ARC-IT V8 Workshop

ARC-IT & ITS SECURITY

Security

- Same basic security classification scheme in previous versions continues:
  - considered confidentiality, integrity, and availability requirements for each information flow and physical object
- Upgraded and revised for Version 8.0:
  - Every information flow triple now includes security classification ratings (C-I-A) which are used to provide device classification requirements for the physical objects
  - Explicitly supports security credentials management
  - References specific communications security standards

Securing ITS

- ITS as an information system
  - Trusted
  - Reliable
  - Available
- Security impacts all views
  - Enterprise must consider security-related roles.
    - Institutions will have relationships with security providers
    - Users will expect institutions to care for their security
  - Physical includes objects and flows dedicated to security
  - Functional includes functions dedicated to security
  - Communications profiles all require security protocols

ITS Security Areas

- ITS as a provider of security
  - Disaster response
  - Freight/Commercial Vehicle security
  - HAZMAT security
  - ITS Wide Area Alert
  - Rail security
  - Transit security
  - Transportation Infrastructure security
  - Traveler security

- Largely unchanged, just updated from 7.1

Take a Tour – Next Pit Stop

- Find the list of physical objects. Select "ITS Roadway Equipment"

- In the "Emergency Vehicle Preemption" service package, what is the device class suggested for ITS Roadway Equipment to provide appropriate security?

- What types of controls apply to devices of this class?

- What is Integrity requirement for the signal pre-emption request?

- Where do these High/Moderate/Low ratings come from?

- Where do these requirements (controls) come from?

What about all this PKI stuff?

- All of the connected vehicle security content has been integrated into the architecture
- SU08 and SU02 provide the necessary security SPs
  - For most, SU08 will be externally provided
  - For many, SU02 will have to be considered
- Much more information under the Security menu item

U.S. Department of Transportation
ITS Joint Program Office