

Zigbee Alliance

Intellectual Property Rights Policy

From and after the date that this Intellectual Property Rights Policy ("**IPR Policy**") is adopted, the IPR of the Alliance and its Members shall be governed prospectively by this IPR Policy, all in accordance with the terms of the Zigbee Alliance Bylaws. Recognizing that the Alliance is an open participation organization whose activities are focused on encouraging the rapid advancement of interface Specifications for consumer electronics, home and building automation, energy management, industrial controls, PC peripherals, medical sensor applications, toys and other related applications, this IPR Policy is designed to maximize widespread adoption of Specifications. In furtherance of the objective of widespread adoption, the Alliance and its Members agree that barriers to industry use of Adopted Specifications should be limited as much as possible. Capitalized terms used in this Exhibit are defined in **Section 8** of this Exhibit or the applicable Member Agreement.

1. **IPR Categories.** IPR shall be categorized as follows:

- (a) Adopted Specifications, Proposed Specifications, Draft Specifications and Working Specifications;
- (b) Alliance IPR; and
- (c) Joint IPR

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

2. **RANDz License for Necessary Claims – Pre-Existing Specifications.** The terms of this **Section 2** apply only to Pre-Existing Specifications.

2.1 **License Obligations Between Pre-Existing Members.** Each Pre-Existing Member agrees to grant to all other Pre-Existing Members a RANDz License to its Necessary Claims in each Pre-Existing Specification.

2.2 **Opt-In for Pre-Existing Specifications.** New Members may opt-in to a RANDz License for any Pre-Existing Specification ("**Opted-In Specification**") on a Specification-by-Specification basis at any time after joining the Alliance. By executing a "**Specification Opt-In Form**," a New Member commits to provide a RANDz License to its Necessary Claims for an Opted-In Specification to all Pre-Existing Members and other New Members who opt-in with respect to the same Opted-In Specification. Effective as of the date of the Pre-Existing Specification Opt-In Form, Pre-Existing Members and other New Members who have provided a Specification Opt-In Form with respect to the same Specification agree to grant such New Member a RANDz License to the Necessary Claims for the Opted-In Specification.

2.3 **Transfer of Necessary Claims for Pre-Existing Specifications.** Transfer of any Necessary Claims for Pre-Existing Specifications is subject to the same obligations as transfer of Necessary Claims for New Specifications, as set forth in **Section 3.9** below.

2.4 **RANDz License for Pre-Existing Specifications That a Member Certifies Against.** If a Member certifies a product or technology against a Pre-Existing Specification pursuant to the Alliance certification program, it agrees to grant to all other Members a RANDz License to its Necessary Claims in such Pre-Existing Specification.

2.5 RANDz License Obligations for Subsequent Versions of a Pre-Existing Specification. To the extent that a New Adopted Specification contains the same text or substantively similar text in a Pre-Existing Specification that is a prior version of the New Adopted Specification or a Working Specification existing on December 15, 2019 and implicates a Necessary Claim in such Pre-Existing Specification or such Working Specification, each Pre-Existing Member agrees to grant a RANDz License to its Necessary Claim to each Member in such New Adopted Specification.

3. RANDz License for Necessary Claims – New Specifications. The terms of **Section 3** apply only to New Specifications.

3.1 Working Group Membership and Participants. Members wanting to participate in an Alliance Working Group must: (a) apply in writing to the Alliance via email or other written notice to participate; (b) notify the Alliance of each individual person representing such Member who wants to join the Working Group (*i.e.*, prospective Working Group Representative(s)); (c) limit participation in the Working Group to such named Working Group Representatives (no invitees or guests will be permitted to attend Working Group meetings); and (d) comply with all of the terms and conditions of this IPR Policy and Working Group rules, policies and procedures, as may be adopted and/or revised from time-to-time. The Alliance will record, keep and maintain the register of Working Group Members and Working Group Representatives, and such register shall be the official record for those Working Group Members and Working Group Representatives who are part of the applicable Working Group. These terms apply to all Members of all Alliance Working Groups in existence as of December 15, 2019.

3.2 RANDz License Obligations.

(a) Working Group Members. Except as provided below, each Working Group Member agrees to grant to all other Members a RANDz License to its Necessary Claims in each New Adopted Specification which is developed by such Working Group or as set forth in **Section 4**. When a Member joins a Working Group, the Member does not incur additional RANDz License obligations for New Adopted Specifications generated by the Working Group and adopted by the Alliance Board of Directors before the Member joins the Working Group. A Working Group Member may exclude Necessary Claims from the foregoing RANDz License obligation by complying and in accordance with the terms set forth in **Sections 3.3** and **3.4**, and, as applicable, **Section 4**.

(b) Contributions. To the extent a Member makes a Contribution to a Specification which is included in the applicable New Adopted Specification, such Member: (i) agrees to grant to all other Members, a RANDz License to its Necessary Claims in such Contribution; and (ii) grants to all other Members, a worldwide, perpetual, irrevocable, nonexclusive, nontransferable, fully-paid up, royalty-free license under the Member's copyrights in such Contribution to redistribute and use the same in source and binary forms, with or without modification, for the sole purposes of developing and implementing Fully Compliant products and technology, developing implementations of New Adopted Specifications, and developing New Specifications; provided, however, that if a Member submits a Contribution and within thirty (30) days following such submission notifies the applicable Working Group in writing that it is withdrawing such Contribution (a "**Contribution Withdrawal**"), such Member is not required to grant a license as required in **Section 3.2(b)(i)** or **(ii)**. Subject to the right to make a Contribution Withdrawal, a Member making a Contribution shall not be permitted to exclude any Necessary Claims in the Contribution under **Sections 3.3**, **3.4** or otherwise. Each Member who makes a Contribution retains ownership of the copyrights in the Contribution and grants the Alliance a worldwide, irrevocable, perpetual, nonexclusive, nontransferable, fully-paid up, royalty-free license under the Member's copyrights in its Contributions to copy, modify, disclose, reproduce, prepare derivative works of, publicly display,

publicly perform, and distribute such Contribution for the purpose of developing a Draft and Proposed Specifications, releasing New Adopted Specifications, and developing and using Test Materials with no duty to account to any other copyright owner. The foregoing terms do not affect the copyright ownership rights of the Alliance in and to the Specifications as described in **Section 5**.

(c) RANDz License Obligations for Prior and Subsequent Versions of a New Adopted Specification. To the extent that a prior or subsequent version of a New Adopted Specification to which a Member has a RANDz License obligation under **Section 3.2(a)** or **Section 3.10** contains the same text or substantively similar text that implicates its Necessary Claim in such New Adopted Specification and was or is developed in the same Working Group that developed such New Adopted Specification, such Member agrees to grant a RANDz License to such Necessary Claim to each Member in such prior or subsequent version of such New Adopted Specification. For purposes of this **subsection (c)** and with regard to Pre-Existing Specifications, a Working Group will be deemed to include the working group that, prior to December 15, 2019, developed the Pre-Existing Specification that is a prior version of such New Adopted Specification, and as a result such Pre-Existing Specification is a prior version of such New Adopted Specification.

3.3 Disclosure of Necessary Claims.

(a) Mandatory Disclosure by Working Group Representatives – Prior to Expiration of Necessary Claims Review Period. If during the development of a Working Specification or Draft Specification but no later than the expiration of the Necessary Claims Review Period, a Working Group Representative of a Working Group Member has actual, personal knowledge of Necessary Claims of the Working Group Member at any time that a Working Specification or Draft Specification is being developed in such Working Group, the Working Group Representative shall promptly submit a written Necessary Claims notice ("**Necessary Claims Notice**") in accordance with **Section 3.4** unless the Working Group Member agrees to license the Necessary Claims under the RANDz license obligation set forth in **Section 3.2(a)**.

(b) Exclusions by Working Group Members. An initial Draft Specification shall be distributed to all Members for a sixty (60) day review period ("**Initial Necessary Claims Review Period**"). Subsequent iterations of such Draft Specification (to the extent they exist) shall be distributed to all Members for review as set forth in **Section 3.6**. If a Working Group Member does not agree to grant a RANDz License under **Section 3.2(a)** to any of its Necessary Claims, the Working Group Member must submit a Necessary Claims Notice in accordance with **Section 3.4** before the end of the Necessary Claims Review Period. If a Working Group Member does not provide a Necessary Claims Notice compliant with each of the requirements set forth in **Section 3.4**, then the applicable Working Group Member agrees to grant a RANDz license pursuant to **Section 3.2(a)**.

(c) Optional Disclosure of Patents Owned by Third Parties. If any Member of the Alliance has knowledge of a Necessary Claim in a Specification owned by another Member or Non-Member, such Member is encouraged, but not required, to promptly submit a Necessary Claims Notice with respect to such Necessary Claim and to provide the information set forth in **Section 3.4** as may be available.

(d) Non-Working Group Member Disclosure. A non-Working Group Member who has actual knowledge of its Necessary Claims in a Draft Specification may, but is not required to, submit a Necessary Claims Notice with respect to such non-Working Group Member's Necessary Claims during the applicable Necessary Claims Review Period in accordance with the terms set

forth in **Sections 3.3** and **3.4**. In the event a non-Working Group Member submits such Necessary Claims Notice, the non-Working Group Member shall indicate on the Necessary Claims Notice Form whether such non-Working Group Member agrees or does not agree to license the Necessary Claims under the RANDz License obligation set forth in **Section 3.2(a)**.

(e) **No Patent Search Required.** No Member of the Alliance is required to conduct a patent search with respect to any of its rights or obligations set forth in this **Section 3.3**.

3.4 Necessary Claims Notice Requirements.

(a) **General.** A Member's Necessary Claims Notice shall be made in the form adopted by the Alliance and available on the Alliance website (the "**Necessary Claims Notice Form**"). Except as set forth in **Section 3.3**, each section of the Necessary Claims Notice Form that is applicable to the Necessary Claims must be completed with the requested detail in order for the Necessary Claims Notice to be compliant. The Alliance reserves the right to make changes, consistent with this IPR Policy, to the format and/or content of the Necessary Claims Notice Form by posting a revised Necessary Claims Notice Form on the Alliance website. All Necessary Claims Notices made more than thirty (30) days after the posting of a revised Necessary Claims Notice Form must be made using such revised Necessary Claims Notice Form in order to be compliant.

(b) **Information Required.** Except as set forth in **Section 3.3**, each Necessary Claims Notice shall include at least the following information:

(i) information for each Necessary Claim, including:

(A) For issued patents, the country or countries in which the patents were issued, and the patent numbers;

(B) For published patent applications, the country or countries in which the patent applications were filed and the publication number assigned to the patent application; and

(C) For unpublished patent applications, the country or countries in which the patent applications were filed, the serial number of the patent applications, and the date of filing of the patent applications;

(ii) for each Necessary Claim, identification of the subsection of the Specification to which the Necessary Claim relates;

(iii) the legal entity or entities owning such Necessary Claim; and

(iv) whether the Member agrees or does not agree to provide a RANDz License to such Necessary Claim to Members as set forth in **Section 3.2(a)** (a Working Group Member's express rejection of a commitment to provide a RANDz License to such Necessary Claim to Members as set forth in **Section 3.2(a)** is referred to as a "**Necessary Claims Licensing Exclusion**").

(c) **Other Information.**

If the Member does not agree to provide a RANDz License to such Necessary Claim to Members as set forth in **Section 3.2(a)**, the Member may, but is not required to, include on

the Necessary Claims Notice Form the terms and conditions, if any, on which such Member agrees to license such Necessary Claim to Members.

The requirements set forth above will not be deemed to be satisfied if any of the information required in **subsections (b)(i) through (iv)** is missing or non-responsive, such as a blanket or general statement that Necessary Claims exist or may exist in the Specification. If the Alliance or the Working Group Leadership Body determines that a Necessary Claims Notice does not meet the requirements of this Section, the Member submitting the Necessary Claims Notice and the Alliance, the Working Group Leadership Body and/or other representatives from the Working Group will discuss the areas of non-compliance, and such Member shall promptly resubmit the Necessary Claims Notice in a manner that complies with this Section. If there is continued disagreement amongst the applicable parties as to the sufficiency of the Necessary Claims Notice, the matter will be escalated to the Alliance Board of Directors. The Working Group Leadership Body and/or Alliance Board of Directors may establish a patent counsel advisory group to assist the Working Group Leadership Body or Alliance Board of Directors in understanding or resolving disputes related to a Necessary Claims Notice. Each Member who participates in the patent counsel advisory group shall cover its own costs of participating. If a Member inadvertently makes typographical errors in a submitted Necessary Claims Notice, they shall be permitted to submit a corrected Necessary Claims Notice without triggering the process set forth above or any other legal ramifications.

A Necessary Claims Notice submitted by a Member shall be ineffective to the extent it attempts to exclude from the RANDz License commitment Necessary Claims to Contributions submitted by the Member, or to the extent it attempts to exclude Necessary Claims for which the Member has previously been obligated to grant a RANDz License under **Section 2** or **Section 3**. In either of these cases, other portions of the Necessary Claims Notice shall not be affected.

(d) Updating a Necessary Claims Notice. Each Member may, but is not required to, update the information provided in its Necessary Claims Notices that were previously submitted when such information changes, including if there is an unpublished patent application that becomes published, if claims are added through a continuation application or other action on an application, if a patent is issued that requires making an update to the claims information set forth in **Section 3.4 (b)(ii)**, if a patent application or patent is abandoned, and if a patent is invalidated. A Member may not use the update process to make a Necessary Claims Licensing Exclusion to one or more claims that the Member has previously been obligated to grant a RANDz License under **Section 2** or **Section 3**.

3.5 Impact of Necessary Claims Notice. If a Member timely submits a Necessary Claims Licensing Exclusion that meets the requirements set forth in **Section 3.4**, such Member shall not be required to grant a RANDz License with respect to its applicable Necessary Claims pursuant to **Section 3.2(a)**.

3.6 Process for Addressing Necessary Claims Licensing Exclusions and Additional Necessary Claims Review Periods.

(a) Review. If one or more Necessary Claims Licensing Exclusions compliant with **Section 3.4** are received by the Alliance during review of a Specification by a Working Group, the Alliance will notify all Working Group Representatives of the receipt of such Necessary Claims Licensing Exclusions and provide a copy thereof after closure of the Necessary Claims Review Period. The applicable patent counsel advisory group for the Working Group, in conjunction with the Working Group Members, will evaluate the Necessary Claims Licensing Exclusions, alternative design options, and other factors to decide on a course of action with respect to the Specification.

(b) Subsequent Necessary Claims Review Period(s). If a Draft Specification is revised as a result of any course of action taken pursuant to **Section 3.6(a)** or is revised in any other manner, and the Working Group Leadership Body does not intend to send such revised Draft Specification to the Board for approval as a New Adopted Specification, then the revised Draft Specification shall be re-distributed to all Members in accordance with **Section 3.3(b)** for a forty-five (45) day Necessary Claims Review Period (the "*Subsequent Necessary Claims Review Period*").

(c) Final Necessary Claims Review Period. Before the Draft Specification is sent to the Board for approval as a New Adopted Specification, if the Draft Specification has already undergone a Necessary Claims Review Period and no new features have been added, then the revised Draft Specification shall be re-distributed to all Members in accordance with **Section 3.3(b)** for a thirty (30) day Necessary Claims Review Period, and if one or more new features have been added, then the revised Draft Specification shall be re-distributed to all Members in accordance with **Section 3.3(b)** for a forty-five (45) day Necessary Claims Review Period (each, a "*Final Necessary Claims Review Period*").

(d) Additional Necessary Claims Review Period Exclusion Scope. During a Subsequent Necessary Claims Review Period or Final Necessary Claims Review Period, a Working Group Member is only permitted to submit a Necessary Claims Notice for the portions of the revised Draft Specification for which such Member did not previously have an opportunity to submit a Necessary Claims Notice.

(e) No Additional Necessary Claims Review Period Required. Notwithstanding anything to the contrary herein, if the revisions made to a Draft Specification are exclusively in one or more of the following categories, then no additional Necessary Claims Review Period is required:

(i) Errata Changes;

(ii) revisions to non-normative portions of the Specification;

(iii) incorporation by reference of other Adopted Specifications merely incorporated by reference in a Specification unless: (A) such other Adopted Specifications are required for implementing the Specification; or (B) if only a portion of such other Adopted Specification is incorporated by reference, such portion is specifically identified and is required for implementing the Specification; or

(iv) incorporation by reference of a standard, technology or a specification (or portion thereof) developed outside of the Alliance in the body of the Specification, and which the technical requirements of the standard, technology or specification (or portion thereof) are not expressly set forth within normative portions of the Specification.

In addition, there is no additional Necessary Claims Review Period required if there are no revisions to the Draft Specification.

If there is a disagreement as to whether a revision in the Draft Specification is within one or more categories above, such disagreement shall be addressed in accordance with the Alliance's policies and procedures.

3.7 Finalizing a Draft Specification. A Working Group will finalize a Draft Specification taking into consideration the Necessary Claims Notices, including any Necessary Claims Licensing Exclusions and the

results of the evaluation and alternative design options referenced in **Section 3.6**. Unless otherwise approved by the Alliance Board of Directors, Necessary Claims Notices will not be published to a particular audience until the corresponding New Adopted Specification is published in accordance with the Alliance's policies and procedures.

3.8 Joining or Resigning from an Existing Working Group or the Alliance. A Member joining an existing Working Group prior to the start or during the pendency of the Necessary Claims Review Period shall comply with all the terms and conditions of **Section 3**. A Member who wants to join a Working Group after the expiration of a Necessary Claims Review Period and before the Specification becomes a New Adopted Specification may do so; provided, if such Working Group Representative has actual, personal knowledge of Necessary Claims in such Specification, and the Working Group Member does not agree to license the Necessary Claims under the RANDz License obligation set forth in **Section 3.2(a)**, such Working Group Member shall provide a Necessary Claims Notice in accordance with **Section 3.4** within thirty (30) days of joining the Working Group. If a Member leaves the Working Group before the Necessary Claims Review Period begins, that Member is only bound to license Necessary Claims based on subject matter contained in the latest Working Specification before the Member resigned from the Working Group, subject to such Member filing a Necessary Claims Licensing Exclusion prior to the expiration of the Necessary Claims Review Period for the Working Specification and, at its discretion, a copy of the Working Specification against which the Member is filing the exclusion. Members resigning from a Working Group are still subject to obligations set forth in **Section 3.3** up until the date of departure from the Working Group. If a Member withdraws from a Working Group and also withdraws as a Member of the Alliance, the terms and conditions of Section 9(e) of the Member Agreement shall apply, which includes, without limitation, that Members shall comply with **Sections 2 and 3** of this IPR Policy, provided, however, that if the Member is withdrawing within or prior to the Necessary Claims Review Period, such withdrawing Member may, prior to the expiration of the Necessary Claims Review Period, submit a Necessary Claims Licensing Exclusion in accordance with the terms set forth in **Section 3.4**, and if such Member meets such requirements, the terms contained in this **Section 3** relating to the Necessary Claims Licensing Exclusion shall apply.

3.9. Transfer of Necessary Claims for New Specifications. The RANDz License obligations set forth in **Section 2** and **Section 3** shall be interpreted as encumbrances that bind all successors-in-interest to the applicable Necessary Claims. Recognizing that this interpretation may not apply in all legal jurisdictions, any Member who has a RANDz License obligation in **Section 2** and **Section 3** who transfers ownership of a Necessary Claim that is subject to such RANDz License obligation shall include appropriate provisions in the relevant transfer documents to ensure that the RANDz License obligation is binding on the transferee and that the transferee will similarly include appropriate provisions in the event of future transfers with the objective of binding all successors-in-interest to the applicable Necessary Claims. The RANDz License obligations set forth in **Section 2** and **Section 3** shall be interpreted as binding on successors-in-interest regardless of whether such provisions are included in the relevant transfer documents.

3.10 RANDz License for New Adopted Specifications That a Member Certifies Against. If a Member certifies a product or technology against a New Adopted Specification pursuant to the Alliance certification program, it agrees to grant all other Members a RANDz License to its Necessary Claims in such New Adopted Specification, subject to any Necessary Claims Licensing Exclusion in existence for the New Adopted Specification.

4. Urgent Changes to Adopted Specifications. Notwithstanding the other provisions of this IPR Policy, the following procedures and process will be followed for any Urgent Changes:

- (a) the applicable Adopted Specification will be modified to reflect the technical change or changes set forth in the Urgent Change and such modified Adopted Specification will be sent to the Board of Directors for ratification as a New Adopted Specification;
- (b) the Alliance will issue a test house notification to all applicable Alliance testing facilities setting forth the modification(s) to the Adopted Specification and any applicable Test Materials;
- (c) the Alliance will notify all Members and provide a separate notice to all Members who are directly affected by the Urgent Change (e.g., Members known to the Alliance that are undergoing certification of products using the applicable Adopted Specification) that modification(s) to the Adopted Specification are being made but they will be subject to a Necessary Claims Review Period, and accordingly, there is a risk that the modification will not be subject to a RANDz License obligation; and
- (d) the modification(s) to the Adopted Specification shall be treated as a Draft Specification under **Section 3** of this IPR Policy and the process and procedures set forth in **Section 3** shall apply to such modification(s), provided that: (i) the Necessary Claims Review Period shall be forty-five (45) days; and (ii) any Necessary Claims Licensing Exclusion shall be limited to the proposed modification(s) of the Adopted Specification and shall not be available for unaffected portions of the Adopted Specification.

5. Alliance IPR and IPR Transferred to the Alliance. All right, title and interest in and to any and all IPR, software and documentation created or developed by individuals employed or retained by the Alliance or transferred to the Alliance shall vest in the Alliance ("**Alliance IPR**"), and the Alliance shall be free to use and publish any research results, ideas, algorithms, techniques and other information developed for or by the Alliance as determined by the Board of Directors. Members shall have rights to Alliance IPR as determined by the Board of Directors. The Alliance owns all right, title and interest in and to the copyrights in the Pre-Existing Specifications, Working Specifications, Draft Specifications, Adopted Specifications and Proposed Specifications.

6. Joint IPR. IPR developed jointly by the Alliance and either: (a) a Member pursuant to a separate agreement with the Alliance defining the scope of the work to be performed by such Member; or (b) a contractor acting in their capacity as such, shall be jointly owned by the Alliance and the applicable Member ("**Joint IPR**"). Each joint owner shall be entitled to exercise all rights of ownership as provided by law without, however, an obligation of accounting from one to the other. The Member acknowledges and agrees that the Alliance will make Joint IPR available to all Members pursuant to terms and conditions determined by the Board of Directors. For the purposes of the foregoing, the term "jointly" shall mean that at least one Member employee and one Alliance employee or contractor assigned to the Alliance qualify as co-inventors as a matter of U.S. patent law, in the case of patentable subject matter, or qualify as co-authors as a matter of U.S. copyright law, in the case of copyrightable subject matter.

7. Clearinghouse Activities. The Alliance may serve, upon such terms and conditions as may be established by the Board of Directors, as a clearinghouse for the purposes of collecting and distributing any royalties or license fees due to any applicable Members and/or Non-Members in connection with the licensure and/or use of Pre-Existing Specifications or New Specifications.

8. Definitions.

"**Alliance**" means the Zigbee Alliance.

"**Adopted Specification**" means a Specification that has been approved by the Board of Directors.

"**Adopter**" means any participant in the Alliance which has executed the Zigbee Adopter Member Agreement.

"**Alliance IPR**" is defined in **Section 5**.

"**Associate**" means any participant in the Alliance which has executed the Zigbee Associate Member Agreement.

"**Contribution**" means any document, material or information submitted by a Member for incorporation into a Specification, including, without limitation, any software, firmware, computer program, code, data, architecture, white paper, presentation, proposal, chart, functional or technical specification, and functional or technical requirement.

"**Contribution Withdrawal**" is defined in **Section 3.2(b)**.

"**Draft Specification**" means, for New Specifications, a Working Specification that has been approved by the Working Group Leadership Body for distribution to all Members for review during a Necessary Claims Review Period, and in the case of an Urgent Change, the proposed modified Adopted Specification.

"**Final Necessary Claim Review Period**" is defined in **Section 3.6(c)**.

"**Errata Change(s)**" means a well-defined set of changes to a Draft Specification which make non-substantive clarifications or fix editing mistakes or editorial errors, such as for formatting, organization, spelling or grammar. An Errata Change is not a new feature, a change that creates a new technical mechanism, a change that alters the behavior of a device, or a change that materially alters certification tests or requirements.

"**Fully Compliant**" means that products or technology meet all mandatory requirements applicable to those types of product(s) or technology specified in Adopted Specifications, as ascertained by the Alliance certification program. If the Adopted Specification contains optional features, and the product or technology incorporates optional features, then the mandatory requirements include the incorporated optional features of such Adopted Specification.

"**Initial Necessary Claim Review Period**" is defined in **Section 3.3(b)**.

"**Interfaces**" means a set of message and message sequences on the information flowing across a reference point between two identified functional entities or the method by which information, including data and control information, is conveyed between cooperative systems or devices, such as radio frequency communications-related subsystems.

"**Intellectual Property Rights (IPR)**" means all patent rights, copyrights, domain name rights, and any other intellectual property rights (registered or unregistered) throughout the world (excluding design patents, trademark, trade name or service mark rights), including applications for the same.

"**Joint IPR**" is defined in **Section 6**.

"**Member**" means any Promoter Member, Participant, Adopter, Associate or other class of Alliance member that may be approved by the Alliance Board of Directors, collectively or individually, as applicable.

"**Necessary Claims**" means those claims of all patents and patent applications throughout the world, existing now or hereafter issued or filed, that: (a) cover or directly relate to one or more of the Draft Specifications, Proposed Specifications and/or the Adopted Specifications, as applicable; and (b) would be necessarily infringed by a Fully Compliant implementation of any Draft Specifications or Proposed Specifications, if approved as Adopted Specifications, and/or Adopted Specifications, as applicable, where such infringement could not have been avoided by another technical non-infringing implementation of such Draft Specifications, Proposed Specifications and/or Adopted Specifications, as applicable.

Necessary Claims shall not include:

- (i) any claims of any patents or patent applications covering any enabling technologies (*e.g.*, semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, *etc.*) that are used in the manufacture of products that are Fully Compliant with the Draft Specifications, Proposed Specifications and/or Adopted Specifications, and which are not expressly set forth as technical requirements within normative portions of the Draft Specifications, Proposed Specifications and/or Adopted Specifications;
- (ii) any claims not covered by **subsections (a) and (b)** above even if contained in the same patent as Necessary Claims;
- (iii) claims that would be infringed only by portions of an implementation that are not set forth within normative portions of the Adopted Specification;
- (iv) claims that would be infringed only by the implementation of other Adopted Specifications merely incorporated by reference in an Adopted Specification unless: (A) such other Adopted Specifications are required for implementing the Adopted Specification; or (B) if only a portion of such other Adopted Specification is incorporated by reference, such portion is specifically identified and is required for implementing the Adopted Specification; or
- (v) with respect to New Adopted Specifications, claims that would be infringed only by the implementation of a standard, technology or a specification (or portion thereof) developed outside of the Alliance and merely incorporated by reference in the body of the New Adopted Specification, and which the technical requirements of the standard, technology or specification (or portion thereof) are not expressly set forth within normative portions of the New Adopted Specification.

"**Necessary Claims Licensing Exclusion**" is defined in **Section 3.4**.

"**Necessary Claims Notice**" is defined in **Section 3.3**.

"**Necessary Claims Notice Form**" is defined in **Section 3.4**.

"**Necessary Claims Review Period**" means an Initial Necessary Claims Review Period, Subsequent Necessary Claims Review Period or Final Necessary Claims Review Period, as applicable.

"**Non-Member**" means any entity which is not a Promoter Member, Participant, Adopter, Associate or other class of Alliance member that may be approved by the Alliance Board of Directors.

"**New Adopted Specification**" means a Specification subject to the procedures set forth in **Section 3** that is adopted by the Board after December 15, 2019.

"**New Member**" means a Promoter Member, Participant, Adopter, Associate or other class of Alliance member that may be approved by the Alliance Board of Directors, who becomes a Member on or following December 15, 2019.

"**New Specification**" means each Draft Specification, Proposed Specification and/or New Adopted Specification created or finalized on or following December 15, 2019.

"**Participant**" means any participant in the Alliance which has executed the Zigbee Participant Member Agreement.

"**Pre-Existing Member**" means a Promoter Member, Participant, Adopter or Associate who is a Member immediately prior to December 15, 2019.

"**Pre-Existing Specification**" means the Adopted Specifications that are in existence prior to December 15, 2019.

"**Promoter Member**" means any participant in the Alliance which has executed the Zigbee Promoter Member Agreement.

"**Proposed Specifications**" means Draft Specifications that are approved by the Working Group Leadership Body for consideration by the Alliance Board of Directors.

"**RANDz License**" means a no cost, worldwide, perpetual, irrevocable (except with respect to Suspension, Reciprocity and a material breach of the applicable license agreement) non-exclusive, non-transferable license to the Necessary Claims of Adopted Specifications or such limited scope of Necessary Claims as referenced in **Section 2.5** or **Section 3.2(c)**, as applicable, on fair, reasonable and non-discriminatory terms and conditions (but does not include any right to grant sublicenses), solely to make, have made, use, import, sell, offer to sell, license, promote or otherwise distribute and dispose of the resulting product or technology that is Fully Compliant with the applicable Adopted Specifications, the New Adopted Specification referenced in **Section 2.5**, or prior or subsequent versions of the Adopted Specification as referenced in **Section 3.2(c)**, as applicable. For purposes of this IPR Policy, reasonable and non-discriminatory terms and conditions are deemed to include, but are not limited to, Reciprocity and Suspension.

"**Reciprocity**" means a RANDz License for an Adopted Specification may be conditioned on a reciprocal RANDz License grant from the licensee Member to the licensor Member with respect to Necessary Claims of the licensee Member for the Adopted Specification.

"**Specifications**" means documents or specifications that define or specify one or more aspects of an Interface. Interfaces may be defined and/or specified by using either message-oriented descriptions or a protocol specification. Test Materials do not constitute Specifications under this IPR Policy.

"**Subsequent Necessary Claim Review Period**" is defined in **Section 3.6(b)**.

"**Suspension**" means a RANDz License for an Adopted Specification may be suspended by the licensor Member if the licensee Member alleges or initiates legal action for infringement of the licensee Member's Necessary Claims for such Adopted Specification by the licensor Member implementation of such Adopted Specification.

"**Test Materials**" mean test plans, test scripts, test software and tools, test specifications, protocol information conformance statements, interoperability tools and plans, and other documents and tools associated with the certification testing process for a Specification.

"Urgent Change" means any request determined by the Alliance, in accordance with Alliance policies and procedures, to be urgent and that will result in a modification to any mandatory or optional feature portions of an Adopted Specification.

"Working Group" means each Alliance working group that develops a New Specification.

"Working Group Member" means a Member who joins a Working Group and is recorded and registered as such on the Alliance's books and records.

"Working Group Representative" means an individual representative of a Member (*e.g.*, an employee or contractor of such Member) participating in a Working Group who is recorded and registered as such on the Alliance's books and records.

"Working Group Leadership Body" means the most senior leadership body (*e.g.*, management committee, management board, steering committee, *etc.*) of the Alliance Working Group responsible for applicable Specification(s).

"Working Specification" means a Specification that a Working Group is actively developing prior to such Specification becoming a Draft Specification.

IPR Policy Adoption Date: This version of the Zigbee Alliance IPR Policy (Version 6.2) was adopted on, and is effective as of, April 7, 2021.