

NTCIP 1202 Version 04

Draft Concept of Operations (ConOps) Walkthrough Plan

March 13, 2023

In support of: Task Order No. 693JJ322F00212N

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1 Purpose

This document is the draft ConOps Walkthrough Plan (WP) to review the Draft Concept of Operations (ConOps) for NTCIP 1202 v04.

The ConOps WP is submitted as a required deliverable, *ConOps Walkthrough Plan*, for Performance Work Statement (PWS) Task 2.3, Walkthrough Draft Concept of Operations [Task 2.1.1.2.3 in the Project Management Plan] for Task Order No. 693JJ322F00212N.

A formal walkthrough is a proven method to validate a product, in this case, the user needs and system concepts for a proposed standard. This document is the Walkthrough Plan (WP) to be used to review the NTCIP 1202 v04 ConOps at a virtual meeting with the NTCIP Actuated Signal Controllers (ASC) Working Group along with additional stakeholders and interested parties. The ASC Working Group is made up of subject matter experts including those from public agencies, manufacturers, software providers, and consulting firms. The committee members may not provide stakeholder representation in all subject areas, so additional stakeholders, as subject matter experts (SMEs), will be invited as necessary.

The purpose of the walkthrough is to allow the ASC Working Group, additional stakeholders, and interested parties to:

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

The walkthrough will consist of a presentation of the ConOps to attendees who may provide comments that may be resolved during the walkthrough or in subsequent activities of the ASC Working Group.

2 Walkthrough

2.1 Time and Location

The walkthrough will be a web-conference of the ASC Working Group, invited stakeholders, SMEs, and association/government liaisons. The walkthrough will take arranged by the Institute of Transportation Engineers (ITE) on Microsoft Teams and will take place no earlier than Wednesday, March 29. Invitees will receive a link to the session. The walkthrough is expected to take two hours.

2.1 Participants

The participants include the ASC Working Group, additional stakeholders, and other interested parties. The table below lists the voting members of the ASC Working Group

No	Name	Organization	Role
1	Douglas Tarico	Q-Free	Co-Chair
2	John Thai	City of Anaheim	Co-Chair
3	Kevin Balke	Texas A&M Transportation Institute	Voting Mbr
4	Matt DeWitt	Florida Department of Transportation	Voting Mbr
5	Michael Robinson	California Department of Transportation	Voting Mbr
6	Ray Starr	Minnesota Department of Transportation	Voting Mbr
7	Christopher Primm	Oregon Department of Transportation	Voting Mbr
8	Dustin DeVoe	Econolite	Voting Mbr
9	Roy Goudy	Nissan	Voting Mbr

No	Name	Organization	Role
10	Ralph Boaz	Pillar Consulting	Voting Mbr
11	Robert Rausch	Transcore	Voting Mbr
12	Jonathan Grant	Yunex Traffic	Voting Mbr

2.3 Walkthrough Materials

The NTCIP 1202 v04 ConOps walkthrough materials include:

- a) **Presentation:** The presentation, in powerpoint/pdf format, includes the agenda for the meeting, a summary of the project and project status, a review of the systems engineering process used for the proposed standard, a review of the draft ConOps document and a review of the walkthrough process. This will be provided to the invitees before the walkthrough.
- b) **Draft ConOps Document:** Provided at least 10 working days prior to the ConOps walkthrough.

3 Meeting Agenda

A draft ConOps Walkthrough agenda follows.

Table 1 Draft Meeting Agenda

	Item
1	Welcome/Call to Order (Co-Chairs)
2	Introductions (Narla)
3	Antitrust Guidance & Logistics (Narla)
4	Review Agenda (Co-Chairs)
5	Purpose (Co-Chairs) Purpose: Solicit input from attendees on the ConOps, Systems Engineering Process (SEP) and implementation perspective.
6	Review Process, Ground Rules, Roles/Responsibilities Review ConOps walkthrough process, ground rules, SEP, roles/responsibilities, as well as entry criteria/inputs, and exit criteria/outputs.
6	Walkthrough of Draft ConOps document Marking up the Draft ConOps document in real-time
7	Next Steps Review the next steps, schedule, and deliverables
8	Adjourn

3.1 Meeting Rules

The following general meeting rules apply to the conduct of a ConOps walkthrough.

- a) Show up on time and come prepared
 - i. Be prompt in arriving to the meeting and in returning from breaks
 - ii. Be prepared to contribute to achieving the meeting goals
- b) Contribute to meeting goals
 - i. Participate 100% by sharing ideas, asking questions, and contributing to discussions
 - ii. Share your unique perspectives and experience, and speak honestly
 - iii. If you state a problem or disagree with a proposal, try to offer a solution
- c) Stay on point and on time
 - i. Respect the groups' time and keep comments brief and to the point
 - ii. When a topic has been discussed fully, do not bring it back up
 - iii. Do not waste everyone's time by repeating what others have said

- iv. 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, and move discussion to the next User Need in the ConOps.
- d) Close decisions and follow up
 - i. Make sure decisions are supported by the group, otherwise they won't be acted on
 - ii. Note pending issues and schedule follow up actions/meetings as needed
 - iii. Identify actions based on decisions made, and follow up actions assigned to you
- e) Record outcomes and share
 - i. Record issues discussed, decisions made, and tasks assigned

3.2 Walkthrough Process

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 draft ConOps document
- 2) Perform a review of draft ConOps document
 - Read sections of the draft ConOps document identified for review, capturing comments in real-time to reflect inputs from walkthrough participants
 - Review each new user need proposed for NTCIP 1202 v04 to ensure that it meets the criteria identified in Section 3.5 and, if revisions are necessary, that they are captured in the draft ConOps document.
 - Collect and document new user needs proposed by participants as agreed upon by the ASC Working Group

3.3 Roles and Responsibilities

The roles and responsibilities for the participants during the ConOps walkthrough follow.

- a) Walkthrough Leader (Consultant): Lead walkthrough/guide discussion
- b) Recorder (Consultant): Record all revisions with basis of revisions (anomalies)
- c) "Author" (Consultant): Subject Matter Expert on standard details with overview of Standard
- d) Review Team (All others): Identify anomalies, discuss, propose and agree to appropriate resolutions

3.4 Entry Inputs

The inputs to be used during the walkthrough follow.

- a) Draft ConOps Document
- b) Inputs (proposed revisions) on the draft ConOps document (if any)

3.5 Walkthrough Criteria

The criteria used to determine if a need is well-written follow.

- a) **Uniquely Identifiable:** Each need must be uniquely identified that is each need shall be assigned a unique number and title

- b) **Major Desired Capability (MDC):** Each need shall express a major desired capability (corridor level) in the system, regardless of whether the capability exists in the current system or situation or is a gap
- c) **Solution Free:** Each need shall be solution free, thus giving designers flexibility and latitude to produce the best feasible solution
- d) **Capture Rationale:** Each need shall capture the rationale or intent as to why the capability is needed in the system

3.6 Walkthrough Procedures

The procedures to be used during the walkthrough follow.

- a) Review any comments received prior to the walkthrough
 - i. Identify resolutions
- b) Perform review of draft ConOps document
 - i. Summarize the user needs from NTCIP 1202 v03 that are proposed to remain in NTCIP 1202 v04 with walkthrough participants and answer the designated questions for each User Need
 - ii. Read through each NEW user need proposed for NTCIP 1202 v04 in the draft ConOps document and answer the designated questions for each User Need
 - iii. Capture comments in 'real time' in the draft ConOps document to reflect inputs from walkthrough participants

3.7 Exit Outputs

The outputs of the walkthrough follow.

- a) A marked-up draft ConOps document with inputs provided during the walkthrough that resulted in revisions
- a) Following the ConOps walkthrough, an updated ConOps document reflecting revisions resulting from walkthrough input
- b) Documented plan for completion of the updated ConOps

After the walkthrough, ITE will deliver a ConOps Walkthrough resolution report which identifies inputs received during the ConOps walkthrough, using track changes in a copy of the draft ConOps document. An updated draft ConOps document will follow within 8 business days after the walkthrough.