CYBERSECURITY TESTING & CERTIFICATION SERVICE TERMS

These Cybersecurity Testing and Certification Service Terms ("Service Terms") shall govern the provision of cybersecurity testing and certification services by the UL Contracting Party (as identified in the Quotation or Project Confirmation) and set out the responsibilities and obligations of the Client. These Service Terms, the Global Services Agreement ("GSA") between the Parties, and each Quotation or Project Confirmation form the Service Agreement for cybersecurity testing and certification services. The capitalized terms in these Service Terms, which are not defined herein, shall have the same meaning as in the GSA. In case of any conflict, the terms of the GSA shall prevail.

1) **Scope.** The Services (as defined in Section 4) address: (A) testing and certification services solely for network-connectable products, including software and firmware, and (B) certification services for organizational capabilities. The Services are not intended to identify any vulnerabilities or weaknesses that may arise from the incorrect or inadequate configuration, manufacture, installation, integration, maintenance, or removal of a product, whether standalone or in combination with any other product or service. The Services do not cover evaluation or investigation of functional testing of a product and do not address whether the product functions as designed, unless specifically stated in the Quotation or Project Confirmation. The Services also do not address vulnerabilities or weaknesses that arise from physical loss, destruction, tampering, damage, extreme weather conditions, or any other harm, other than cyber-enabled means expressly stated in these Service Terms, the Quotation and/or Project Confirmation. Private labeling is addressed in Section 5.

2) **Obligations of the Client.**
   a) The Client shall provide the UL Contracting Party with an attestation of intended use and all documented configurations, specifications, processes, procedures, or other information related to the product for testing and/or certification prior to scheduled testing under any Quotation or Project Confirmation.
   b) The Client shall provide the UL Contracting Party with a production sample or near equivalent for testing and/or certification prior to scheduled testing under any Quotation or Project Confirmation.
   c) The Client shall provide the UL Contracting Party with all requested feedback, response to additional information requests and reasonable technical support**.**
   d) The Client shall backup all data, programs or other files before testing begins, and the Client acknowledges and accepts that the UL Companies shall not be liable for any loss of data or business interruption that may result from the Services.
   e) If product certification is sought:
      i) The Client shall establish and provide to the UL Contracting Party documentation of a security risk analysis file for the product, containing security risks identified in the product and suitable risk controls to mitigate each threat of a security risk with an acceptable and unacceptable risk level identified by the Client.
      ii) The Client represents and warrants that it is the responsible manufacturer for the products(s) for which it may be eligible to receive the UL 2900 certificate; or if the Client is not the original responsible manufacturer, in order to be eligible to receive the UL 2900 certificate, the Client shall ensure that the manufacturer complies with the requirements for the certificate. The Client shall also ensure that the product it places into the stream of commerce and represents as having achieved certification is identical to the original certified product with respect to the scope of certification and agrees not to transfer or assign rights for the use of the certificate to third parties. All required minor releases related to the product during the period of the valid certification that do not affect the cybersecurity aspects of the product which have been

exercised through the Client's assessed risk management program shall not invalidate certification.

f) If a product earns certification, for the period of the valid certification:
   i) The Client shall provide the UL Contracting Party with timely notice of any security vulnerability, weakness or defect in the product that is identified by the Client or becomes known to the Client that has gone through the Client's risk management framework as defined in the applicable standard, and requires a mitigation or fix to address the vulnerability, weakness or defect. For each such security vulnerability, weakness, or defect, such notice shall include: a technical description of and proof of concept for the vulnerability, weakness or defect; steps taken by the Client to mitigate the vulnerability, weakness or defect; and whether such mitigation was fully effective. For the purpose of these Service Terms, "timely notice" means no longer than: (A) sixty (60) days from the date the security vulnerability, weakness or defect is identified by or becomes known to the Client, provided that during such time period, the Client has been diligently investigating the vulnerability, weakness or defect; or (B) thirty (30) days after the vulnerability, weakness or defect has gone through the Client's risk mitigation framework and requires a mitigation or fix. The Client agrees that the UL Contracting Party, in its sole discretion, reserves the right to suspend, revoke, and/or terminate a certification granted under these Service Terms, should the Client fail to notify the UL Contracting Party or inadequately mitigate any security vulnerability, weakness or defect, in the sole view of the UL Contracting Party.
   ii) The Client shall provide the UL Contracting Party with notice of any product change, modification or deletion related to the certified product that could affect the certification. Such notice shall include a technical description of the product change, modification or deletion. The Client agrees that the UL Contracting Party, in its sole discretion, reserves the right to not extend the original product certification to any future product change, modification or deletion. The Client may seek testing and certification for modified products.
   iii) The Client agrees to keep a record of all complaints made known to the Client regarding the product's compliance with the certification requirements, take appropriate action to investigate and respond to such complaints and any non-compliance with the certification requirements, and provide a record of such actions upon the UL Contracting Party's request.
   iv) The Client agrees that certification of the product shall be applicable solely for the period stated on the certificate, typically 12 months from date of issuance. Certification may be withdrawn or cancelled earlier if: (A) the GSA or Service Agreement is terminated for any reason; (B) the certificate is used contrary to these Service Terms; (C) all fees and expenses are not paid when due; (D) the Client otherwise breaches the GSA or Service Agreement; (E) based on a request from the Client; or (F) permission to use the certificate or otherwise advertise the product's certification is withdrawn for any other reason, including without limitation subsequent changes in the actual relevant regulations and testing requirements, or the Client's misuse of UL's Marks.
   v) The Client acknowledges and agrees that if a revision to an applicable requirement is adopted, or if an applicable requirement is withdrawn, the UL Contracting Party shall determine the date by which the certificate related to the certified product(s) cease to be valid and shall notify the Client in writing, and as soon as is practicable, of such date. The Client agrees unconditionally to comply with any such cancellation notice. Products that are subject to cancellation due to changes in requirements are eligible for resubmission, upon request by the Client, under the revised requirements.

g) If organizational capability certification is sought:
   i) The Client shall establish and provide to the UL Contracting Party documentation of the Client's declaration of capability level(s) in accordance with the IEC 62443-X-X series of standards.

h) If an organizational capability earns certification, for the period of the valid certification:
   i) The Client shall provide the UL Contracting Party with notice of any change, modification or deletion related to the certified capability that could affect the certification. Such notice shall include a description of the change, modification or deletion. The Client agrees that the UL Contracting Party, in its sole discretion, reserves the right to not extend the original capability certification to any future change, modification or deletion. The Client may seek certification for modified capabilities.
   ii) The Client agrees to keep a record of all complaints made known to the Client regarding compliance with the capability certification requirements, take appropriate action to investigate and respond to such complaints and any non-compliance with the certification requirements, and provide a record of such actions upon the UL Contracting Party's request.
   iii) The Client agrees that certification of the capability shall be applicable solely for the period stated on the certificate, typically 12 months from date of issuance. Certification may be withdrawn or cancelled earlier if: (A) the GSA or Service Agreement is terminated for any reason; (B) the certificate is used contrary to these Service Terms; (C) all fees and expenses are not paid when due; (D) the Client otherwise breaches the GSA or Service Agreement; (E) based on a request from the Client; or (F) permission to use the certificate or otherwise advertise the capability's certification is withdrawn for any other reason, including without limitation, subsequent changes in the requirements, or the Client's misuse of UL's Marks.
   iv) The Client acknowledges and agrees that if a revision to an applicable requirement is adopted, or if an applicable requirement is withdrawn, the UL Contracting Party shall determine the date by which the certificate related to the certified capability(ies) cease to be valid and shall notify the Client in writing, and as soon as is practicable, of such date. The Client agrees unconditionally to comply with any such cancellation notice. Capabilities that are subject to cancellation due to changes in requirements are eligible for resubmission, upon request by the Client, under the revised requirements.

3) Obligations of the UL Contracting Party.

a) The UL Contracting Party shall provide the Client with the Services, as specified below and as elected by the Client in the Quotation or Project Confirmation. UL Contracting Party will investigate the product or capability based on the Client's attestation of intended use and configuration of the product and/or in accordance with the Client's instructions as described in a Quotation or Project Confirmation. Testing reports shall be provided to the Client within thirty (30) days of the completion of testing. Certification determinations shall be provided to the Client within ninety (90) days of the completion of testing or evaluation.

b) The UL Contracting Party shall provide the Client with confirmation of receipt of any timely notice of any security vulnerability, weakness or defect and a response that reasonably explains any additional steps that must be taken by Client to mitigate/cure any security vulnerability, weakness or defect in order to maintain a certification of the product and/or provides a reasonable basis for the UL Contracting Party's determination to suspend, revoke or terminate a certification. If timely notice is not given by the Client, but a security vulnerability, weakness or defect becomes known to the UL Contracting Party, then the UL Contracting Party shall send a letter to the Client, providing thirty (30) days' notice for the Client to report, mitigate and/or cure the security vulnerability, weakness or defect to the UL Contracting Party's sole satisfaction, as a condition of maintaining the certification.

c) The UL Contracting Party shall provide the Client with confirmation of receipt of any advance notice of any product or capability change, modification or deletion related to a certified product or capability and provide a reasonable basis for why the product or capability change, modification or deletion will or will not be considered to be covered by the original certification. If advance notice is

not given by the Client, but a product or capability change, modification or deletion occurs, the product or capability with the change, modification or deletion shall not be certified.

4) Services. For the purpose of these Service Terms, "Service(s)" means the services that are identified in a Quotation or Project Confirmation, and may include the following:

a) **Testing** - Testing services consist of performance of tests to determine whether a representative product sample conforms to the applicable requirements. The UL Contracting Party will deliver test report(s) with findings to the Client and can perform any of the following tests:

i) Assessment of a product's mechanisms used to provide access to the product via all interfaces as described in the vendor's product documentation and the product submittal form. UL Contracting Party shall examine the authentication mechanisms for the following:

(A) Session timeout features are enabled and functional.
(B) Authentication credentials are encrypted in some form in the product or a hardware security feature is implemented.
(C) Authentication credentials have complexity associated with guessing the credentials. UL Contracting Party shall attempt to guess the credentials via brute force or lookup in tables. There shall be no hardcoded passwords.
(D) Authentication credentials that are role based shall have means to identify the role and permissions associated. UL Contracting Party shall examine if it can easily assume a different role or permission.
(E) The authentication mechanisms shall meet the reasonable specifications the Client has documented and must not be capable of circumvention by reasonable electronic means, including per the Client's documentation. "Reasonable" in this context shall mean commercially available techniques and technologies.
(F) Assessment of all communications protocols' ability to validate integrity by using an encrypted means. This shall be applicable for communications protocols that transmit sensitive data or personally identifiable data like passwords, keys, and configuration data.

ii) Assessment of a product's communication protocols' ability to continue to operate as intended while being subjected to malformed incorrect data for a minimum of 8 hours per communication protocol and recover, within 2 minutes or less, with/without additional human intervention, if failure occurs after the malformed traffic has stopped. The product shall not display unexpected behavior to the following:

(A) The product resets or reinitializes its configuration;
(B) A process crash or assertion failure occurs without a recovery to its previous state after the test is completed in 2 minutes or less;
(C) A process hangs;
(D) The testing uses resources of the product and the product does not relinquish these resources after testing;
(E) The product software throws an unhandled exception;
(F) A storage data corruption occurs;
(G) The product loses the connection to the malformed input testing tool;
(H) The specified behavior of the product is interrupted and the product does not continue to operate as intended within a timeframe defined by the manufacturer.
(I) The product discloses any personally identifiable data or sensitive data over any interface. Sensitive data shall include at least all personally identifiable information and any data whose disclosure could jeopardize the security properties of the product, such as cryptographic keys and passwords.

iii) Assessment of a product's use of cryptography via validation of the cryptography results with a known answer test to a validated working algorithm's results. UL Contracting Party shall assess the product's ability to secure the confidentiality of all sensitive data and personally identifiable data generated, stored, used or communicated by the product via validation of the cryptography through a government run cryptography algorithm testing program or a test of validating results of the cryptography with known cryptography algorithms. The Client shall identify and document which data is to be considered sensitive. Sensitive data shall include at least all personally identifiable information and any data whose disclosure could jeopardize the security properties of the product, such as cryptographic keys and passwords.

iv) Assessment of a product's ability to update its software and/or firmware that is updatable without return to a factory using a hash, digital signature or other identifier to validate the authenticity of the origin of the software and/or firmware. This evaluates that the product can perform these updates per the manufacturer's documentation and does not cover if the product is misconfigured, used improperly or the process is circumvented by any means other than authenticating the firmware.

v) Assessment of the product's ability to erase or delete sensitive data stored on the product including but not limited to its cryptography keys, passwords, tokens, personally identifiable data and configuration data when the product has reached its end of life via erasing the data or destroying the data where it is not easily retrievable.

vi) Assessment of known vulnerabilities in the product found in the National Institutes of Technology (NIST) National Vulnerability Database at the time of testing using automated means via a commercially-available third-party vendor tool. The UL Contracting Party shall scan the product for known vulnerabilities found in the National Vulnerability Database and provide to the Client to include in the risk acceptance criteria.

vii) Assessment of known malware that may exist in the product per the signatures associated with the malware using automated means via a commercially-available third-party vendor tool.

viii) Assessment of the Client provided source code for known software weaknesses using automated means via a commercially-available third-party vendor tool. The Client shall provide a list of all software contained within the product. This shall include software purchased, open sourced, and developed internally, scripts, libraries, makefiles, build configuration parameters and tool used information. The tool shall provide a list of software weaknesses identified in the source code of the product per the standard ITU-T X.1524, Cybersecurity information exchange - Vulnerability/state exchange - Common weakness enumeration (CWE). UL Contracting Party shall scan the product for software weaknesses identified as top 25 at a minimum as defined in the CWE/SANS Top 25 Most Dangerous Software Errors; retrievable from cwe.mitre.org/top25 and OWASP Top 10 2013; retrievable from https://www.owasp.org/index.php/Top_10_2013-Top 10 and provide to Client to include in the Client's risk acceptance criteria. This does not include penetration testing or fuzzing.

ix) Assessment of the Client's risk management process. The Client agrees to provide an identification of all product functionalities for its intended use and all data stored, processed or used by the product; a list of all threats to the product, its functionalities and data; an assessment of the impact of each identified threat, its operational impact and any PII or sensitive information that would be exposed, should it become a reality; an assessment of the likelihood of each identified threat; a determination of the resulting risk level for each threat, considering its impact and likelihood; risk acceptance criteria, i.e., clear criteria to determine whether or not a given risk level is acceptable; a determination of suitable risk controls to mitigate each threat with an unacceptable risk level, completeness of coverage of risk controls as well as risks that may arise from the risk control measures themselves. The Client shall identify any additional risk controls that need to be implemented to mitigate threats, and shall

provide their assessment of residual risk. The Client shall provide information regarding its production and post-production processes to be used for continuous improvement of their risk management process. The Client shall create a traceability matrix or other traceability tool showing the relationships among the elements of the risk management process.

x) Assessment of the product for known product vulnerabilities and common software weaknesses found in the product per 4(a). The UL Contracting Party shall attempt to circumvent the Client-provided and documented controls that mitigate the identified vulnerabilities and weaknesses; attempt to engage the product in a denial of service to observe its performance, and attempt to access and authenticate on the product via unauthorized means through select, known and commonly observed tactics, techniques and procedures relevant to the cybersecurity product undergoing testing. The UL Contracting Party shall evaluate the risk management criteria provided by the Client and shall test each risk management criteria to validate they conform to the Client's documented specifications for managing the risk. The UL Contracting party shall test that the product shall have no known vulnerabilities that can be exploited and/or cause the product to crash, degrade, or perform in an unexpected or random manner without a recovery to its previous state in 2 minutes or less while attempting to test the product based on the risk acceptance criteria provided by the vendor.

b) **UL Certificate for Products**– The UL Contracting Party may provide a UL certification of the product if the following is met:
   i) Testing in 4 (a) and its subparts are completed and passed;
   ii) The product meets the requirements of UL 2900-1 or UL 2900-2-X, where applicable;
   iii) Documentation has been provided in accordance with 2 (e) and assessed to be adequate by the UL Contracting Party; and
   iv) The parties are in compliance with sections 2 (f), 3 (b) and 3 (c).
   v) For any product for which the UL Contracting Party has provided certification services to the Client, the certificate will state the intended use of the product that the Client identified and the UL Contracting Party tested.

c) **UL Certificate for Capabilities**– The UL Contracting Party may provide a UL certification of the capability if the following is met:
   i) The capability levels declared by the Client meet the requirements of the applicable standard IEC 62443-X-X;
   ii) Documentation has been provided in accordance with 2 (g) and assessed to be adequate by the UL Contracting Party; and
   iii) The parties are in compliance with sections 2 (h) and 3 (c).
   iv) For any capability for which the UL Contracting Party has provided certification services to the Client, the certificate will state the functional requirements that the Client declared and the UL Contracting Party evaluated.

5) Private Labeling. This section 5 applies when a product earning certification under these Service is manufactured by the Client for marketing under the name of another company ("Private Label Client"). Subject to this Section 5 and the other terms and conditions of these Service Terms, the Private Label Client will be issued a certificate in its name based on the certificate issued to the Client under Section 4(b). This Private Label Client is assigned a File and is included in UL Contracting Party's Online Certification Directory and published records with no visible link to the Client. Private Labeling is not permitted for certified capabilities.

a) **Requirements**. In order for a Private Label Client to receive a certificate the following must be met:
   i) All requirements under these Service terms for the product to have earned certification and the Client to have received the certificate under Section 4(b);
   ii) A Private Label Authorization Form must be completed and signed by both the Client and the Private Label Client. The Client and Private Label Client shall execute one or more Private Label Authorization Forms to authorize the private label relationship and identify which of the Client or Private Label Client shall manage the relationship with UL Contracting Party ("Private Label Manager").

b) **Price.** The Private Label Client must pay an initial set-up fee and a fee for each certificate for the private label service. Pricing is subject to change at UL Contracting Party's discretion without notice.

c) **Management of Private Label Relationship**. All requests pertaining to the Files covered by the Private Label Authorization Form will be submitted to UL Contracting Party by the Private Label Manager. The Private Label Manager may provide information and requests to UL Contracting Party on behalf of both the Client and the Private Label Client. The Private Label Client agrees that the Private Label Manager may submit private label certificate requests to UL Contracting Party on behalf of the Private Label Clients, and understands that UL Contracting Party will notify all parties involved when any such requests are processed. The Private Label Manager shall be authorized to make requests for private label certificates according to the Scope of Authorization chosen in the Private Label Authorization Form. The Private Label Manager shall inform UL Contracting Party in writing of the product by name of the Client, name of product(s), and identifying catalog, model or other product designation, and specify the Private Label Client's company name, the name of the product(s), and identifying catalog, model or other product designations for which private labeling is desired.

d) **Private Label Authorization Form.** UL Contracting Party reserves the right to accept or reject a Private Label Authorization Form and any private label certificate requests outside the scope of the Service Agreement. UL Contracting Party's notification to the Private Label Client that private label service has been established will constitute UL Contracting Party's acceptance of the Private Label Authorization Form. The Private Label Authorization Firm is attached to and incorporated into the Service Agreement. Either the Client or Private Label client may terminate the private label relationship at any time with or without cause upon not less than thirty (30) days' written notice to the other party and to the UL Contracting Party.

e) **Product Requirements**. The product for which private labeling is requested must be completely identical to and shall not differ from the Client's product that has achieved certification under these Service Terms.

f) **Use of Certificate.** The private label relationship shall not result in UL Contracting Party issuing any certification apart from the certification for the Client's product(s) that has received UL certification under these Service Terms for which private labeling is sought. The Private Label Client's authorization to use a private label certificate may be withdrawn by UL Contracting Party if the File or the Client's product is withdrawn or if the Client or Private Label Client violates any of the terms of the Service Agreement.

6) **Third Party Tools and Documentation.** The Client and each Private Label Client agree that the UL Contracting Party, in performance of these Services, may use reasonably available tools provided by third-party vendors and those tools may produce reports, data or other materials. The Client and each Private Label Clients are prohibited from distributing such reports or other materials to third parties without the UL Contracting Party's prior written consent.

7) **Personnel.** UL Contracting Party will be responsible for assigning and re-assigning its personnel, as appropriate, to perform the Services. For the duration of the engagement and for a period of eighteen (18) months after the Services are completed, Client will not actively solicit the employment of UL Contracting Party personnel involved directly with providing the Services to Client.

8) **Disclaimers and Indemnification.**
   a) The Client and each Private Label Client acknowledges and agrees that all errors, flaws, vulnerabilities or weaknesses in the Client's products, software or systems may not be discovered or identified by the UL Contracting Party through the Services described herein.
   b) The Client and each Private Label Client acknowledges and agrees that testing and/or certification by the UL Contracting Party does not constitute any representation as to the security of the product, its ability to withstand attacks from an outside actor, the ability of the product to protect or secure assets to which it is connected, and the ability of the Client's capabilities to prevent the aforementioned concerns.
   c) The Client and each Private Label Client acknowledges and agrees that the UL Contracting Party may use tools from third-party vendors while performing Services, and the Client and each Private Label Client agrees that the UL Companies are not liable for accuracy, completeness or flaws the tools may provide in generation of the Services.
   d) The Client and each Private Label Client acknowledges and accepts the risk that some of the testing tools the UL Contracting Party may use have the potential to cause the Client's or each Private Label Client's systems to fail, error out or become otherwise unavailable.
   e) The Client and each Private Label Client acknowledges and agrees that the UL Contracting Party cannot and does not provide any guarantee or warranty that the Client's and each Private Label Client's software or systems will not be vulnerable, susceptible to exploitation, free from hacking, or eventually breached.
   f) The Client and each Private Label Client acknowledges and agrees that it, and not the UL Contracting Party, is solely responsible for the security of its products and systems and that the UL Contracting Party's provision of the Services does not in any way relieve the Client and each Private Label Client of any responsibility for the design, manufacture, testing, marketing, sale, and security of the Client's products. The Client and each Private Label Client further acknowledges that the Services are meant to supplement, and not supplant, the Client's and each Private Label Client 's own efforts to examine and test its products.
   g) The Client and each Private Label Client agrees to indemnify and hold harmless the UL Companies and their trustees, directors, officers, employees, members, affiliates, agents and subcontractors (each an "Indemnified Party") from all losses and expenses (including reasonable attorneys' fees) arising out of, or related to the potential or actual compromise of the security of the Client's and each Private Label Client's product or systems and for any claims arising out of or related to intellectual property infringement of or by the Client's or Private Label Client's product or systems.

9) **No Use of UL Name or Marks.** The Services do not result in the authorization to use any of UL's Marks. The UL Contracting Party will permit the Client and each Private Label Client to make appropriate references to UL in promotional or advertising material, in any medium, including, without

limitation, print or electronic media, solely in connection with certified products; PROVIDED THAT, in the UL Contracting Party's sole opinion, the following conditions are met:

a) The promotional or advertising material is in no way inconsistent with the UL Contracting Party's findings and/or coverage;
b) The reference to UL is not intended to and does not create a misleading impression as to the nature of the UL Contracting Party's findings, its coverage, and/or its Cybersecurity Assurance Program Service;
c) The promotional or advertising material does not in any manner state or imply that UL is in any way (i) "endorsing" the product or Client's capabilities; or (ii) "warranting" or "guaranteeing" any aspect of the product, its performance, its safety and/or security (cyber or otherwise);
d) The Client and each Private Label Client obtains the UL Contracting Party's prior written approval of the reference; and
e) The reference to UL is in strict compliance with UL's marketing and advertising guidelines in place at the time of desired publication.