



Appendix-17

Business Rules

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1. Introduction

1.1. Purpose

The purpose of this document is to describe the business rules that govern interactions between Road Charge vendors and project participants, as well as between vendors providing components of the Road Charge system.

The introduction section presents a brief overview of the system to which this Business Rules document applies to help the reader understand the document organization and how to interpret the document.

The business rules govern the provision of technology and services for all vendors participating in the Mileage Reporting, Account Management, and Account Management Oversight subsystems of the Road Charge System.

A diagram of the architecture is included below.



Figure 1: The three subsystems that comprise the Road Charge System

The ICD describes the interfaces between the Mileage Reporting subsystem and Account Management subsystem in greater detail and the SRS provides more information about the required functionality of all subsystems.

1.2. Document Overview

This document provides the business rules that govern the provision of technology and services for all vendors participating in the three major subsystems of the Road Charge system.

1.3. Definitions, Acronyms, and Abbreviations

- ▶ AM – Account Manager, an entity certified by the State of California to record the miles traveled by Road Charge eligible vehicles, collect the simulated Road Charge due on behalf of the State, and provide Road Charge account management.
- ▶ AMO – Account Management Oversight
- ▶ Caltrans – California Department of Transportation
- ▶ ICD – Interface Control Document
- ▶ MM – Mileage Meter
- ▶ SRS – System Requirements Specification



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1.4. Project Context

The California Road Charge System will implement a Road Usage Charge to provide road usage charging for a volunteer group of vehicles. This system will allow for automatic collection of road use charges from subject vehicles as well as manual reporting of mileage driven and manual mileage exemption (deduction) requests. The automatic collection uses a Mileage Reporting subsystem, which is comprised of a Mileage Meter (MM) and a Data Collection component (which may be located in the Mileage Meter, or may be located on a server), which will send a “mileage message” to Account Management servers run by Account Managers.

This system includes an Account Management subsystem to administer customer accounts, collect information from vehicles, invoice customers, and send simulated revenue to the California State Treasury (this function is simulated in the pilot). The Road Charge system also includes a Road Usage Charge Administration Subsystem (Account Management Oversight), internal to the agency. Road Charge administrative functions include audits and account reconciliations of Account Manager reports required for financial operation and monitoring of the entire system.

Note that during the California pilot, no actual funds will be exchanged and functions of the California State Treasury will be simulated by the AMO. Account managers will send invoices to Participants, and participants will use simulated forms of payment to pay their bills. Account Managers will report simulated financial details to AMO.

1.5. Business Rules Overview

This document lists the business rules that govern relationships between the system components and customers (pilot project volunteers), between the system components, and between the system and the pilot project management (D’Artagnan Consulting and Caltrans). The technical aspects of the project work are documented primarily in the following documents (business, administrative, and programmatic aspects of the work are documented elsewhere):

- ▶ A Concept of Operations (ConOps) that describes the functions and processes of the system at a high level.
- ▶ The Technical Design Memo, which describes several aspects of the pilot experience at a high level from the user perspective.
- ▶ An Interface Control Document (ICD) that provides detailed information about the interfaces between the various components of the system (Mileage Reporting, Account Management, and Account Management Oversight).
- ▶ A System Requirements Specification (SRS) that provides the functional technical requirements for the component subsystems.



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2. Business Rules

2.1. Overview

The business rules defined for the Road Charge Pilot Project fall into 6 categories:

1. **Quality of Customer Service:** These rules provide for a minimum standard of customer service and responsiveness to pilot participants by both technology providers and Account Managers.
2. **Support of Participants entering / leaving the pilot and changing vehicles:** These rules define the minimum standard of support for pilot participants who enter or leave the pilot outside of the defined begin/end dates, or who sell and/or purchase a new vehicle during the pilot period, or who wish to change operational concepts during the pilot with or without changing Account Managers.
3. **Customer Support for Simulated Payments:** These rules govern the provision of “simulated” payment methods for pilot participants.
4. **Restrictions on Use of Participant Data:** These rules govern use of pilot participant data by all vendors participating in the pilot.
5. **Restrictions on Selling Services to Participants:** These rules govern the offering/provision of value-added services to pilot participants.
6. **Interactions with Pilot Program / Account Management Oversight (AMO) Beyond ICD:** These rules define required data sharing between pilot vendors/subsystems and pilot project oversight (AMO, D’Artagnan) beyond that identified in the ICD.



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2.2. Business Rules

2.2.1. Quality of Customer Service

- 2.2.1.1. The Account Manager shall offer the participants good customer service.
 - 2.2.1.1.1. *The Account Manager shall offer a customer service call center.*
 - 2.2.1.1.2. *The Account Manager shall offer a customer service web contact or email address.*
 - 2.2.1.1.3. *The Account Manager may offer additional customer service contact points such as on-line chat services.*
- 2.2.1.2. The Account Manager shall respond to e-mails or web contacts within 1 business day.
- 2.2.1.3. All Customer Service phone calls shall be answered within 5 min for 95% of calls.
 - 2.2.1.3.1. *The Customer Service Representatives shall have a friendly demeanor.*
 - 2.2.1.3.2. *The Customer Service Representatives shall be generally knowledgeable about the California Road Charge Program.*
 - 2.2.1.3.3. *The Customer Service Representatives shall be knowledgeable about the specific technologies, devices, and/or services they support.*
- 2.2.1.4. Participants shall be notified of equipment, reporting, or account anomalies within 3 days of the detection of the problem/anomaly by the account manager.
 - 2.2.1.4.1. *Problems with equipment (mileage reporting device or smartphone app) shall be resolved within 3 days from detection of problem by customer or notification of customer by account manager.*
 - 2.2.1.4.2. *Problems with account data (e.g. incorrect mailing address, incorrect payment method on record) shall be resolved within one business day from detection of problem by customer or notification of customer by account manager.*

2.2.2. Support of Participants entering / leaving the pilot and changing vehicles or operational concepts.

- 2.2.2.1. The Account Manager shall support all actions necessary for participants to enter the pilot late (after kickoff), or leave the pilot before its official conclusion.
 - 2.2.2.1.1. *Account Manager shall support new pilot participant registration and provide all necessary account creation services for new participants (not only new customers) who join the pilot after the official kickoff date. We anticipate a "rolling" pilot launch, so the official kickoff date may be later than the initial start date of the pilot.*



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- 2.2.2.2. The Account Manager shall support vehicles/participants changing from another account manager to it during the pilot, and shall support participants changing from it to another account manager during the pilot. There will be one opportunity for participants to make a change approximately 3 months after pilot launch and a second opportunity approximately 6 months after pilot launch.
- 2.2.2.3. The Account Manager shall support participants changing vehicles during the pilot (removing one VIN and adding another).
- 2.2.2.4. If an Account Manager offers more than one operational concept, the Account Manager shall support participants changing operational concepts without changing Account Managers during the pilot.

2.2.3. Support of Invoicing and Simulated Payments

- 2.2.3.1. The account manager shall provide itemized bills giving details of what is invoiced and method used to compute charges.
 - 2.2.3.1.1. *The time permit and mileage permit shall be provided as pre-pay options. The odometer charge shall be offered as a post-pay option. The automated options may be offered either as pre-pay from credit that participants have added to their accounts, or as post-pay options.*
- 2.2.3.2. The account manager shall provide participants means of simulated payment for each participant to use during the pilot, and accept these means of payment from the participants for payment. The account manager shall provide:
 - 2.2.3.2.1. *printed vouchers (simulated checks) to allow participants to make payment via USPS, and*
 - 2.2.3.2.2. *simulated credit card numbers that can be used by participants to pay for services using the vendor's website.*

2.2.4. Restrictions on use of participant data

- 2.2.4.1. The account manager may not use participant data for any purposes other than support of the pilot program, except that each Account Manager may ask if each participant wishes to



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be contacted by the account manager about future offers (strictly on an informed opt-in basis).

- 2.2.4.2. Participant data may not be stored by any vendor or pilot project subsystem except as specified in the SRS and ICD:

2.2.4.2.1. *If a pilot participant opts-in and completes a signed release allowing data to be retained for pilot analysis and research purposes, the Account Manager shall store that data for the duration of the pilot and deliver it to D'Artagnan on request.*

2.2.4.2.2. *CAMs may request informed opt-in of participants to allow use of participant data to support provision of value-added services. Such opt-in shall require a signed release and must comply with all applicable state and federal laws.*

2.2.5. Restrictions on selling services to participants

- 2.2.5.1. The Account Manager may provide value-added services to participants on an informed opt-in basis but may not charge participants for these services during the course of the pilot test.

2.2.5.1.1. *Charging may continue for services offered on devices that were already installed in vehicles before the start of the pilot test—devices that were providing value-added services that were already being charged for.*

- 2.2.5.2. The account manager shall not provide any services to the participants that may lead to distracted driving.

- 2.2.5.3. D'Artagnan must approve all value-added services in writing before they are offered to participants.

Note: D'Artagnan intends to take a liberal approach to approval of value-added services. Nonetheless, we wish to have the opportunity to review all services before they are offered.

2.2.6. Interactions with Pilot Program / Account Management oversight beyond routine interactions defined in the ICD

- 2.2.6.1. The Account Manager shall support all road charge / pilot participant data requests made by the pilot program liaison (D'Artagnan) or the AMO, even for data not covered in the ICD, for the purposes of program evaluation and operational analysis.