UNECE AECS

Non Paper regarding component approvals
A component based approval would allow:

- To use one component for various AECS system configurations
- Smaller modifications of an AECS system can be handled at AECD level
- Individual suppliers can obtain an AECD approval for individual components that are used in variety of emergency call systems
- Flexibility to select an approval route in function of supply chain responsibility and OEM responsibility (one box solutions, individual components, semi-integrated and fully integrated ecall systems)
Can be:
- Dedicated eCall power supply
- 12V starter battery
- Traction battery
- ….

MNO antenna can be:
- External antenna dedicated to AECS
- External antenna for other Vehicle communication functions
- Antenna integrated in AECD unit
- ….

Positioning function can be:
- Dedicated AECS positioning module within AECD unit
- Take info from vehicle navigation module
- …

Trigger detection can be:
- Dedicated AECS crash sensor
- Take signal from vehicle SRS unit
- …

Indicator can be:
- AECS indicator integrated in AECD
- Separate indicator in instrument panel/common place
- …

Audio can be:
- Dedicated AECS audio speaker/micro
- Integrated with vehicle audio
- …
**Current AECO**

1. **AECD control unit**
   - With intended fixation & part of wire harness

2. **Mobile Network antenna**
   - With intended fixation & part of wire harness

3. **Main power supply**
   - If no back-up battery
   - **or**
   - w/o fixation

**Suppliers or Manufacturer** → **Component set** → **Sled test** → **Function check** → **AECD approval**

- **AECD test bench**
  - **GNSS antenna**
  - **AECD control unit**
  - **Manual button**

- **Mobile network**
  - **or**
  - **Mobile network simulator**
    - + VSWR measurement (for wired procedure)

**UNECE part I**

- Incl. other requirements if requested by applicant
  - Par. 7.1 EMC
  - Par. 7.2 Position (& Annex 8)
  - Par. 7.4 Means of access to MNO
  - Par. 7.5 AECD information and warning signal
  - Par. 7.6 Power supply
Individual components as AECD

1. AECD control unit
   - With intended fixation & part of wire harness

2. Mobile Network antenna
   - With intended fixation & part of wire harness

3. Main power supply
   - If no back-up battery
     - w/o fixation

Sled test → Function check

eCall test bench
- GNSS antenna
- MNO antenna
- AECD control unit
- Battery
- Manual button

VSWR measurement

Battery tester

Proposed as additional flexibility in UNECE part I

Incl. other requirements if requested by applicant
- Par. 7.1 EMC
- Par. 7.2 Position (& Annex 8)
- Par. 7.4 Means of access to MNO
- Par. 7.5 AECD information and warning signal
- Par. 7.6 Power supply
1. Check which part I requirements are already covered.

2. AECS requirements (if not covered already by AECD)
   - General installation
   - Full scale impact test
   - Positioning AECS Control
   - Information signal
   - warning signal
   - HF Audio
   - Power supply

3. AECS approval