Update on Pilot Preparation Activities

Matthew Dorfman, D'Artagnan

Agenda Item #7

TAC Meeting #14, June 24, 2016

Sacramento, CA

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Account Management Choices

Commercial Account Managers

azuga® IMS® EROAD

State Account Manager

powered by arvato BERTELSMANN

Mileage Reporting Methods

Commercial Account Managers

1. OBD-II without location
2. OBD-II with location
3. Smartphone without location
4. Smartphone with location
5. Telematics

1. OBD-II without location
2. OBD-II with location
3. Telematics

1. Heavy truck mileage meter

State Account Manager

powered by arvato BERTELSMANN

1. Time permit
2. Mileage permit
3. Odometer charge

Security Testing

- Very Comprehensive Survey
  - 300 Questions on all areas of Security
  - 7 vendors + Web Page Provider
- Interviews with each vendor, web page provider
- No critical security issues found
- Several recommendations for security in case of a potential future operational road charging system

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Unit Testing

- To verify compliance with technical requirements
- Procedures developed by project team, customized by vendors
- Performed by each vendor separately
  - Mileage Reporting
  - Account Manager
- Proof required for each requirement
- Successful
  - Enhanced proof for some requirements was required later

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Integration Testing

- Checked two main interfaces:
  - Mileage Meter to Account Manager
  - Account Manager to Account Management Oversight
- Mileage Meter to Account Manager (Mileage Message or Odometer Message)
- Account Manager to Account Management Oversight
  - Five Weekly Reporting Messages
  - Simple and Stress Testing
- Successful

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End-to-End Testing

- Operating the complete road charge system for four days in order to ensure the system works as expected (System Acceptance Test)
- Conditions similar to the live pilot
- 34 participant vehicles on 8 Different Mileage Reporting Methods, 11 different combinations of Mileage Reporting Method and Account Manager
- 3 Light Vehicle Account Managers: Azuga, IMS, and the State Account Manager (powered by Arvato)
- 2 Heavy Vehicles supported by EROAD

Schedule

- **Monday**: Onboarding Session
- **Tuesday**:
  - Drive to Reno (*location-enabled mileage reporting options only*)
  - Change Operational Concept (*select vehicles only*)
- **Wednesday:** Failure conditions testing (*select vehicles only*)
- **Thursday**: Payment and Account Closeout
- **Friday**: Reserved for makeup testing (if needed)

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Analyses Performed

- Does it work? How can we make the participant experience better?
  - Account Manager self-analysis
  - Participant Feedback
- Device Accuracy (distance and fuel, where available)
  - Non-location-based devices: comparisons with odometer sheets
  - Location-based devices: comparisons with Trimble Global Positioning System units
- Failure Conditions (select vehicles)
- Account Management Oversight
  - Perfect Weekly Reports
  - Verify that Data was transmitted correctly

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Results of End-to-End Testing

- Technically the system worked well
- Improvements needed in human interfaces:
- Account sign-up: streamline; improve activation code, e-mail, and Vehicle Identification Number input; remove technical language and acronyms
- Mileage Reporting Methods:
  - General: reduce e-mails and steps, clarify vendor roles
  - Telematics: add vehicle compatibility interface
  - Smartphone without location: Add push reminders/e-mails/texts; improve odometer capture and messaging
  - Smartphone with location: Rename Activation Code to App code, add initial odometer reading
- Payment:
  - Simplify Payment Process
  - Improve Invoice, add Fuel Tax Credit
  - Fix day of travel issues

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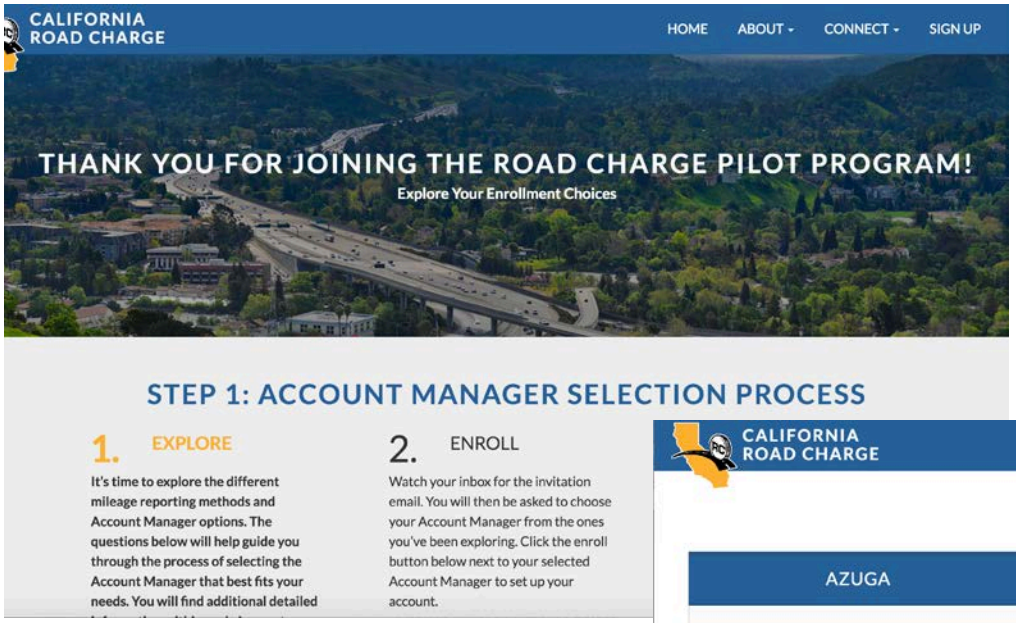
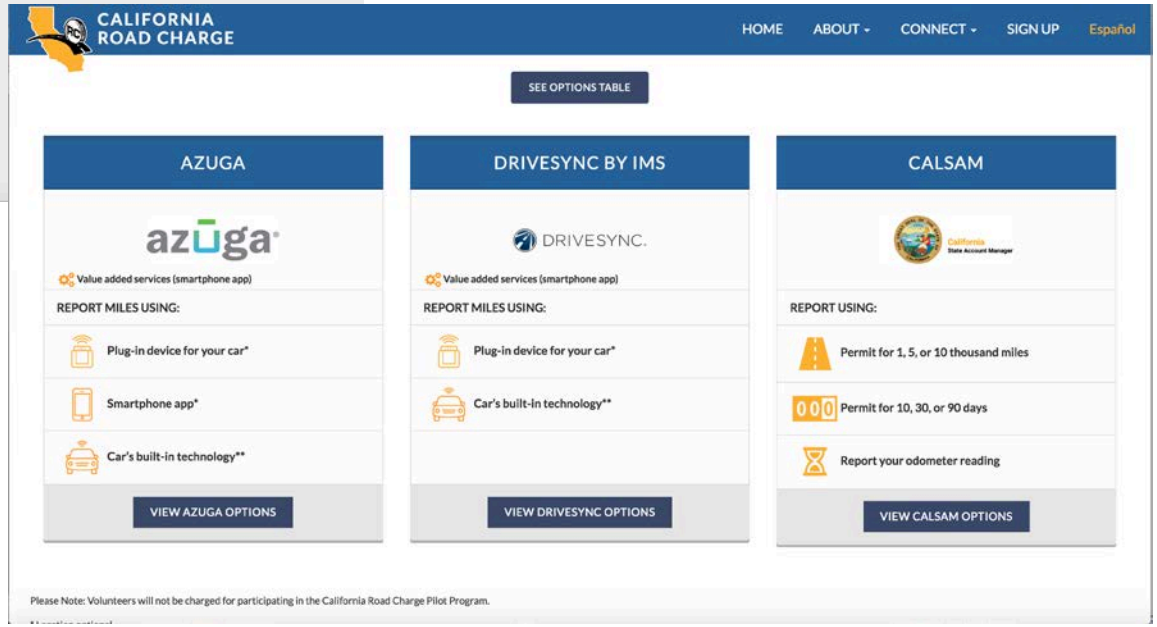
Participant Web Page





Volunteer Information Line (Call Center)

- Volunteer Information Line overseen by PRR, Customer Service Responses provided by Answernet
  - 12 Answernet call center staff
  - Call Center 24/7 June 8-July 15, October 15-November 15
- PRR e-mail and callback staff
  - 4 dedicated PRR Email/Callback Staff with 1 alternate
  - 8 AM to 5 PM M-F throughout the pilot
- Call Center Standard Operating Procedures/Scripts reviewed by Caltrans and CalSTA

Participant Sign-ups to Date

- *To be added shortly before TAC meeting*