

AAM PUBLIC GOOD COMMUNITY OF INTEREST ANNEX #2
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

UNDER SPACE ACT UMBRELLA AGREEMENT #34708, DATED
5/7/2021 (ANNEX NUMBER 37403)

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of NASA and the Partner to exchange information and collaborate on (i) identifying and describing potential public good AAM use cases, and (ii) modeling these use cases within an AAM Reference Framework that is being used to model a potential AAM system.

The legal authority for this Annex, consistent with the Umbrella Agreement, is in accordance with the Space Act, Other Transactions Authority (OTA), 51 U.S.C. § 20113(e).

ARTICLE 2. RESPONSIBILITIES

A. NASA will use reasonable efforts to:

1. Host one day virtual workshop with partner and its team members, “model-based systems engineering (MBSE) for Transportation Planners”.
2. Host Model Based Systems Engineering (MBSE) tool training session for 3 attendees either remote or in person or both.
3. Provide current NASA AAM Reference Framework, glossary, and models.
4. Lead development of document defining the details and requirements for an AAM public good use case, also known as a ConOps document, a ConOps template, model, and incorporate this model into NASA’s AAM Reference Framework. Support the integration of Partner recommended changes for this use case model into NASA’s AAM Reference Framework.
5. Host AAM Ecosystem Working Group (AEWG) session updating ecosystem on efforts under the Annex.
6. Attend partner’s workshops during partner development of community relevant public good use case, e.g., medical transport ConOps and model(s) to provide comments and potentially incorporate these model(s) into NASA’s publicly releasable AAM Reference Framework.
7. Jointly identify and contribute to opportunities to advance AAM ecosystem MBSE maturity, including identifying potential recipients of NASA Reference Framework.
8. Publish document covering efforts and lessons learned under the annex.
9. Host AEWG session updating community on results of efforts under the Annex.

B. Partner will use reasonable efforts to:

1. Contribute to agenda planning for and attend one day virtual workshop with partners, “MBSE for Transportation Planners”.
2. Identify potential attendees and/or host session(s) during day long workshop
3. Identify community relevant public good use case, e.g., medical transport to be described and modeled as part of this annex.
4. Identify U.S attendees for a training session (MBSE tool) that will be able to be active over the relevant period of the annex.
5. Obtain MBSE tool licenses for these attendees.
6. Provide comments on NASA AAM Reference Framework, glossary, and models.
7. Mature and expand on the NASA provided public good ConOps document from the community perspective, provide comments, recommended requirement, architecture, and interface changes to NASA ConOps model that should be integrated into NASA’s AAM Reference Framework. Additionally, provide comments on the ConOps template to facilitate generation of partner developed ConOps. An example of a complex ConOps can be found here:
https://ntrs.nasa.gov/api/citations/20210016168/downloads/20210016168_MJohnson_Ve rtiportAtmtnConOpsRprt_final_corrected.pdf
8. Contribute to AEWG session updating ecosystem on efforts under the Annex.
9. Develop ConOps document(s) and MBSE tool for previously identified use case, potential additional public good use cases e.g., medical access and provide to NASA for potential incorporation into NASA’s AAM Reference Framework.
10. In conjunction with other partners, host approximately monthly workshop to overview ConOps development and discuss questions arising during development of model.
11. Jointly identify and contribute to opportunities to advance AAM ecosystem MBSE maturity including identifying potential recipients of NASA Reference Framework.
12. Review and comment on the document covering efforts and lessons learned under the annex.
13. Host AEWG session updating community on efforts under the Annex.

ARTICLE 3. SCHEDULE AND MILESTONES

The planned major milestones for the activities for this Annex defined in the "Responsibilities" Article are as follows:

Hold one day virtual workshop with partners and their team members, “MBSE for Transportation Planners”.	Within 9 months of signing Annex
Hold Magic Draw training session for 12 attendees (total) divided amongst the partners. TBD if remote or in person.	Within 12 months of signing Annex

Provide current NASA AAM Reference Framework, glossary and models to partners.	Within 12 months of signing Annex
Develop document defining the details and requirements for an AAM public good use case, also known as a ConOps document, a ConOps template, model, and incorporate this model into NASA's AAM Reference Framework. Integration Partner recommended changes for this use case model into NASA's AAM Reference Framework.	Within 12 months of signing Annex
Hold AEWG session updating ecosystem on efforts under the Annex.	Within 18 & 24 months of signing Annex
Partner(s)' conduct workshops for development of community relevant public good use case ConOps and model(s), provide comments and potentially incorporate these model(s) into NASA's publicly releasable AAM Reference Framework	Within 28 months of signing Annex
Identify and contribute to opportunities to advance AAM ecosystem MBSE maturity, including identifying potential recipients of NASA Reference Framework.	Within 30 months of signing Annex
Publish document covering efforts and lessons learned under the annex.	Within 30 months of signing Annex
Hold AEWG session updating community on results of efforts under the Annex.	Within 30 months of signing Annex

ARTICLE 4. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement will be protected for the period of five (5) years.

B. Under paragraph H. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.

1. Background Data: The Disclosing Party's Background Data, if any, will be

- identified in a separate technical document.
2. Third Party Proprietary Data: The Disclosing Party's Third-Party Proprietary Data, if any, will be identified in a separate technical document.
 3. Controlled Government Data: The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.
 4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement: None

ARTICLE 5. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or three years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

ARTICLE 6. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Annex by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 7. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Annex.

Technical Points of Contact:

NASA
Nancy Mendonca
Deputy AAM Mission Integration Office
300 E St SW
Washington, DC 20546
202-358-3051
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MassDOT Aeronautics Division
Jeffrey DeCarlo
Administrator
One Harborside Drive, Suite 205N
East Boston, MA 02128
857-368-8788
Jeffrey.DeCarlo@dot.state.ma.us

ARTICLE 8. MODIFICATIONS

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

ARTICLE 9. SIGNATORY AUTHORITY

The signatories to this Annex covenant and warrant that they have authority to execute this Annex. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION

MassDOT Aeronautics Division

BY: _____
Jon Montgomery
Deputy Associate Administrator for
Policy, Aeronautics Research Mission
Directorate

BY: *Jeffrey DeCarlo*

Jeffrey DeCarlo
Administrator

DATE: _____

DATE: 9/30/2022