OPEN RAN PATENT PORTFOLIO LICENSE

This Agreement is made this	day of		_, by a	ınd l	betwee	n
Alium, L.L.C., a limited liability	y company of Delav	ware, having a principa	al place of	of bus	siness i	r
Greenwood Village, Colorado, U	J.S.A. (hereinafter "	Licensing Administrat	or"); and	1		
			, having	gap	rincipa	al
place of business in				and	d all i	ts
Affiliates (hereinafter "Licensee"	").					

WHEREAS, standards for implementing the infrastructure portion of an open radio access network (Open Radio Access Network or Open RAN) have been defined under the 3rd Generation Partnership Project (3GPP) and are referred to in this Agreement as the "Open RAN Standard" (as more fully defined herein);

WHEREAS, the Licensors or individually Licensor (as more fully defined in this Agreement) each own one or more patents that are Open RAN Essential Patents;

WHEREAS, each Licensor believes that the Open RAN Standard represents significant technology advances, which will make available innovative new products and services to the public, and for this reason desires to bring licensing convenience to the adoption of the Open RAN Standard by product and service industries throughout the world;

WHEREAS, each Licensor has granted the Licensing Administrator a worldwide, nonexclusive license and/or sublicense for the Open RAN Licensed Field of Use (as defined herein) under all Open RAN Essential Patents licensable or sublicensable by the Licensor without payment to any third party (which is not an Affiliate) to allow the Licensing Administrator to grant worldwide, nonexclusive sublicenses under such Open RAN Essential Patents (as defined herein);

WHEREAS, Licensing Administrator and Licensors believe that the terms and conditions of this Agreement are fair and reasonable for a license of the Open RAN Licensed Essential Portfolio (as defined herein), in light of the essential nature of the Open RAN Essential Patents contained therein, and wherein the royalties specified herein are only offered when included as part of all of the terms and conditions of this Agreement as a whole, such that, for example, the individual royalties set forth in herein are not the sum of the royalties of licenses for individual Open RAN Essential Patents but rather the value of a license granted under the Open RAN Licensed Essential Portfolio taking into consideration many factors including the commercial intention of the Licensors to facilitate adoption of the Open RAN Standard and make available a pool license of convenience to the market under the complete terms of this Agreement in which the royalties are the same whether one or more patents is used;

WHEREAS, Licensing Administrator commits to make this Agreement available to any party desiring a license on a non-discriminatory basis;

WHEREAS, the Licensing Administrator hereby intends to make available sublicenses in accordance with this Agreement under all Open RAN Essential Patents sublicensable by the

Licensing Administrator as part of this patent pool to any individual, company or other entity desiring such a sublicense under the terms hereof;

WHEREAS, the Licensors agree to make available, through the Licensing Administrator, license rights under all Open RAN Essential Patents that Licensors and their Affiliates now or in the future may own or have the right to license in a single sublicense for the convenience of any individual, company or other entity desirous of acquiring such rights, thereby avoiding the need of such individual, company or other entity to obtain separate licenses from each of the Licensors under its Open RAN Essential Patents;

WHEREAS, Licensee understands that it is free to negotiate directly with one or more Licensors for a separate license to any or all of the Open RAN Patent Portfolio Patents;

WHEREAS, Licensee has elected in its sole discretion to enter into the sublicense grants in this Open RAN Patent Portfolio License under all Open RAN Patent Portfolio Patents and Licensee understands that this Open RAN Patent Portfolio License is offered for the convenience of Licensee to obtain rights under the Patents of several entities in a single license to practice the Open RAN Standard;

WHEREAS, Licensee understands that no license is granted and no royalty is payable on any product manufactured, used or sold unless such product meets the definition of an Open RAN Product, and that all licenses granted by this Agreement are limited licenses as specified herein; and

WHEREAS, Licensee desires to obtain the rights offered in this Open RAN Patent Portfolio License under the terms offered by the Licensing Administrator.

0. EFFECTIVE DATE

Open RAN Standard in the market by Licensee ("Effective Date").

1. **DEFINITIONS**

The definitions set forth in this Article shall apply to the following terms when used with initial capital letters in this Agreement, its attachments, and amendments hereto.

1.1 Affiliate – shall mean a Legal Entity which now or hereinafter directly or indirectly controls, is controlled by, or is under common control with another entity. For purposes of this Section 1.1, control shall mean direct or beneficial ownership of more than fifty percent (50%) of the outstanding shares representing the right to vote for directors or other managing officers of such Legal Entity, or the power to directly or indirectly instruct, appoint, or remove an entity or entities that have the right to make decisions for such Legal Entity. An entity shall be deemed an Affiliate only so long as such control exists.

- **1.2 Agreement** shall mean this sublicense between the Licensing Administrator and Licensee, including exhibits, attachments, amendments and modifications hereto.
- **1.3** Calendar Year shall mean the period commencing on January 1 and concluding on December 31 of any year or any other twelve-month period pursuant to notice given by the Licensing Administrator.
- **1.4 Confidential Information** shall mean any information given to the Licensing Administrator pursuant to Sections 3.9 and 3.10 or handled in accordance with Article 5.
- **1.5 End User** shall mean any Legal Entity which orders, sends, purchases, retrieves, receives or is specifically sent an Open RAN Product for their or its use, whether alone or in combination with any other product, and not for re-Sale.
- **1.6 Legal Entity** shall mean a corporation, limited liability company, limited or general partnership, natural person, company, joint venture, association, trust, estate, unincorporated organization, governmental body or any other entity having the power to sue or be sued under state, provincial or national law.
- **1.7 Licensors (individually Licensor)** shall mean the Legal Entities identified in Attachment 1 hereto.
- **1.8** Manufacture (Manufactured) (Manufacturer) (Make) (Have Made) shall mean,
 - (i) For an Open RAN Product of Section 1.8(i): fabrication, building, constructing, producing, creating, replication, reproduction, copying, assembly, compiling, or otherwise making of the Open RAN Product. For purposes of Section 3.9, in the discretion of the Licensing Administrator, the country of Manufacture shall mean that the country in which an Open RAN Product first exists; and
 - (ii) For an Open RAN Product of Section 1.8(ii): replication, reproduction, copying, linking or otherwise making of the Open RAN Product. For purposes of Article 3, in the discretion of the Licensing Administrator, the country of Manufacture shall mean that country from which the software is initially transmitted to the End User or the country in which software is placed or otherwise used on a physical medium which is Sold or offered for Sale to an End User.
- **1.9 Open RAN Essential Patent** shall mean any and all claims, but only such claims in a Patent which are necessarily infringed in connection with the use or

- implementation of the Open RAN Standard under the laws of the country which issued or published the Patent.
- 1.10 Open RAN Implementation Specific Related Patent shall mean any and all claims, but only such claims, in a Patent in the field of wireless communication, which is not an Open RAN Essential Patent, but which is infringed by practicing a particular part of the Open RAN Standard, wherein there is an alternate way to practice the same particular part of the OPEN RAN Standard without infringing such claims.
- 1.11 Open RAN Licensed Field of Use shall mean the field of use of Open RAN Royalty Products Sold to an End User or offered for Sale by Licensee to an End User for their or its use and not for re-Sale. For the avoidance of doubt, the Open RAN Licensed Field of Use excludes any Manufacture, Sale, transfer or use other than in substantial accordance with the Open RAN Standard, such exclusion extending to, but not excluding the Manufacture, Sale, transfer or use of an Open RAN Product in a system with but not limited to any Other Wireless Communication Standard.
- **1.12 Open RAN Licensed Essential Portfolio** shall mean the portfolio of Open RAN Licensed Essential Patents.
- **1.13 Open RAN Patent Portfolio License** shall mean any license offered by the Licensing Administrator under the Open RAN Licensed Essential Patents which license is materially equivalent to the license granted by the Licensing Administrator under this Agreement.
- **1.14 Open RAN Licensed Essential Patent** shall mean an Open RAN Essential Patent under which a Licensor has the right to grant a license or sublicense to a third party (without payment to any other entity which is not an Affiliate) with the right of such third party to grant sublicenses.
- **Open RAN Product** shall mean an Open RAN Radio Unit in whatever form or implementation, including software and/or hardware, that is:
 - (i) contained in a product Sold to an End User or offered for Sale to an End User, or
 - (ii) software Sold (for compensation or other consideration) to an End User or offered for Sale to an End User that is capable of being installed in a product,

which product, or software capable of being installed in a product, bears the brand name that Licensee owns or otherwise has the right (or apparent right) to use at Licensee's discretion or bearing no brand name if the decision to do so is at the discretion of Licensee. An Open RAN Product includes only the software

and/or hardware that is substantially in accordance with the Open RAN Standard and excludes any other portion or segment of a product that is not substantially in accordance with the Open RAN Standard.

- **1.16 Open RAN Radio Unit** shall mean radio access network (RAN) infrastructure hardware and/or software that is capable of performing any of the functionalities or operations covered by the Open RAN Standard.
- **1.17 Open RAN Royalty Product** shall mean an Open RAN Product for which a royalty is payable to the Licensing Administrator hereunder. An Open RAN Royalty Product is not a licensed under this Agreement unless and until royalties applicable under Article 3 are received and accepted for that particular Open RAN Royalty Product by Licensing Administrator.
- 1.18 Open RAN Standard shall mean the technical specifications and recommendations included in any 3GPP release up to and including release 17 for a 4G Long Term Evolution (4G LTE), 5G Standalone (5G SA), or 5G New Radio (5G NR) radio access network (RAN) solely to the extent that such define any of the functionality and operations identified in either of the two following design specifications adopted by the O-RAN Alliance:
 - (i) O-RAN Hardware Reference Design Specification for Outdoor Micro Cell with Split Architecture Option 7-2 1.0 March 2021 (O-RAN.WG7.OMC-HRD-Opt7-2-v01.00) or
 - (ii) O-RAN Hardware Reference Design Specification for Indoor Picocell FR1 with Split Architecture Option 7-2 2.0 March 2021 (O-RAN.WG7.OMC-HRD-Opt7-2-v02.00).

The definition of Open RAN Standard shall be considered amended for all purposes upon the posting of a new definition to the website of the Licensing Administrator, http://www.alium.com ("Amended Definition"); provided, however, that no Amended Definition shall reduce the scope of any definition of the Open RAN Standard immediately prior to the posting of the Amended Definition. Section 7.2 of this Agreement shall not apply to any Amended Definition.

- **1.19 Other Wireless Communication Standard** shall mean any wireless communication standard other than the Open RAN Standard.
- **1.20 Patent** shall mean any issued patent (including reexaminations, reissues, continuations, divisionals and continuations-in-part) in any country.
- **1.21** Sale (Sell) (Sold) shall mean (whether or not for compensation or other consideration) any sale, rental, lease, license, transfer or other form of distribution of an Open RAN Product as defined in Sections 1.15(i) or 1.15(ii),

either directly or through a chain of distribution, to an End User. A Sale shall be deemed to take place in the country in which title to the Open RAN Product passes to an End User or, at the election of the Licensing Administrator, in the country in which the Open RAN Product is received by an End User. Notwithstanding anything in this Section 1.21 to the contrary, in the case where some or all of the functionality of the Open RAN Product is software or data transmitted by download, the country of Sale shall be the country in which the End User is located or, at the election of the Licensing Administrator, the country from which such software or data is initially transmitted. For further avoidance of doubt, a Licensee and an End User may be the same Legal Entity.

1.22 Terminal Device – shall mean any device which ends a communications link and is a point at which a data signal enters or leaves a communication network which includes but is not limited to mobile phones, smart phones, fax machines, computer terminals, printers and workstations.

2. LICENSING ADMINISTRATOR GRANT

- **2.1 Open RAN License Grant.** For only the Open RAN Licensed Field of Use, upon the Licensing Administrator's receipt and acceptance of applicable royalties due under Article 3 and subject to the terms and conditions of this Agreement, the Licensing Administrator hereby grants to Licensee a royalty-bearing, worldwide, nonexclusive, nontransferable sublicense under all Open RAN Licensed Essential Patents to:
 - (i) Manufacture or have Manufactured an Open RAN Product, and
 - (ii) Sell or offer to Sell an Open RAN Product to an End User, and
 - (iii) Allow an End User to use an Open RAN Product in a wireless communication network.

THE LICENSE GRANTED UNDER THIS SECTION 2.1 IS SUBJECT TO SECTION 2.3 AND LIMITED AS PROVIDED THEREIN. NO LICENSE IS GRANTED UNDER THIS SECTION 2.1 FOR A PARTICULAR OPEN RAN PRODUCT UNLESS AND UNTIL ROYALTIES APPLICABLE UNDER ARTICLE 3 FOR THAT PARTICULAR OPEN RAN PRODUCT ARE RECEIVED AND ACCEPTED BY LICENSING ADMINISTRATOR. IT IS THE INTENT OF THE PARTIES TO THIS AGREEMENT THAT NO SALE OF A PARTICULAR OPEN RAN PRODUCT IS AN AUTHORIZED SALE UNDER THIS AGREEMENT UNLESS AND UNTIL THE APPLICABLE ROYALTY IS RECEIVED AND ACCEPTED BY THE LICENSING ADMINISTRATOR.

2.2 Scope of License Grant.

NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY:

- (I) NO LICENSE RIGHTS ARE GRANTED OR INTENDED TO BE GRANTED RELATED TO OR FOR ANY TERMINAL DEVICE UNDER THIS AGREEMENT. IF ANY PROVISION OF THIS AGREEMENT IS HELD BY A COURT OF COMPETENT JURISDICTION TO GRANT SUCH A LICENSE, THE SCOPE OF THE LICENSE HEREIN UNDER SHALL BE RETROACTIVELY AMENDED AND LIMITED TO EXCLUDE SUCH LICENSE TO A TERMINAL DEVICE.
- (II) THE LICENSE RIGHTS OF SECTION 2.1 ARE INTENDED TO BE LIMITED TO THE LICENSE RIGHTS EXPLICITLY STATED THEREIN AND GRANT NO OTHER RIGHTS UNDER THE OPEN RAN ESSENTIAL PATENTS. NO RIGHTS OTHER THAN THOSE EXPLICITLY STATED IN SECTION 2.1 MAY BE EXHAUSTED BY VIRTUE OF THIS AGREEMENT.
- (III) NO LICENSE IS GRANTED HEREIN TO ANY PORTION OR SEGMENT OF ANY PRODUCT EXCEPT THOSE PORTIONS OR SEGMENTS OF SUCH PRODUCT OR THING THAT COMPLY WITH THE OPEN RAN STANDARD.
- (IV) NO OTHER LICENSES ARE GRANTED HEREIN FOR COVERAGE PROVIDED UNDER ANY OTHER PATENT PORTFOLIO LICENSE OFFERED BY LICENSING ADMINISTRATOR.
- (V) NO SALE OF ANY PRODUCT (OR USE THEREOF) IS AN AUTHORIZED SALE (OR USE) UNDER THIS AGREEMENT UNLESS AND UNTIL THE APPLICABLE ROYALTY IS RECEIVED AND ACCEPTED BY THE LICENSING ADMINISTRATOR. NO PRODUCT BECOMES LICENSED UNDER THIS AGREEMENT UNLESS AND UNTIL THE APPLICABLE ROYALTY IS RECEIVED AND ACCEPTED BY THE LICENSING ADMINISTRATOR.
- **2.3 No License or Immunity Unless Expressly Granted.** No license, covenant to not assert or immunity is granted by either party to the other party, either directly or by implication, estoppel or otherwise, other than as expressly provided herein.
- **2.4 No Sublicenses.** Licensee has no right to grant sublicenses under this Agreement.

3. ROYALTIES AND PAYMENTS

- 3.1 Open RAN Product Royalties. Licensee shall pay to the Licensing Administrator a running royalty throughout the term of this Agreement on all Open RAN Products (Licensee's product may contain or include more than one Open RAN Product) licensable by this Agreement that are Sold by Licensee or as otherwise required by this Agreement as follows:
 - 3.1.1 Open RAN Product. Subject to Section 3.2, the royalty in any Calendar Year for the sublicense granted pursuant to Section 2.1 hereof for each Open RAN Product Sold (a "Unit") on or after January 1, 2022, which Open RAN Product is Manufactured or Sold in a country in which one or more Open RAN Patent Portfolio Patents is in force shall be as follows:

Unit Sales In Any Calendar	
Year Starting January 1, 2022	Royalties Payable per Unit
0 to 10,000 Units	\$ 25.00
10,001 to 50,000 Units	\$ 20.00
50,001 to 200,000 Units	\$ 15.00
200,001 or more Units	\$ 10.00

- **3.2 Applicable Royalty Payments.** Subject to the terms of this Article 3, the royalties set forth in this Article 3 are additive as to each Open RAN Royalty Product Sold to the extent that individual royalties specified in this Article 3 are applicable thereto including, without limitation, when multiple such Open RAN Royalty Products are included in a single product, which is an Open RAN Product Sold.
- **3.3 Disabled Products.** Upon the Sale of Open RAN Products in an encrypted, disabled, or otherwise unusable form (for purposes of this Section 3.3, collectively, "Disabled Products").
 - **3.3.1** Royalties pursuant to Article 3 are payable upon the Sale of Disabled Products in which the Open RAN Product is encrypted, disabled or otherwise unusable only:
 - **3.3.1.1** upon the distribution of a key or other instrumentality allowing the Disabled Product to be used;
 - **3.3.1.2** if the encryption, disablement or other method employed to prevent use of the Disabled Product is generally breached, royalties for all such Disabled Products Sold shall immediately become payable pursuant to Article 3; or
 - **3.3.1.3** if Licensee fails to take reasonable steps to ensure that the Open RAN Product is encrypted, disabled or otherwise unusable,

royalties for all such Disabled Products Sold shall immediately become payable pursuant to Article 3.

3.4 Payment Schedule.

- 3.4.1 Payment of Per Unit Royalties. Per Unit royalties payable pursuant to Section 3.1 on Open RAN Royalty Products Sold after the latest signature date ("Signature Date") specified on the final page of this Agreement shall be payable by Licensee to the Licensing Administrator semiannually. The first payment for Open RAN Royalty Products licensed pursuant to Article 2 which are Sold starting on the Signature Date through the six-month period thereafter shall be due on the last calendar day of the second month following this six-month period unless Licensee and Licensing Administrator otherwise agree. Payment for each next six-month period shall be made in the same manner.
- 3.4.2 Back Royalties. Any royalties pursuant to the above schedule on Open RAN Royalty Products Sold under the terms of this Agreement during the period between January 1, 2022 (hereinafter "Royalty Date") and the latest Signature Date of this Agreement (hereinafter "Back Royalties") shall be payable within one calendar month of such Signature Date together with accrued interest of ten percent (10%) per annum from the later of (1) the date of Sale of the Open RAN Royalty Product to which the royalty applies or (2) the date an Open RAN Patent Portfolio License was first offered to the market, and shall be accompanied by a royalty statement in accordance with Section 3.9.
- 3.5 Payments Upon Termination or Expiration. Within thirty (30) days after the effective date of termination or expiration of this Agreement, Licensee shall pay the Licensing Administrator (i) any and all amounts that are due pursuant to this Agreement as of the effective date of such termination or expiration, preceded by a royalty statement for such payment in accordance with Section 3.9, and (ii) all amounts at the applicable royalties specified in Article 3 for all Open RAN Royalty Products in the possession of the Licensee as if such Open RAN Royalty Products had been Sold as of the effective date of such termination or expiration, unless a royalty has already been paid for those products under an Open RAN Patent Portfolio License.
- **3.6 Form of Payment.** Any payment made under the provisions of this Agreement shall be made in United States Dollars and by wire transfer to the account designated by the Licensing Administrator in writing to the Licensee or other means the Licensing Administrator shall, in its sole discretion, find acceptable.
 - **3.6.1 Taxes.** In addition to the royalties set forth in Article 3, Licensee shall pay or reimburse the Licensing Administrator for any and all taxes, such as sales, excise, value added, use taxes, consumption taxes, and similar

taxes of the Licensee, based on payments to be made hereunder in a jurisdiction(s) where such taxes are required. The royalties set forth in Article 3 shall be subject to withholding of any taxes of the Licensors required by applicable law. Withholding taxes, although withheld from royalty payments and remitted to the tax authority as required by law, are deemed paid by Licensors because the Licensors are the beneficial owners of all royalties. At the Licensing Administrator's request, the Licensee shall file any necessary tax forms required or desirable in order to apply for the application of rates under tax treaties. Nothing in this Section 3.6.1 shall require Licensee to take any action inconsistent with any applicable law or government regulation.

- 3.6.2 The Licensee shall not be required to pay or reimburse the Licensing Administrator for taxes based upon the net worth, capital, net income, or franchise of the Licensing Administrator, nor for taxes imposed upon the Licensing Administrator solely by reason of the Licensing Administrator's doing business in or being incorporated in the jurisdiction imposing such taxes.
- 3.6.3 The Licensee shall reasonably cooperate with the Licensing Administrator in respect to mitigation of any withholding taxes, including providing such information as may be required by the Licensing Administrator for purposes of obtaining refunds of any taxes withheld.
- **3.6.4** The Licensing Administrator shall reasonably cooperate and provide such information as may be required by the Licensee for any purpose or reason relating to taxation.
- **3.6.5** If the Licensee in good faith contests any tax that is payable or reimbursable by the Licensee, the Licensing Administrator shall reasonably cooperate in such contest at the Licensee's expense.
- **3.6.6** The Licensing Administrator shall pass on to the Licensee any tax refunds received by the Licensing Administrator with respect to the Licensee's previous payment or reimbursement of applicable taxes, if any.
- 3.7 Late Payments. Any payment required hereunder that is received by the Licensing Administrator after the date it is due pursuant to the terms of Article 3 (including unpaid portions of amounts due) shall bear interest, compounded monthly, at the lesser of ten percent (10%) per annum or the highest interest rate permitted to be charged by the Licensing Administrator under applicable law.
 - **3.7.1** Excess Interest. Any interest charged or paid in excess of the maximum rate permitted by applicable law shall be deemed the result of a mistake

- and interest paid in excess of the maximum rate shall be promptly credited or refunded (at Licensee's option) to Licensee.
- **3.7.2 When Payments are Deemed Made.** No payment shall be deemed made under this Agreement until the funds in the appropriate amount and as specified in this Agreement are actually received by the Licensing Administrator. All received payments are non-refundable for any reason.
- **3.8 Dishonored Payments.** If any payment due from Licensee under this Agreement is dishonored, the payment may, at the Licensing Administrator's option, be deemed not to have been made. The Licensing Administrator may, at its option, by written notice to Licensee, require subsequent payments to be made by wire transfer or cashier's check in immediately available funds.
- **3.9 Statements.** Royalty statements as specified in this Section 3.9 shall be provided in electronic form to the Licensing Administrator at least thirty (30) days before a royalty payment, if any, associated with such statement is due.

3.9.1 Information Required on Royalty Statements.

- **3.9.1.1** Royalties paid pursuant to Section 3.1 shall be accompanied by a statement that shall show in reasonable detail both (a) the quantity and country of Manufacture of any and all Open RAN Products, and (b) the quantity and country of Sale of any and all Open RAN Products Sold by Licensee during such reporting period, and a calculation of the royalties, if any, which are payable by virtue of such Sale of Open RAN Products during the period when the payment, if any, accrued.
- **3.9.1.2** Royalties paid pursuant to Section 3.1 shall be accompanied by a statement which shall show the total quantity of global Sales of Open RAN Products respectively.
- 3.9.2 The Licensing Administrator shall maintain all information in such statements of Licensee as Confidential Information in accordance with Article 5 of this Agreement, except to the extent that the information is needed by the Licensing Administrator to report to the Licensors the aggregate royalties paid by all sublicensees of the Licensing Administrator, including by geographic region. In no event shall the Licensing Administrator provide to any of the Licensors information on royalties paid on a sublicensee-by-sublicensee basis unless required by law, court order, or rule or regulation.
- **3.9.3** The Licensing Administrator shall have sole discretion to apply any royalties paid by Licensee to any Open RAN Royalty Product for which

a royalty is due under this Agreement, regardless of whether they are reported under this Agreement by Licensee.

3.10 Audits.

- **3.10.1 Books and Records.** Licensee shall keep and maintain accurate and detailed books and records adequate for the Licensing Administrator to ascertain the royalties payable hereunder. In the normal course of business, Licensee shall maintain all books and records pertaining to a particular royalty reporting period but in no event shall such books and records be maintained for less than three (3) years from the date on which a royalty is paid or becomes due in respect of such period.
- **3.10.2 Audit Rights.** In accordance with all of the provisions of Section 3.10, the Licensing Administrator shall have the right to have the books and records of Licensee audited relating to payments made or due hereunder for any and all periods of Open RAN Essential Portfolio coverage from the Royalty Date for the sole purpose of verifying any underpayments or shortfalls of the amounts due and payable hereunder, not more than once per Calendar Year (unless an audit reveals a shortfall as provided in this Section in which case there shall be no such limitation) upon reasonable notice to the Licensee. If reasonably practicable, all such audits shall be conducted during reasonable business hours of the Licensee.
 - **3.10.2.1** Any such audit shall be performed by a certified public accountant(s), consultant(s), or equivalent ("Auditor") as selected by the Licensing Administrator. Licensee shall fully cooperate with Auditor in conducting such audit and shall permit Auditor to inspect and copy such portions of the Licensee's books and records that the Auditor deems appropriate and necessary ("Necessary Records"). It shall be a material breach of this Agreement for the Licensee to fail to provide to Auditor such Necessary Records.
 - 3.10.2.2 The Licensing Administrator shall have the Auditor (and each member or employee thereof participating in the audit) agree not to disclose any information learned by the Auditor in the audit, nor use any such information, except (i) for providing the Licensing Administrator with a statement of payments due by Licensee in sufficient detail consistent with Section 3.9; or (ii) in connection with the Licensing Administrator's enforcement of rights under this Agreement.
 - **3.10.2.3** The cost of an audit in accordance with Section 3.10.2 shall be at the expense of the Licensing Administrator; provided, however, the Licensee shall pay the full cost of the audit if the

audit reveals any underpayment which in the aggregate is greater than five percent (5%) of the amount actually due for the period being audited. Any payments due by the Licensee under Section 3.11 shall be due within thirty (30) days of notice from Licensing Administrator.

3.10.2.4 Regardless of whether there is agreement on the results of the audit, within thirty (30) days after receiving notice from the Licensing Administrator of any shortfalls uncovered in the audit, Licensee shall pay (i) any shortfalls plus interest as set forth in Section 3.8, as measured from the date when such shortfall should have been paid; and (ii) the cost of the audit if required under Section 3.10.2.3.

4. REPRESENTATIONS AND WARRANTIES

- **4.1** The Licensing Administrator represents and warrants that it has the authority, power and right to grant the rights and licenses to Licensee under this Agreement.
- 4.2 The Licensing Administrator makes no representation or warranty that the Open RAN Licensed Essential Patents sublicensed hereunder includes all Open RAN Essential Patents throughout the world, or that the making, using or selling of products, or providing services covered by the claims of the Open RAN Licensed Essential Patents licensed hereunder will not infringe, directly, contributorily, by inducement or otherwise, any patent or other intellectual property right of a person or entity other than the Open RAN Licensed Essential Patents.
- 4.3 Licensee represents and acknowledges that (a) Licensee is entering into this Agreement for its own convenience to acquire rights under Open RAN Essential Patents from multiple licensors in a single transaction, (b) Licensee is fully aware that the Patents in the Open RAN Licensed Essential Portfolio may not include all present and future Open RAN Essential Patents, and that this Agreement may not provide Licensee with all the Patent rights or other rights needed to perform the activities contemplated by Licensee in entering into this Agreement, (c) Licensee understands that the terms of this Agreement require the payment of the same specified royalty regardless of the number of Open RAN Essential Patents in the Open RAN Licensed Essential Portfolio that may be used or infringed, (d) that the royalties specified herein are fair and reasonable for a license under one or more Open RAN Essential Patents, and (e) for any product licensable hereunder for which applicable royalties have not been received and accepted by the Licensing Administrator, the Licensing Administrator shall be free to elect its remedies and pursue its remedies, e.g. by breach of contract or for Licensors to pursue Patent infringement.

- 4.4 Licensee acknowledges and understands that in granting Licensee a license under all Open RAN Licensed Essential Patents that Licensors and their Affiliates now or in the future may own or have the right to license, the Licensing Administrator makes no representation that any specific Patent is an Open RAN Essential Patent.
- 4.5 Except as provided in Section 7.5.1, Licensee represents and warrants that it has not and will not grant an exclusive license under an Open RAN Essential Patent owned by Licensee and has not assigned an Open RAN Essential Patent or application in anticipation of entering into this Agreement except for purposes of making it available as part of the Open RAN Licensed Essential Portfolio or to Licensing Administrator for enforcement purposes.
- 4.6 Licensee represents that it understands it is not required by this Agreement to use all Open RAN Licensed Essential Patents licensed herein, and that the respective royalty rates specified in this Agreement represent the value to Licensee of making, using, Selling and/or offering for Sale an Open RAN Product under this Agreement and not the value of using any particular Open RAN Licensed Essential Patent. Licensee further acknowledges that an Open RAN Product uses one or more Open RAN Licensed Essential Patents.
- 4.7 Licensee represents that it understands that nothing in this Agreement prevents Licensee from using, licensing or in any other way dealing in or with any other technology, whether or not such technology is deemed to be competitive with the Open RAN Standard.
- 4.8 Licensee represents that it understands that the royalty rates specified in this Agreement are payable under the terms of this Agreement for the life of this Agreement and that nothing shall compel the Licensors or the Licensing Administrator to reduce the royalties specified in this Agreement during the term of this Agreement.
- **4.9** Each party represents and warrants that it will comply with all applicable laws, regulations or ordinances pertaining to its performance hereunder.
- **4.10** Each party represents and warrants that this Agreement and the transactions contemplated hereby do not violate any agreements to which it is subject.
- **4.11** Each party further represents and warrants that in executing this Agreement, it does not rely on any promises, inducements, or representations made by any party or third party with respect to this Agreement or any other business dealings with any party or third party, now or in the future with the exception of the terms of this Agreement.
- **4.12** Each party represents and warrants that it is not presently the subject of a voluntary or involuntary petition in bankruptcy or the equivalent thereof, does

not presently contemplate filing any such voluntary petition, and does not presently have reason to believe that such an involuntary petition will be filed against it.

- 4.13 Licensee and the Licensing Administrator recognize that the royalties payable shall neither increase nor decrease because of an increase or decrease in the number of Open RAN Essential Patents in the Open RAN Licensed Essential Portfolio or because of an increase or decrease in the prices of its Open RAN Royalty Products such that, for example, the royalties set forth herein are not the sum of the royalties for licenses for individual patents in the Open RAN Licensed Essential Portfolio but rather the value of a license granted under the Open RAN Licensed Essential Portfolio taking into consideration the commercial intention of the Licensors to facilitate adoption of the Open RAN Standard and make available a pool license under the complete terms of this Agreement in which royalties are the same whether one or more patents is used.
- **4.14** Other than the express warranties of this Article 4, there are NO OTHER WARRANTIES, EXPRESS OR IMPLIED.

5. CONFIDENTIAL INFORMATION

- 5.1 For a period of five (5) years as measured from the first date of disclosure pursuant to this Agreement, the Licensing Administrator agrees to use reasonable care and discretion, at least commensurate with that degree of care it uses to protect similar information of its own, to avoid disclosure, publication, or dissemination of received Confidential Information, outside of those employees, officers, or consultants of the Licensing Administrator who have a need to know Confidential Information.
- 5.2 Disclosure by the Licensing Administrator of Confidential Information under Section 5.1 of this Agreement shall be permitted in the following circumstances; provided that (except with respect to Section 5.2.3) the Licensing Administrator shall have first given reasonable notice as practicable to Licensee that such disclosure is to be made:
 - **5.2.1** In response to an order of a court, legal process or other governmental body where such disclosure shall be made under any applicable protective order;
 - **5.2.2** Otherwise required by law;
 - **5.2.3** Necessary to establish rights under this Agreement; or
 - **5.2.4** If necessary in a proceeding before a governmental tax authority.

- 5.3 Notwithstanding any other provisions of this Agreement, the obligations specified in Section 5.1 of this Agreement will not apply to any information that:
 - **5.3.1** Is or becomes publicly available without breach of this Agreement; or
 - **5.3.2** Is released for disclosure by written consent of the Licensee.

6. TERM AND TERMINATION

- on December 31, 2027. Upon expiration, this Agreement shall be automatically renewed for successive five (5) year periods for the life of any Open RAN Licensed Essential Patent (unless terminated pursuant to Section 6.4) upon thirty (30) days' notice of renewal to Licensee by the Licensing Administrator. Renewal may be conditioned upon compliance with any reasonable amendments or changes to the terms and conditions of this Agreement as set forth in such notice. Such reasonable change or amendment may take into account prevailing market conditions, changes in technological environment, and available commercial products at the time of each five (5) year renewal. In no event shall the royalties specified in Section 3.1 increase upon each renewal of this Agreement by more than twenty percent (20%) of the royalty rates applicable to such specific Open RAN Royalty Product and specific license grant as set forth in the sublicense immediately prior to renewal.
- 6.2 Termination for Material Breach. The Licensing Administrator shall have the right to terminate this Agreement upon breach of a material provision thereof by the Licensee. Subject to Section 6.5.7, such termination for material breach shall become effective upon the Licensing Administrator sending written notice to the Licensee specifying the breach, and the failure of the Licensee to demonstrate, to the satisfaction of the Licensing Administrator, that Licensee has cured such breach within thirty (30) days of the sending of such notice. A material breach as that term is used herein shall include, but is not limited to:
 - **6.2.1** Failure of the Licensee to make payments and provide statements in accordance with this Agreement;
 - **6.2.2** Failure of the Licensee to maintain adequate books and records or to permit an audit in accordance with Section 3.10; or
 - **6.2.3** Failure of the Licensee to grant licenses to an Open RAN Essential Patent licensable or sublicensable by Licensee in accordance with at least one of Section 7.3 or 7.4.
- **6.3** Partial Termination in the Event of Litigation Brought by Licensee. The Licensing Administrator, upon the instruction of a Licensor, shall terminate Licensee's sublicense under one or more Open RAN Licensed Essential Patents

licensed or sublicensed to the Licensing Administrator by such Licensor in the case of one of the following events.

- 6.3.1 The Licensee or an Affiliate has brought a lawsuit or other proceeding for infringement of an Open RAN Implementation Specific Related Patent and/or an Open RAN Essential Patent against such Licensor, and Licensee or its Affiliate has refused to grant the Licensor a license on fair and reasonable terms and conditions under the Open RAN Implementation Specific Related Patent and/or Open RAN Essential Patent upon which the lawsuit or other proceeding is based.
- 6.3.2 In the event Licensee exercises any of its Have Made rights under Article 2 with any party or obtains all or part of an Open RAN Product from such party ("Have-Made Supplier") and:
 - (i) such Have-Made Supplier brings a lawsuit or other proceeding for infringement of any Open RAN Essential Patent or Open RAN Implementation Specific Related Patent against a Licensor,
 - (ii) upon Licensor's representation that such Have-Made Supplier refuses to grant the Licensor a license on fair and reasonable terms and conditions under an Open RAN Essential Patent and/or an Open RAN Implementation Specific Related Patent upon which the lawsuit or other proceeding is based, and
 - (iii) pursuant to this Section 6.3.2, Licensor requests that Licensing Administrator revoke the Licensee's Have Made rights and/or Licensee's rights pursuant to Section 2.1 for any Open RAN Product resulting from Licensee's use of such Have-Made Supplier,

then the Licensing Administrator shall revoke with six (6) months prior notice such Licensee's rights under any Open RAN Licensed Essential Patent licensed or sublicensed to the Licensing Administrator by such Licensor with respect to Licensee's use of such Have-Made Supplier, and any Open RAN Product resulting from Licensee's use of such Have-Made Supplier shall not be licensed under such rights provided in this Agreement as they relate to such Licensor's Open RAN Essential Patents in any respect whatsoever. Termination of Licensee's sublicense of any Open RAN Licensed Essential Patent shall be effective as of the date written notice is sent to Licensee by Licensing Administrator.

6.4 Voluntary Termination. Licensee may terminate this Agreement by providing six (6) months' written notice to the Licensing Administrator.

- **6.5 Other Terminations.** In addition to other provisions set forth in this Agreement, this Agreement, in whole or in part as may be permitted by applicable law, may be terminated by the Licensing Administrator upon the occurrence of the following events:
 - **6.5.1** If Licensee files a petition in bankruptcy or the equivalent thereof, or is the subject of an involuntary petition in bankruptcy that is not dismissed within sixty (60) days after the filing date thereof, or is or becomes insolvent, or admits of a general inability to pay its debts as they become due.
 - **6.5.2** Upon the de facto or de jure nationalization or expropriation of Licensee by governmental or military action, whether or not with valid authority.
 - **6.5.3** Upon any failure by Licensee to provide, within thirty (30) days after written notice from the Licensing Administrator, satisfactory and adequate assurances that Licensee is able and willing to fully and effectively perform its obligations under this Agreement.
 - **6.5.4** Within thirty (30) days after written notice (unless cured within that period) from the Licensing Administrator of Licensee's failure during the term of this Agreement to pay royalties due and/or provide statements as required by this Agreement.
 - **6.5.5** Upon determination of a court of competent jurisdiction that an Affiliate of Licensee has infringed a Patent licensed under this Agreement.
 - 6.5.6 If Licensee in any judicial or administrative proceeding or the equivalent thereof asserts a position that is in conflict with any of the representations, warranties, or covenants made by Licensee in this Agreement, regardless of whether such representations and/or warranties are set forth in the whereas clauses of this Agreement or in Article 4 or in Sections 7.3, 7.4 and 7.5. Termination pursuant to this Section 6.5.6 shall be effective as of the date written notice is sent to Licensee by Licensing Administrator.
 - 6.5.7 In the event that any of the events listed in Sections 6.5.1, 6.5.2, 6.5.3, 6.5.5 or 6.5.6 hereof occur, this Agreement may be terminated by the Licensing Administrator upon thirty (30) days' written notice to Licensee, without any right of Licensee to cure.
- **6.6 Survival.** The following provisions of this Agreement shall survive expiration or termination of this Agreement:

- **6.6.1** The obligation of Licensee to pay all royalties accrued pursuant to Article 3 as of the effective date of expiration or termination;
- **6.6.2** The obligation of Licensee to provide statements as applicable under Section 3.9 and to allow for an audit pursuant to Section 3.11 within three (3) years of termination of this Agreement
- **6.6.3** The obligation of the Licensing Administrator to maintain confidentiality under Article 5; and
- **6.6.4** Any licenses granted by Licensee pursuant to Sections 7.3 and 7.4 prior to expiration or termination.

7. MISCELLANEOUS PROVISIONS

7.1 Assignment.

- **7.1.1** In the event that the right of the Licensing Administrator to grant Open RAN Patent Portfolio Licenses is transferred to a successor Licensing Administrator, the rights and obligations of this Agreement shall be deemed assigned to the successor Licensing Administrator.
- 7.1.2 This Agreement may not be assigned by the Licensee to any other person or entity under any circumstances; provided, however, that this Agreement may be assigned or transferred, with Licensing Administrator's prior consent, to a transferee that is either (a) the purchaser of all or substantially all of the operating assets (other than cash) of Licensee, or (b) the successor of Licensee in connection with the sale of all, or substantially all, of the outstanding capital stock of Licensee, or (c) the successor of Licensee in connection with a merger or other combination, including an acquisition, asset sale, asset purchase or otherwise. Licensee shall provide thirty (30) days' written notice after any such transfer transaction to Licensing Administrator. This provision does not exempt a Licensee's successor(s) in interest from liability for any unpaid royalties regardless of whether the Agreement is executed by such Licensee or its successor(s) in interest.
 - **7.1.2.1** In the event of such assignment or transfer, pursuant to Section 3.5.3, the transferee shall pay any additional Back Royalties that may be due for Open RAN Royalty Products that were Sold by the transferee during the period from the Royalty Date to the effective date of the assignment or transfer of the Agreement.

- 7.2 Notice to Licensee or Licensing Administrator.
 - **7.2.1** All notices required or permitted under this Agreement to Licensee or the Licensing Administrator shall be sent by either Certified Mail with return receipt requested, overnight delivery by commercial or other service which can verify delivery, fax to the number(s) indicated herein, or by e-mail to the address(es) indicated herein. Such notice so sent shall be effective as of the date it is sent.
 - **7.2.2** All notices from the Licensing Administrator to Licensee shall be sent to:

Name:	
Title:	
Company	
:	
Address:	
Tel:	
Fax:	
E-mail:	
CC:	
Name:	
Title:	
Company	
:	
Address:	
Tel:	
Fax:	
E-mail:	

7.2.3 All notices from the Licensee to the Licensing Administrator or its successor shall be sent to:

License Management

Open RAN Licensing Program

E-mail: LicenseManagement@alium.com

Website: www.alium.com

7.3 Licensee Grant. Upon full execution of this Agreement, and as part of the consideration for the license granted in this Agreement, Licensee agrees to grant

a nonexclusive license and/or sublicense for the Open RAN Licensed Field of Use under any and all Open RAN Essential Patents that Licensee or its Affiliate(s), if any, has the right to license and/or sublicense, to any Licensor, or any Open RAN sublicensee of the Licensing Administrator desiring such a license and/or sublicense on fair and reasonable terms and conditions.

Licensee's Option. In lieu of Section 7.3 and upon full execution of this 7.4 Agreement, Licensee shall have the option to hereby grant a nonexclusive license and/or sublicense for the Open RAN Licensed Field of Use under any and all of its Open RAN Essential Patents to the Licensing Administrator with the right by the Licensing Administrator to grant Open RAN Patent Portfolio Licenses that include the Open RAN Essential Patents that License and its Affiliates, if any, have the right to license or sublicense. The terms and conditions of the license and/or sublicense granted by the Licensee to the Licensing Administrator under this Section 7.4 shall be identical to the terms and conditions of the license and/or sublicense granted by each Licensor to the Licensing Administrator. If Licensee elects the option set forth in this Section 7.4, it shall be required to enter into the "Agreement Among Licensors", the "Licensing Administrator Agreement" and the "License from Licensor to Licensing Administrator", which have been entered into by all Licensors.

7.5 Licensee Covenants.

7.5.1 In the event that Licensee or any of its Affiliates has granted an exclusive license to a third party under an Open RAN Essential Patent prior to the date of Licensee's execution of this Agreement, Licensee shall advise the Licensing Administrator prior to the execution of this Agreement of such an exclusive license and identify to the Licensing Administrator such third party.

7.6 Licensing Administrator Covenants.

- **7.6.1** The Licensing Administrator covenants that if during the term of this Agreement, it acquires rights to grant sublicenses under additional Open RAN Essential Patents, the Open RAN Patent Portfolio License herein will be supplemented to include such additional Open RAN Essential Patents.
- 7.7 Most Favorable Royalty Rates. Except as provided in Section 7.7.1, in the event that the Licensing Administrator grants an Open RAN Patent Portfolio License to another party with royalty rates more favorable than those available in Article 3 as they pertain to the specific products which are licensed thereunder, whether or not such more favorable royalty rates are on terms and/or conditions that are different than those set forth herein, the Licensing Administrator shall send written notice to Licensee specifying the more favorable royalty rates and any terms and/or conditions that are different than

those set forth herein within thirty (30) days of the granting of the Open RAN Patent Portfolio License providing for such more favorable royalty rates. Licensee shall be entitled to an amendment of this Agreement to the extent of providing for royalty rates as favorable as that available to such other party within thirty (30) days of sending written notice to the Licensing Administrator requesting such amendment; provided, however, that this Agreement shall also be amended to include any additional terms provided in connection with the more favorable royalty rate as specified by the Licensing Administrator. Any amendment made pursuant to this Section 7.7 shall be effective as of the date it is made, and such more favorable royalty rates shall not be retroactively applicable in favor of the Licensee, and shall not be a basis for claiming any refund of royalties paid prior to such effective date.

- **7.7.1** Section 7.7 shall not apply to:
 - **7.7.1.1** Settlement of litigation;
 - **7.7.1.2** Determination by the Licensing Administrator of Back Royalties owed by a sublicensee or prospective sublicensee;
 - **7.7.1.3** Compromise or settlement of royalty payments owed by a sublicensee in financial distress:
 - **7.7.1.4** Any individual licenses or sublicenses granted by a Licensor to a third party prior to the formation of this license;
 - **7.7.1.5** An order of a court or an administrative body; and
 - **7.7.1.6** An unauthorized act of the Licensing Administrator.
- **7.8** Freedom of Independent Development. Nothing in this Agreement shall be construed as prohibiting or restricting Licensee from independently developing competitive products or services.
- **7.9 Relationship.** Nothing in this Agreement shall be construed to create a principal-agent relationship, partnership or joint venture between the parties, or give rise to any fiduciary duty from one party to the other party.
- **7.10 Severability.** If any provision of this Agreement is held by a court of competent jurisdiction to be unenforceable or contrary to law, the remaining provisions of this Agreement will remain in full force and effect to the extent that the interests of the parties in entering this Agreement can be realized.
- **7.11 No Waiver.** The failure of either party at any time to require performance by the other party of any provision of this Agreement shall not be construed as acquiescence or waiver of such failure to perform such provision. The failure of

- either party to take action upon the breach of any provision of this Agreement shall not be construed as acquiescence or waiver of any such breach.
- **7.12 Binding on Successors.** This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns to the extent assignment is permitted by this Agreement.
- **7.13** Article and Section Headings. The Article and Section headings contained in this Agreement are for reference purposes only and shall not in any way control the meaning or interpretation of this Agreement.
- **7.14 Representation of Counsel; Mutual Negotiation.** Each party had the opportunity to be represented by counsel of its choice in negotiating this Agreement. This Agreement shall therefore be deemed to have been negotiated at arm's-length, with the advice and participation of counsel, and prepared at the joint request, direction, and instruction of the parties, and shall be interpreted in accordance with its terms without favor to any party.
- **7.15 English Language.** The parties have required that this Agreement and all documents relating thereto be drawn up in English.

7.16 Bankruptcy.

- 7.16.1 In the event that the Licensing Administrator files a petition under the United States federal bankruptcy laws, or that an involuntary petition shall be filed against the Licensing Administrator, the parties intend that Licensee shall be protected in the continued enjoyment of its rights as Licensee under the Open RAN Essential Patents sublicensed hereunder to the maximum feasible extent including, without limitation, if it so elects, the protection conferred upon licensees under 11 U.S.C. Section 365(n). The Licensing Administrator agrees that it will give Licensee notice of the filing of any voluntary or involuntary petition under the United States federal bankruptcy laws.
- **7.16.2** The Open RAN Essential Patents sublicensed hereunder shall be deemed to be "intellectual property" as the term is defined in 11 U.S.C. Section 101(35A). All written agreements entered into in connection with the parties' performances hereunder from time to time shall be considered agreements "supplementary" to this Agreement for purposes of said Section 365(n).
- **7.17 Choice of Law and Consent to Jurisdiction.** The validity, construction and performance of this Agreement shall be governed by the substantive law of the State of New York, United States of America, without regard to the conflict of law rules. The parties to this Agreement hereby consent to the jurisdiction of the federal and state courts of the states of Colorado, Delaware, Maryland and/or

New York ("Applicable Courts") in the event of any dispute arising under or in connection with this Agreement. In the event either party files an action against the other in any Applicable Court, the other party hereby waives any right to assert lack of personal jurisdiction.

7.18 No Third-Party Beneficiaries. Except as provided in this Section 7.18, nothing in this Agreement shall be construed to give rise to any obligation on either party hereto for the benefit of a third party other than the Licensors or to confer any rights on any third party other than the Licensors. Notwithstanding anything to the contrary herein, any licensee under an Open RAN Patent Portfolio License which is in full compliance with its obligations under such license shall be deemed a third-party beneficiary of the obligations under Section 7.3 of any other licensee.

7.19 Entire Agreement.

- **7.19.1** The provisions of this Agreement, including its attachments, referenced agreements, and any amendments, constitute the entire agreement between the parties, and supersede any and all prior communications and understandings, oral or written, between the parties relating to the subject matter hereof.
- **7.19.2** Except for amendments to the Open RAN Standard, no amendment of this Agreement shall be effective unless such amendment is in writing and specifically references this Agreement, and is signed by all parties hereto.
- **7.20** Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(Licensee)

	(214411244)
Date:	By:
	Alium LLC
Date:	By:
	President and CEO