Secure Credential Management System (SCMS) Proof of Concept (PoC) Overview

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SCMS PoC

- Supports the trusted and secure exchange of messages among devices and between devices and the SCMS PoC.

- USDOT will be the SCMS PoC Manager, the USDOT will:
  - Provide information about EE requirements and specifications
    - Includes hardware, software, and operating system
  - Set policies and technical process and procedures for operation
  - Provide technical and policy instruction and guidance
  - Establish overall device certification and performance requirements
  - Grant approval of devices for enrollment
  - Generate, distribute, and revoke certificates
  - Manage the SCMS PoC manager environment to support Connected Vehicle, Smart City, and other deployments
SCMS PoC Manager Environment
Device Suppliers and SCMS PoC

- **Deployment Sites**
  - Device orders

- **Certification Services**
  - Testing services to certify DSRC and connected vehicle functional capabilities
    - Transmit and receive messages, GPS position accuracy

- **Connected Vehicle Support Services**
  - First level policy and technical support
  - Assist in the develop and submission of device enrollment application

- **SCMS PoC Technical Management and Operation**
  - EE security interface requirements, and enrollment and certificate technical processes and procedures
  - Two environments
    - Quality Assurance – development
    - Production - deployment
  - Provide 2\textsuperscript{nd} and 3\textsuperscript{rd} level technical support

- **SCMS PoC Governmental Management**
  - Device application and approval policies and process
    - Criteria regarding approval to access SCMS PoC and enroll device
      - Includes certification and other requirements e.g. secure enrollment facility
    - Device approvals
SCMS PoC and End-Entity (Device) Support

- SCMS PoC EE Requirements and Specifications
  - Supporting Software Release 1.1 delivered May, 2016
  - Supporting Software Release 1.2 and Final report, Release scheduled for December 2016
  - Guidance Notes – 1609.2

- Sample OBE security materials
  - Generated by SCMS PoC development environment
  - 3 years of security materials including enrollment and pseudonym certificates for OBEs
  - Certificate batch for RSUs
  - Available through Connected Vehicle Support Service
SCMS PoC End-Entity (Device) Interface

- Investigating Interim Support
  - Question/Answer one-on-ones
  - Interface Reviews
  - Interim QA test involvement

- Quality Assurance Environment
  - Next source of security materials for development
  - Working SCMS PoC interface
  - Device interface shakedown opportunity
  - Will include low level device screening
  - Dry run for Production Environment