



February 5, 2024

Via Email
Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: Ex Parte Notification, PS Docket Nos. 15-91 and 15-94

Dear Ms. Dortch:

The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Wireless Technologies and Systems Committee's Wireless Emergency Alerts Subcommittee (WTSC WEA), is pleased to provide its input regarding timeline estimates associated with proposed enhancements to the Federal Communications Commission (Commission).¹

The Commission's Eighth Communications Security, Reliability and Interoperability Council (CSRIC VIII) recommended that ATIS study timeline estimates associated with potential Wireless Emergency Alert (WEA) enhancements included in the *Report on WEA Application Programming Interface* developed by CSRIC VIII Working Group 6: WEA Application Programming Interface (CSRIC VIII Report). Specifically, the report asked ATIS to collaborate with WEA Stakeholders to recommend an order of efforts, taking into consideration parallel development and its impact on the timelines for each overlapping effort.

ATIS Wireless Technologies and Systems Committees (WTSC) WEA Subcommittee has examined the end-to-end needs associated with the development of the enhancements referenced in the CSRIC VIII Report:

- (1) Event-Specific Notifications (Spoken Term/Phrase, Symbol, Infographic);
- (2) Event-Specific Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal);
- (3) AO-Controlled Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal); and
- (4) Threats in Motion.

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¹ATIS is a global standards development and technical planning organization that develops and promotes worldwide technical and operations standards for information and communications technologies. ATIS Wireless Technology Systems Committee's (WTSC) develops wireless radio access, system, and network solutions related to wireless and/or mobile services and systems and develops and continues to enhance solutions necessary to support a U.S. public warning system and wireless emergency alert system.

² Report on WEA Application Programming Interface, drafted by CSRIC VIII, Working Group: WEA Application Programming Interface (March 2023), Section 5.2.

This examination included pre-design decisions (expert/accessibility input on user perspective), high-level design, specification updates (CAP, ATIS, 3GPP), stakeholder internal development and testing, integration testing, deployment, and education, as required, for the Alert Originators (AOs) and the public. This work project focused on the *Further Notice of Proposed Rulemaking* released April 21, 2023, in PS Docket Nos. 15-91 and 15-94, and on the CSRIC VIII WG 6 Report. The items addressed in the Commission's *Third Report and Order* released December 15, 2023, in PS Docket Nos. 15-91 and 15-94, while originally part of this work, have been removed.

Timeline Assumptions

ATIS WTSC based its work on certain assumptions and acknowledgements associated with the parallel work that would be required for these enhancements.

- Additional stakeholder work streams: ATIS WTSC notes that the timeline estimates do not reflect the additional time needed for any studies intended to result in decisions required prior to the high-level design phase. The estimates also do not reflect AO Vendor Interface or CAP signaling development. This development work is expected to run in parallel to the development work of other stakeholders; however, if it exceeds the time ranges indicated below, could require additional time. If the development work is not completed by all parties within these time ranges, integration testing will not be able to commence as expected and field deployment will be delayed.
- <u>Educational Aspects:</u> The planning for education is expected to commence when the specification work is complete and would run at the same time as development and testing of the enhancements. Education for both the AOs and the public should be completed prior to field deployment. Timeline information and additional details can be found in the attached tables.
- Parallel Enhancements: For enhancements 1-3 (Event-Specific Notifications, Event-Specific Presentation Suppression, and AO-Controlled Presentation Suppression), similar design and signaling changes are expected. If the Commission adopts rules requiring these modifications in parallel and if all required pre-design decisions (see Phase I table below) are made, the timelines provided should be sufficient. ATIS WTSC expects that field deployment would align with the upper cap for the time ranges.

Timeline Estimates

As a result of its review, and considering the assumptions noted above, ATIS WEA has developed the following estimated timelines (more detailed information on the estimates is included in the attached tables):

- 1) Event-Specific Notifications (Spoken Term/Phrase, Symbol, Infographic) 36-54 months total, including:
 - six months for high-level design;
 - 18-24 months for completion of specification work (ATIS and 3GPP); and
 - 12-24 months for development, testing (individual components), integration testing and deployment.

Phase Interactions: High-level design phase can proceed with confirmation of which enhancements, out of the three listed, will move forward. High-level design can proceed parallel to final decisions on which Spoken Terms/Phrases, Symbols and Infographics will be supported, but specification work cannot begin until this is complete.

- 2) Event-Specific Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal) 36-54 months in total, including:
 - six months for high-level design;
 - 18-24 months for completion of specification work (ATIS and 3GPP); and
 - 12-24 months for development, testing (individual components), integration testing and deployment.

Phase Interactions: High-level design phase can proceed following a decision regarding whether or not Event Code is granular enough. If an additional indicator is needed (highly likely), the process of identifying the specific events can proceed in parallel with high-level design phase, but specification work cannot begin until this is complete.

- 3) AO-Controlled Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal) 36-54 months in total, including:
 - six months for high-level design;
 - 18-24 months for completion of specification work (ATIS and 3GPP); and
 - 12-24 months for development, testing (individual components), integration testing and deployment.

Phase Interactions: High-level design phase can proceed following a Commission decision to allow AOs to have the option to indicate that presentation suppression is to be applied.

4) Threats in Motion - more information needed.

There is no specific time estimate for Threats in Motion as no clear path forward has been identified. ATIS is continuing to review proposed solutions.

ATIS appreciates the opportunity to provide this information. If there are any questions about this matter, or if additional information is required, please do not hesitate to contact the undersigned. A copy of this letter has been filed in the above-referenced dockets.

Sincerely,

Thomas Goode

ATIS General Counsel

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cc James Wiley, Deputy Chief of the Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau Tara Shostek, Attorney Advisor, Public Safety and Homeland Security Bureau Suzon Cameron, Designated Federal Officer for CSRIC IX

Phase I: Pre-Design Decisions and High-Level System Design

	Required Studies and Collaborative Efforts, Including Identified Participants	AO Vendor Interface	AO->FEMA (CAP)	FEMA- >CMSP GW (C i/f)	CMSP GW	Broadcast	Chipset	Device/OS
Event-Specific Notifications - Spoken Term/Phrase - Symbol - Infographic	Produce list of appropriate terms and phrases. Determine limited list of symbols that can be easily recognized and taught to the public without producing milling. Determine infographics that are likely to prompt faster understanding and action by the user, primarily focusing on events for which this initial reaction should occur immediately, followed by reading of the alert text.	Access to options for selection.	New information field(s) that conveys the AO's selection.	New information field(s) that conveys the AO's selection.	New information field(s) that conveys the AO's selection.	New information field(s) that conveys the AO's selection.	Processing of new information field(s) that conveys the AO's selection.	Mapping of new information field value(s) to appropriate Spoken Term/Phrase, Symbol, Infographic.
	6-12 months	xx months*	6 months	6 months				
Event-Specific Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal)	AO input for use cases to determine appropriate application, if any.	If event code is not granular enough, separate option to evoke suppression.	Addition of indicator for suppression.	Authorization check at FEMA and convey indicator.	Convey indicator.	Convey indicator.	Recognize new IE.	Suppress specified presentation aspects.
	xx months*	xx months*	6 months	6 months				
AO-Controlled Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal)	Studies on potential user impacts. Design to avoid mistaken suppression.	Addition of presentation suppression indicator.	Addition of indicator for suppression.	Convey indicator.	Convey indicator.	Convey indicator.	Recognize new IE and pass to app layer.	Suppress specified presentation aspects.
	xx months*	xx months*	6 months	6 months				
Threats in Motion	Technical Proposals to be presented and studied in ATIS. Premise to be analyzed for mobile users. Field exceptions (corner cases) to be identified. Possible redesign of WEA. xx months*	More information needed.						

Phase II: Standards Development

	AO Interface	CAP	ATIS	3GPP/SA and CT	3GPP/RAN
Event-Specific Notifications - Spoken Term/Phrase - Symbol	Options for selection.	Indicators mapped to appropriate value for each item.	Update Service Description, MDB, C i/f spec, C i/f test specs.	Update 23.041 (CT1), 29.168 (CT4).	Update 36.413, 38.413
- Infographic	xx months*	xx months*	12-18 months	18-24 months	18-24 months
Event-Specific Presentation Suppression	Options for selection.	Addition of indicator for suppression.	Update Service Description, MDB, C i/f spec, C i/f test specs. Update 23.041 (CT1), 29.168 (CT4).		Update 36.413, 38.413
	xx months*	xx months*	12-18 months	18-24 months	18-24 months
AO-Controlled Presentation Suppression (e.g., Vibration Cadence,	Options for selection.	Addition of indicator for suppression.	Update Service Description, MDB, C i/f spec, C i/f test specs.	Update 23.041 (CT1), 29.168 (CT4).	Update 36.413, 38.413
Audio Attention Signal)	xx months*	xx months*	12-18 months	18-24 months	18-24 months
Threats in Motion		?	?	?	?

Phase III: Implementation. Including Testing. Integration Testing, and Time to Deploy

	AO Interface	CAP	CMSP Gateway	eNB/gNB	Chipset	Device
Event-Specific Notifications - Spoken Term/Phrase - Symbol - Infographic	xx months*	xx months*	12-24 months	12-24 months	12-24 months	12-24 months
Event-Specific Presentation Suppression	xx months*	xx months*	12-24 months	12-24 months	12-24 months	12-24 months
AO-Controlled of Presentation Suppression (e.g., Vibration Cadence, Audio Attention Signal)	xx months*	xx months*	12-24 months	12-24 months	12-24 months	12-24 months
Threats in Motion	xx months*	More information needed.				