

## DEPARTMENT OF TRANSPORTATION



# **QUESTIONNAIRE**

## **REGARDING TRANSITIONING FROM THE CURRENT TITLE-21 PROTOCOL TO A NEW PROTOCOL**

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The California Department of Transportation (Caltrans) is currently considering the development of regulations regarding new technologies and new technical specifications to replace the current automated vehicle identification protocol currently set out in the California Code of Regulations (commonly referred to as the "Title-21 protocol"). Caltrans is very interested in hearing from stakeholders as to their views on the transitioning from Title-21 protocol to a new protocol, most likely the 6C protocol.

Caltrans will be holding two public workshops (July 8, 2015 in Oakland and July 22, 2015 in Fontana) to solicit initial comments on the transition from the current Title-21 protocol.

However, in anticipation and in connection with those workshops and other activities to facilitate public participation in the regulatory process, Caltrans invites you to complete the following questionnaire. This information will greatly assist Caltrans as it begins the process of considering new regulations.

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

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

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

NAME \_\_\_\_\_ Ellen Lee \_\_\_\_\_

AGENCY \_\_\_\_\_ Orange County Transportation Authority

**1. Are there any alternatives to the transition to 6C, including comparable Federal regulations or regulations/protocols in other states?**

A possible alternative to transitioning to 6C is to wait for the implementation of the MAP-21 regulation which mandates National Interoperability (NIOP) for Electronic Toll Collection (ETC). The International Bridge, Tunnel, and Turnpike Association (IBTTA) has taken the lead on ETC and NIOP and has narrowed the protocol selection down to three options: EZPass' TDM, TransCore's SeGo, and 6C. Although the timeline for selecting and testing of a national protocol is progressing, IBTTA must also address back office technical approaches, marketing,

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and governance in order to support interoperability. Ultimately, many issues still require resolution before NIOP can be adopted. However, we do not expect the adoption to happen for several years. By transitioning to 6C now, it will enable California agencies to benefit from the cost savings associated with use of the 6C protocol. In addition, the 6C protocol may eventually be selected as the national protocol. 6C transponder costs are significantly lower than the TDM and SeGo protocols and are used by the neighboring Western toll operators in Washington, Utah, Colorado, and British Columbia.

**2. What are the benefits of the transition to 6C? What are the drawbacks?**

The benefits of transitioning to 6C include: cost savings to the agency, not only for the cost of the transponders but also for mailing out the transponders to the customers (postage and packing materials), an established programming standard that is in used by an established user base, the ability to leverage an established compatibility certification process for tolling, multiple vendors able to supply 6C transponders and readers, and ease of distribution for the 6C transponders. Concerns with transitioning to 6C include the need to develop and test 3-position switchable transponders. In addition, modifications will be needed for the in-lane and back office equipment in order to support 6C. Also, there is litigation regarding intellectual property infringement amongst some of the 6C vendors.

**3. Please discuss the factors involved, including projected timetables, for transitioning to a new protocol, with respect to the following:**

**a. Transponder procurements/existing inventories**

OCTA typically has a multi-year contract for transponder procurement and maintains inventory level of 3-4 months. OCTA anticipates the development, certification, and testing of transponder for factors to take one year. OCTA will need 6-8 months for the procurement process and will require lead time for manufacturing and delivery.

**b. Toll-system modifications**

OCTA will need to modify the back-office system and lane systems in order to support 6C. OCTA anticipates taking approximately one year for the upgrade. Timing will be dependent upon the finalization of the technical specification.

**c. Agency administrative changes**

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OCTA's internal business rules/policies will need to be modified due to the transition to 6C. The modification to the business rule will need to be updated in the back office system, in addition to the website and other customer communication collaterals.

**d. Public education, outreach, and marketing**

With the introduction of 6C transponders, customers will need to be educated about some of the different aspects of the 6C transponders, i.e., elimination of the audible beep when passing through the toll gantries, the inability to move the transponders between vehicles, different mounting instructions, and different switch settings for the switchable transponders. Marketing and customer communication materials will need to be redesigned and updated. In addition, OCTA will need to develop a transition plan to distribute the 6C transponders to the customers.

**e. Issues regarding certification**

OCTA supports a 6C certification process. This allows agencies to depend on a base level of compliance to the 6C standard and is important to allow new vendors to enter the tolling industry.

**f. Issues regarding three-position transponders.**

3-position switchable transponders will be needed to support the I-405 Express Lanes for customers to declare their vehicle occupancy. I-The 405 Express Lanes is scheduled to open in 2022.

**4. Please describe how the transition:****a. Impacts business and/or employees**

Outside of businesses/employees supporting OCTA's transition to 6C, no impacts are anticipated.

**b. Impacts small businesses**

No impacts to small businesses anticipated.

**c. Impacts jobs or occupations**

No impacts to jobs or occupations anticipated.

**d. Imposes reporting requirements**

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OCTA does not foresee the imposition of reporting requirements.

**e. Impacts individuals.**

Customers, agency staff and vendors will need to be educated on the new transponder types and differences from the Title 21 tags, i.e., elimination of the beeping, new mounting instructions, switchable settings, etc.

**5. 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?**

OCTA does not anticipate the regulation will affect the ability of California businesses to compete with other states.

**6. What are the costs that businesses and individuals may incur to comply with this regulation over its lifetime?**

OCTA does not anticipate businesses or individuals to incur costs to comply with this regulation over its lifetime.

**7. What are the fiscal impacts on state and local government?**

Substantially lower transponder costs leading to significant cost savings will have a positive fiscal impact to toll operators in California.

**8. Are there any issues regarding fairness of competition?**

The 6C protocol is based on ISO 18000-63. It is a standard that is open, without any proprietary technology. There are multiple vendors that can provide 6C protocol equipment to toll operators.

**9. Are there any issues regarding individual privacy?**

No changes or issues regarding Personally Identifiable Information (PII) are anticipated.

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

OCTA supports incorporation of a sunset date for use of Title 21 in order to eliminate the need to support a legacy protocol. If there are any Title 21 transponders that are still being utilized, all California agencies will be required to maintain the legacy equipment in order to read the tags. There are costs associated with this. Furthermore, California

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agencies will need to support a national protocol that may not be 6C and having a sunset date for Title 21 will eliminate the need to support a third protocol at a later date.

**THANK YOU FOR COMPLETING THIS QUESTIONNAIRE**