64th GRB

EU Regulation on AVAS requirements

Presentation by the European Commission expert
Detailing requirements of Acoustic Vehicle Alerting System (AVAS)

- Commission empowered to detail by 1/7/2017 AVAS requirements that are already in Annex VIII to Reg. (EU) No 540/2014

- Commission Delegated Regulation taking into account the UNECE relevant work (UN R138 on QRTV)
UNECE Regulation No 138

- M and N QRTVs concerned

**AVAS requirements included** – only acoustic devices addressed to

A) Technical

- Definitions, speed range of operation, min vehicle sound for at least two 1/3 octave bands, max vehicle sound 75 dB(A) in forward motion, frequency shift, tests for sound emission (forward and reverse), stationary sound (optional), AVAS pause function (switch): optional

B) Administrative

- Type approval (procedures for application, modification, extension and related certificate and marking), CoP, penalties, Technical Services data
- Communication and marking models in Annexes 1 & 2
EU Regulation on AVAS requirements:


- **Legal obligations:**
  - to detail the requirements in Annex VIII by completing them only
  - to have the AVAS mandatory on all new EV and HEV types by 1/7/2019 and all new EV and HEV by 1/7/2021

- **Articles**
  1) Amendment of Annex VIII to Reg. 540/2014
  2) Entry into force
EU Regulation on AVAS requirements

• Annex

- Based on the technical requirements drafting in Annex VIII, Reg. 540/2014
- Completing the *technical* requirements of Annex VIII, Reg. 540/2014 by *referring* to requirements of UN R138

- *Copying* the necessary *admin* requirements from UN R138
EU Regulation on AVAS requirements

• Annex (cont'd)

A) Technical requirements

1) Accepting from UN R138 the definitions of "Pause function" and "Frequency shift"

2) The AVAS sound generation requirement in forward motion and reverse as in Reg. 540/2014

+ from UN R138: requirements on testing, min vehicle sound level and frequency shift when no AVAS in reverse, due to vehicle warning alarm
EU Regulation on AVAS requirements

• Annex (cont’d)

3) Pause switch

From UN R138

+ Pause function (new term)

+ Optional – to be amended following the UN Reg. final decision

+ Complying with the requirements in UN R138

4) Attenuation

• Requirement from Reg. 540/2014

+ from UN R138 : min sound level & frequency shift
EU Regulation on AVAS requirements

• Annex (cont'd)

5) Sound produced

As in Reg. 540/2014

• Continuous to warn pedestrians and other road users

• Indicative of the vehicle operation

From UN R138:

+ Frequency shift

+ Optional stationary noise, complying with the attenuation requirements of this Regulation, if attenuated

+ Driver selectable sounds
EU Regulation on AVAS requirements

• Annex (cont'd)

6) Sound volume

As in Reg. 540/2014

+ from UN R138: overall vehicle sound level 75 dB(A) in forward motion

7) Transitional provisions

EU Regulation on AVAS requirements

• Annex (cont'd)

B) Administrative requirements copied from the UN R138

+ Communication (type-approval certificate) & its model
+ Marking on vehicle & its model
Next steps

• First comments from MVWG  
  done

• New draft incorporating comments  
  September 2016

• Discussion of new draft in dedicated MSEG and / or  
  comments in writing  
  October 2016

• ISC  
  end 2016-start 2017

• Adoption  
  Q1 2017
Thank you for your attention

DG GROW – Unit C4

Further information: