**NTAP Service Review Matrix**

This matrix is used by the FAA’s Near-Term Approval Process (NTAP) team to evaluate UTM services. Service providers must sign an MOU with the FAA in order to begin the review process. For more information, please email aus-utm@faa.gov. The material in this document should be regarded as guidance. Service providers may propose alternative criteria, or alternative means of demonstrating a given criterion, than what is provided in this document.

Submission Review Process Overview:

1. AUS-440 will review applicant submissions or existing data provided to FAA.
2. AUS-440 will verify applicant provided information and data that would meet referenced standards and criteria. AUS-440 recommends approval or further review (including if sufficient information not provided)
3. If the applicant proposes an alternative means of compliance, AFS-440 will include other LOBs/SOs as appropriate in the review of the declaration.
4. If applicants are using a combination of standards, AUS-440 will review to ensure the combination can be used to meet the corresponding performance requirements.
5. Any combination of aggregate simulation and flight test data will be accepted. Detailed test results and test cards are not expected. USSs providing strategic conflict detection and conformance monitoring must submit a test report from an accepted test harness source.

**Applicant:** Click or tap here to enter text.

**Exemption No.:** Click or tap here to enter text.

**Name of UTM service:**  Click or tap here to enter text.

**Type of service:**  e.g. USS; specific kind of SDSP; C2 link service

**Date of Review:** Click or tap to enter a date.

**Review Personnel:**  Click or tap here to enter text.

**Third-Party Service**

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| --- | --- | --- | --- | --- |
| **Type of Service** | **Criteria** | **Example Demonstration** | **Means of Demonstration (Including alternative means of compliance or demonstration)** | **Criteria is Satisfied?** |
| **Any Service** | Documentation of the respective roles and responsibilities of the operator and the 3PSP. | Service-level agreement (SLA) and Concept of Use (CONUSE) | Click or tap here to enter text. |  |
| The 3PSP has version controls and a defined software update process. | QMS or service provision manual; ISO 9001 certificate | Click or tap here to enter text. |  |
| If the service conforms to a design assurance standard, evidence of relevant processes. | Requirements Traceability Matrix (RTM) is responsive to the appropriate standard and selected level of design assurance | Click or tap here to enter text. |  |
| A hazard analysis of the service has been conducted | Failure Mode and Effects Analysis (FMEA) and/or Functional Hazard Analysis (FHA) | Click or tap here to enter text. |  |
| A deployed instance of the service exists | API or user interface credentials | Click or tap here to enter text. |  |
| The 3PSP provides information to the applicant in an agreed-to message format and at an agreed-to update rate. | SLA | Click or tap here to enter text. |  |
| The 3PSP indicates any specific equipment the applicant is required to use. | SLA | Click or tap here to enter text. |  |
| The 3PSP provides an indication of normal operation. | SLA | Click or tap here to enter text. |  |
| The 3PSP immediately alerts the applicant operator of any malfunction, degradation, or failure condition. | SLA | Click or tap here to enter text. |  |
| The 3PSP keeps all service data, including surveillance information and data related to the operation of the service, for at least 45 days. The 3PSP makes this data available to the FAA within 3 business days of receiving a request from the FAA. | Summary of data retention and retrieval policies | Click or tap here to enter text. |  |
| The service alerts the operator of any malfunction, degradation, or failure condition during the operation. | Averment (declaration) or SLA | Click or tap here to enter text. |  |
| The equipment used for the operations, including both the 3PSP’s equipment and the operator’s equipment, is fully interoperable to meet the functional and performance requirements of the service. | Description of relevant equipment and summary test results (e.g. regression testing output) used to verify proper interoperability | Click or tap here to enter text. |  |
| The service has a means for the FAA to monitor and/or test its performance. | Description of available means | Click or tap here to enter text. |  |
| The service meets the requirements of ISO 27001, Information security management systems, dated October 2022, or ISO 23629-12, Requirements for UTM service providers, dated July 2022. | Current ISO 27001 certification, or RTM | Click or tap here to enter text. |  |
| **Services supporting DAA** | The system has the capability to detect cooperative and non-cooperative crewed aircraft. | Averment | Click or tap here to enter text. |  |
| The DAA system is designed to maintain the well-clear boundary as defined in ASTM F3442/F3442M–23, Standard Specification for Detect and Avoid System Performance Requirements, dated February 28, 2023. | Avertment. Specify use of simulation and/or flight test, and the encounter set used for simulations. Aggregate/ summary results presented as (e.g.) a distribution. | Click or tap here to enter text. |  |
| Logic risk ratios consistent with ASTM F3442/F3442M-23 | Averment and aggregate/summary results of simulations or other testing. | Click or tap here to enter text. |  |
| If applicable, relevant surveillance volumes are defined and verified based on the applicable requirements in RTCA DO-381, Minimum Operational Performance Standards (MOPS) for Ground Based Surveillance Systems (GBSS) for Traffic Surveillance, dated March 26, 2020. | Averment, Requirements Traceability Matrix (RTM) and (e.g.) maps, charts or graphics showing the viewshed, surveillance volume, declaration volume, and operational volume. | Click or tap here to enter text. |  |
| If applicable, surveillance processing capabilities meet the requirements of ASTM WK69690, Surveillance UTM Supplemental Data Service Provider (SDSP) Performance, dated -----, 2023. | Averment and RTM | UNPUBLISHED STANDARD |  |
| DAA alerting functions meet the applicable requirements in either F3442/F3442M-23, or in RTCA DO-365C, Minimum Operational Performance Standards (MOPS) for Detect and Avoid (DAA) Systems, dated September 15, 2022. | Averment and RTM | Click or tap here to enter text. |  |
| If applicable, the applicable requirements are satisfied in RTCA DO-396, Minimum Operational Performance Standards for Airborne Collision Avoidance System sXu (ACAS sXu), dated December 15, 2022. | Averment and RTM. Simulations use a defined encounter set. Aggregate/ summary results presented as (e.g.) a distribution. | Click or tap here to enter text. |  |
| The operator has accounted for its own latencies, including known latencies in the C2 link, and time to respond to information or guidance from the 3PSP. | Averment and completed timing budget for end-to-end DAA system | Click or tap here to enter text. |  |
| Use of ASTM F3442/F3442M-23 and/or ASTM WK69690 is verified through a test method process consistent with ASTM WK62669, New Test Method for Detect and Avoid, dated -----, 2023. | Averment and RTM. | UNPUBLISHED STANDARD |  |
| **USS** | The service processes operational intent requests based on FAA guidance on priority levels, if applicable. | Averment and RTM | Click or tap here to enter text. |  |
| **USS** | The requirements in Sections 5.1-5.7 and 5.9 of ASTM F3548-21, Standard Specification for UAS Traffic Management (UTM) UAS Service Supplier (USS) Interoperability, dated March 8, 2022, are satisfied. | Averment, RTM and InterUSS test suite result | Click or tap here to enter text. |  |
| **C2** | The service meets the applicable requirements of RTCA DO-377, Minimum Aviation System Performance Standards for C2 Link Systems Supporting Operations of Unmanned Aircraft Systems in U.S. Airspace, dated March 21, 2019. | Averment and RTM | Click or tap here to enter text. |  |
| **Weather** | The service meets the applicable requirements of ASTM WK73142, Specification for Weather Supplemental Data Service Provider (SDSP) Performance, dated -----, 2023. | Averment and RTM | UNPUBLISHED STANDARD |  |