the present IPR Policy to evaluate the compliance of other Members' products with the Adopted Specifications.

"Work" means all intellectual creations including, without being limited to, literary and artistic works, including works of art, computer programs and databases, artistic and industrial performances of performers, phonogram, film and database producers and broadcasting organisations, designs and models, inventions, know-how, trade secrets, trademarks, statutory and commercial denominations, domain names and any other intellectual creation, and including, without being limited thereto, all underlying information, data and intellectual creations, including, without being limited thereto, preparations, calculations, codes, specifications, formulae, composites of materials, research procedures, reports, preparatory design materials, prototypes, processes, drafts, pieces of work, studies, research results, experiments, trials, inventions, discoveries, data, know-how and software, on whatever medium.