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

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.

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

NAME  Murali Ramanujam
AGENCY  Santa Clara Valley Transportation Authority (VTA)

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

There is currently a Federal MAP-21 regulation mandate requiring national interoperability for Electronic Toll Collection (ETC). Current progress on the selection of a protocol national interoperability appears complex and might take an extended
period of time before it is finalized. 6C protocol allows for realization of transponder
cost savings as well it will match protocol being used in other neighboring Western states
namely Washington, Utah and Colorado. 6C protocol is currently one of the 3 protocol
selected for testing for the national protocol.

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

The major benefit of transitioning to 6C is significant transponder cost savings and the
ability of several vendors to supply 6C transponder. Due to the relative low cost of the
transponder, 6C might allow potential to address reading particular vehicular group
(motorcycle, clean air vehicles) through issuance of unique transponders. Some of the
drawbacks are similar to the use of other protocols - intellectual property disputes among
vendors. There is also a need to develop switchable transponder to accommodate usage
of carpoolers on toll facilities.

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
   VTA does not procure transponder or maintain inventories. This is undertaken by Bay
   Area Toll Authority (BATA) for the region and VTA has an agreement with BATA for
   services rendered through Regional Customer Service Center (RCSC).

   b. Toll-system modifications
   VTA currently only has one toll zone in operation and is already procuring readers that
can use 6C protocol for future expansion projects. As such, there is minimum toll system
modifications required as part of the transition to 6C. However, the agency is dependent
upon BATA to modify the RCSC to include changes to the Interface Control Document
(ICD) that is used to regionally with toll operators such as VTA.

   c. Agency administrative changes
   Much of these changes will primarily be undertaken by BATA.
d. Public education, outreach, and marketing
As the distributor of transponder for the Bay Area region, much of the education will be undertaken by BATA. Some of the highlights would include that 6C transponders will not beep and that sticker transponders cannot be moved between vehicles as they will be permanently fixed on the windshield.

e. Issues regarding certification
BATA will address issues related to certification for the Bay Area region.

f. Issues regarding three-position transponders.
BATA will address development procurement of three-position transponders for the Bay Area region.

4. **Please describe how the transition:**

   a. Impacts business and/or employees
      No impacts.

   b. Impacts small businesses
      No impacts.

   c. Impacts jobs or occupations
      No impacts.

   d. Imposes reporting requirements
      No new reporting requirements anticipated.

   e. Impacts individuals.
      Some customer education on no beeping and mounting of transponders are required.
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? The goods and services should be cheaper due to the reduced cost of the 6C transponders.

6. What are the costs that businesses and individuals may incur to comply with this regulation over its lifetime? None.

7. What are the fiscal impacts on state and local government? Very minimal modification cost to VTA as we only have one toll zone reader to change.

8. Are there any issues regarding fairness of competition? 6C is an open and non-proprietary protocol.

9. Are there any issues regarding individual privacy? None.

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

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE