

ATC Cybersecurity Standard Concept of Operations (ConOps) Walkthrough Plan Version 01.01

June 15, 2022

This is a Draft ATC Cybersecurity Project document.
It is intended for review and comment by the USDOT.

In support of: USDOT Contract # DTFH61-16-D-00055, TOPR # HOIT190166PR

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ATC Cybersecurity Project

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CHANGE HISTORY

Version	Date	Editor	Notes
01.01	6/14/2023	Ralph Boaz	Updated changed dates of the Walkthrough,.
01.00	8/8/2022	Ralph Boaz	Initial draft version submitted to USDOT for review.

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1 Introduction

This document establishes the Walkthrough Plan for the ATC Cybersecurity Standard Concept of Operations (ConOps) for the Advanced Transportation Controller (ATC) Cybersecurity Project under the United States Department of Transportation (USDOT) Contract # DTFH61-16-D-00055, Work Order # 19-0403. The purpose of the walkthrough is to evaluate the draft ConOps for the ATC Cybersecurity Standard under development. The walkthrough is to be held with the broad base of stakeholders of the ATC Cybersecurity Project including decision makers, managers, and engineers from public agencies, manufacturers, software providers, and consulting firms. The stakeholders also include representatives from the USDOT and the ATC Standards Program Standard Development Organizations (SDOs),

All participating stakeholders are considered a part of the ATC Cybersecurity (ATC Cyber) Working Group (WG). Selected stakeholders have been identified as Voting Members of the ATC Cyber WG in order to make formal decisions and keep the project advancing. The ATC Cyber WG is led by two of the voting members and referred to as Co-Chairs of the WG. The main objectives of the walkthrough are to:

- a) Find anomalies;
- b) Improve the ConOps;
- c) Consider alternatives;
- d) Ensure conformance to standards and specifications;
- e) Ensure completeness; and
- f) Gain a consensus on the user needs and the other material within ConOps.

The process of the walkthrough allows the ATC Cyber WG to respond to a draft of the ConOps and provide comments that may be resolved during the walkthrough or in subsequent activities of the development team and ATC Cyber WG. This walkthrough is part of the Quality Management Plan for the ATC Cybersecurity Project.

2 Responsibilities

In order to effectively administer the walkthrough certain roles have been identified. Multiple individuals may fill these roles:

- Walkthrough Leader – Lead Systems Engineer, ATC Cyber WG Chairs, ITE. The walkthrough leaders conduct the walkthrough meeting, handle the administrative tasks pertaining to the walkthrough (such as distributing documents and arranging the meeting), and ensure that the walkthrough is conducted in an orderly manner. The walkthrough leaders ensure that the team arrives at a decision or identified action for each discussion item,
- Recorder – Lead Systems Engineer, ITE. The recorder notes all decisions and identified actions arising during the walkthrough meeting. In addition, the recorder notes all comments made during the walkthrough that pertain to anomalies found, questions of style, omissions, contradictions, suggestions for improvement, or alternative approaches.
- Author – Lead Systems Engineer. Primary author of the document.
- Team Member – ATC Cyber WG. Those who prepare for and actively participate in the walkthrough meeting to help identify anomalies and improve the ConOps.

3 Walkthrough Meeting

Time and Location

The walkthrough meeting will be held as a webinar during the period of July 11-14, 2023, with the time to be determined. Details are to be distributed by ITE.

Participants

All of the stakeholders of the ATC Cybersecurity Project are potential participants for the walkthrough. They are found in Appendix A. The voting members of the ATC Cyber WG are listed below.

This list may be adjusted to meet project requirements.

ATC Cyber Working Group Voting Members					
#	Sector	First Name	Last Name	Organization	Role
1	Public	Matt	Luker	Utah DOT	Co-Chair
2	Public	Justin	Hatch	Georgia DOT	Voting Mbr
3	Public	David	Lucas	Maricopa County DOT	Voting Mbr
4	Public	Jason	Tao	District DOT	Voting Mbr
5	Public	Paul	Tykodi	MassDOT	Voting Mbr
6	Public	Jeremy	Iwen	WisDOT Bureau of Traffic Ops	Voting Mbr
7	Public	Brandon	Campbell	City of Tampa	Voting Mbr
8	Public	Mike	Bousliman	Montana DOT	Voting Mbr
9	Private	Ethan	Coxsey	Eberle Design	Co-Chair
10	Private	Shea	Tomsin	Econolite	Voting Mbr
11	Private	Doug	Crawford	Q-Free America	Voting Mbr
12	Private	Herasmo	Iñiguez	McCain	Voting Mbr
13	Private	Jonathan	Grant	Yunex Traffic	Voting Mbr
14	Private	Matt	Barron	Cubic	Voting Mbr
15	Private	Robert	Rausch	TransCore	Voting Mbr
16	Private	Marisa	Ramon	Southwest Research Institute	Voting Mbr

Agenda

The following agenda is anticipated. Items 9-11 will stretch across the days of the walkthrough.

1. Introductions/Call to Order/Welcome (Co-Chairs)
2. Opening Statements (Co-Chairs)
3. Antitrust Guidance (Ahmed)
4. Project Goals and Objectives (Co-Chairs)
5. Quorum Determination (Boaz)
6. Review and Approve Agenda (Co-Chairs)
7. Meeting Conduct and Robert Rules (ITE/Co-Chairs)
8. Discussion on Terminology (Co-Chairs)
9. Walkthrough Presentation (Boaz)
10. Perform Walkthrough (Boaz)
11. Plan Next Meeting (Co-Chairs)

12. Other Business (time permitting) (Co-Chairs)
13. Adjourn

Meeting Conduct Rules

The walkthrough meeting rules are listed below. Roberts Rules of Order will also be employed.

- Show up on time and come prepared
 - Be prompt in arriving to the meeting and in returning from breaks.
 - Be prepared to contribute to achieving the meeting goals.
 - Come to the meeting with a positive attitude.
- Stay mentally and physically present
- Contribute to meeting goals
 - Participate 100% by sharing ideas, asking questions, and contributing to discussions.
 - Share your unique perspectives and experience, and speak honestly.
 - If you state a problem or disagree with a proposal, try to offer a solution.
- Let everyone participate
 - Be patient when listening to others speak and do not interrupt them.
 - Respect each other's' thinking and value everyone's contributions.
- Listen with an open mind
 - Stay open to new ways of doing things, and listen for the future to emerge.
 - You can respect another person's point of view without agreeing with them.
- Think before speaking
 - Seek first to understand, then to be understood.
 - Avoid using idioms, three letter acronyms, and phrases that can be misunderstood.
 - It is OK to disagree, respectfully and openly, and without being disagreeable.
- Stay on point and on time
 - Respect the groups' time and keep comments brief and to the point.
 - When a topic has been discussed fully, do not bring it back up.
 - Do not waste everyone's time by repeating what others have said.
 - To manage discussion, it might be appropriate on some issues to use a one minute per person per User Need rule. Following this 'round' of discussion on a particular User Need, the Co-Chair(s) effectively 'call the question' (a process adapted from Robert's Rules of Order Newly Revised for walkthrough purposes). Essentially, the Co-Chair(s) announce the end of discussion on a particular User Need, summarize the walkthrough input concerning that User Need (or refer to the language reflected in the walkthrough workbook (on-screen)), and move discussion to the next User Need in the walkthrough workbook.
- Attack the problem, not the person
 - Respectfully challenge the idea, not the person.
 - Honest and constructive discussions are necessary to get the best results.
- Close decisions and follow up
 - Make sure decisions are supported by the WG; otherwise, they will not be acted on.
 - Note pending issues and schedule follow up meetings as needed.
 - Identify actions based on decisions made, and follow up actions assigned to you.
- Record outcomes and share
 - Record issues discussed, decisions made, and tasks assigned.

4 Walkthrough Materials

The materials prepared prior to the walkthrough are as follows:

- a) The statement of objectives;
- b) The draft ConOps;
- c) A comment form and instructions on how to submit comments;

- d) An introductory presentation on a) the systems engineering process used for development of the ATC Cyber Security Standard and b) the walkthrough process;
- e) A ConOps Walkthrough Workbook (WTWB) that participants can use to prepare for the walkthrough and follow during the walkthrough meeting.

5 Walkthrough Process

Entry Criteria

The inputs to the walkthrough process are as follows:

- a) Draft ConOps;
- b) Comments submitted prior to the walkthrough meeting; and
- c) ConOps Walkthrough Workbook.

Walkthrough Procedure

The following procedure will be used:

- 1) Review any comments received prior to the walkthrough
 - Identify resolutions or defer the comments to the appropriate place in the walkthrough workbook.
- 2) Perform a detailed review of draft ConOps document using the ConOps Walkthrough Workbook
 - Read sections of the ConOps identified in the walkthrough workbook capturing comments in real-time in the walkthrough workbook and, if appropriate, in the draft ConOps to reflect inputs from walkthrough participants.
 - Review each user need to ensure that it meets the criteria identified in the walkthrough workbook and, if revisions are necessary, that they are captured in the walkthrough workbook.
 - Collect and document new user needs proposed by participants as agreed upon by the WG.

Exit Criteria / Outputs

The outputs from the walkthrough process are as follows:

- a) A marked-up walkthrough workbook indicating the changes and decisions made during the walkthrough meeting. For each user need, the result of its evaluation, and the input provided that resulted in a revision.
- b) A ConOps Walkthrough report will be generated.

Appendix A – ATC Cybersecurity Project Stakeholders

#	First Name	Last Name	Organization	email	Role
1	Deborah	Curtis	FHWA	deborah.curtis@dot.gov	TOCOR
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