

## California Department of Transportation

DIVISION OF TRAFFIC OPERATIONS  
P.O. BOX 942873, MS-36 | SACRAMENTO, CA 94273-0001  
(916) 654-6448 | FAX (916) 653-6080 TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



# Questionnaire

## Regarding Adopting the 6C Coalition AVI Standard

### Version 4.0 In the Title 21 Protocol for Automatic Vehicle

### Identification (AVI) Regulation

The California Department of Transportation (Caltrans) is currently considering the development of a regulatory change that would replace the “California 6C Electronic Toll Collection Standard” with the “6C Coalition AVI Version 4.0 Standard” as a Document of Reference in the AVI regulation found in Chapter 16 of Division 2 of Title 21 of the California Code of Regulations.

Caltrans would like to receive input from all interested stakeholders as to their views on this proposal and will be holding a public workshop on July 25, 2024, to solicit initial comments.

In anticipation and in connection with this workshop and other activities to facilitate public participation in the regulatory process, Caltrans is providing this questionnaire to all potential stakeholders. This information will greatly assist Caltrans as it begins the process of considering a regulatory change.

Please provide your responses following each question. Please feel free to forward this questionnaire to any other interested parties.

You may e-mail your responses to: [Title.21.Changes@dot.ca.gov](mailto:Title.21.Changes@dot.ca.gov).

You may also submit written responses to:

Joe Rouse  
Caltrans Division of Traffic Operations  
1120 N Street, Mail Station 36  
Sacramento, CA 95814

**Questionnaire Regarding Adopting the 6C Coalition AVI Standard Version 4.0 In the Title 21 Protocol for Automatic Vehicle Identification Regulation**

Page 2

Please list the name of the person completing the questionnaire and the name of the agency or company you represent.

NAME: Robert Campbell

AGENCY: LACMTA

- 1) Are there any alternatives to the replacing California 6C Electronic Toll Collection Standard with the 6C Coalition AVI Standard?

Caltrans could elect not to replace the California 6C Electronic Toll Collection Standard. This is not recommended as the existing California 6C Electronic Toll Collection Standard is not as current as the 6C Coalition AVI Standard. The 6C Coalition AVI Standard is used by all other States that use 6C tolling equipment and is the prevailing standard for this tolling technology. The original California ETC standard V1.0 is based off the 6C Coalition AVI Standard V3.1 and the new Version 4.0 allows for backward compatibility with existing 6C transponders and readers.

- 2) What are the benefits of the replacing California 6C Electronic Toll Collection Standard with the 6C Coalition AVI Standard? What are the drawbacks?

Benefits of adopting the 6C Coalition AVI Standard:

1. Using the 6C Coalition AVI Standard V4.0 keeps California technology consistent with all other 6C tolling operators nationally and provides consistency for vendors selling and furnishing 6C equipment in California, which reduces costs to California toll operators and allows for support of future national tolling interoperability.
2. Directly using the 6C Coalition's 6C standard allows California to not to have to maintain a separate parallel 6C standard.
3. The backward compatibility between the 6C Coalition AVI Standard Version 4.0 and the existing California 6C ETC Standard means LACMTA's FasTrak customers can continue to use their existing 6C transponders.

There are no known significant drawbacks to LACMTA for adopting the 6C Coalition AVI Standard Version 4.0. For minor impacts, see response to Question 4.

- 3) Please discuss any effects, including projected timetables, from replacing California 6C Electronic Toll Collection Standard with the 6C Coalition AVI Standard.

There are no known significant impacts to any LACMTA project timelines. The

**Questionnaire Regarding Adopting the 6C Coalition AVI Standard Version 4.0 In the Title 21 Protocol for Automatic Vehicle Identification Regulation**

Page 3

6C Coalition AVI Standard allows for backward compatibility with previous 6C standards. This includes the California 6C ETC Standard, which was based on the 6C Coalition AVI Standard Version 3.1. The 6C Coalition AVI Standard V4.0 will be incorporated into future procurements as appropriate. Metro does not anticipate needing to replace any of its existing 6C transponders or readers to support this proposed action.

- 4) Please describe any impacts replacing California 6C Electronic Toll Collection Standard with the 6C Coalition AVI Standard.

This action may require minor software changes and roadside testing to ensure that the roadside systems properly recognize and interpret new transponders encoded to the 6C Coalition AVI Version 4.0. LACMTA expects that this minor update can be included in a normal software revision release by the Roadside Toll Collection System vendor. The 6C Coalition AVI Standard Version 4.0 is backward compatible with the California 6C ETC Standard which allows the continuing usage of existing transponders while issuing newly encoded transponders.

- 5) Would you support Caltrans also adopting the latest versions of the International Organization of Standardization (ISO) standard for radio frequency identification devices as part of this rulemaking?

Yes, we support the addition of ISO 18000-63 (2021) to the existing ISO versions already referenced. This will allow transponder and reader vendors flexibility to use newer 6C chips and certify new equipment that can only be tested using the latest ISO standard. By providing vendors the ability to offer a wider range of products, toll operators will potentially see lower transponder and reader acquisition costs, have more supply change redundancy by having access to more alternative 6C products, and gain access to the latest 6C technology.

- 6) Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?

The proposed regulatory change is not expected to make goods and services more costly to produce goods or services here in California.

- 7) What are the fiscal impacts on state and local government?

There is no anticipated fiscal impact to LACMTA by the proposed changes aside from any minor impacts as described in the response to Question 4. Our procurement process for new toll transponders and readers will not be impacted, as indicated in the response to Question 3. As previously noted, the new AVI Standard is backward compatible with the existing California Standard there is no need to replace existing transponders.

**Questionnaire Regarding Adopting the 6C Coalition AVI Standard Version 4.0 In the Title 21 Protocol for Automatic Vehicle Identification Regulation**

Page 4

8) Are there any issues regarding fairness of competition?

There are no known issues regarding fairness of competition associated with this proposed action since the proposed change is currently being used in the other states using 6C technology. Additionally, the regulatory change will not alter LACMTA's procurement process or tolling operations, as indicated in the response to Question 3.

9) Are there any issues regarding individual privacy?

The proposed standards change does not impact individual privacy because it does not relate to Personable Identifiable Information.

10) Please provide comments on any other relevant issues not addressed above.

No other comments at this time.

**Thank You for Completing This Questionnaire**