

EGEA WG 9

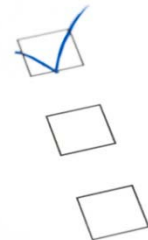
Mobile Air-Conditioning

Brussels, 4th April 2012



Agenda

- 1. Opening and Welcome**
- 2. Approval of the minutes from the 1st meeting (06 December 2011)**
- 3. Evaluate the VDA specification to the new EGEA specification**
- 4. Review and finalise the EGEA 1234YF specification**
- 5. Review additional 1234YF equipment/options to be covered by WG9 and prioritise (check applicable regulations/standards)**
- 6. Operator and service engineer qualifications/training**
- 7. Election of WG9 Chairman**
- 8. Workplan and schedule for future meetings**
- 9. Thank you and closure**



Evaluate the VDA specification to the new EGEA specification

- The VDA specification is a German VM focus and there is no EU/ISO standard for 1234YF Servicing Stations.
- An 'EGEA Specification' would provide an Aftermarket focused product.
- **What are the implications for such a specification for EGEA members?**
- What do the key differentiations need to be?
- External and independent testing of equipment to the specification.

Review additional 1234YF equipment/options to be covered

- **Discussion on new equipment required**
 - ✓ Gas identifier/analyser
 - ✓ Tool to change contaminated R134a
 - ✓ Tool to change fluid R1234YF
 - ✓ Others.....?
- **Discussion whether reference to ISO 13043:2011 should be made in EGEA specification**
- **Check applicable regulations or standards**

Reference standards

A mix of existing American standards or EU Directives:

- SAE J639:** Safety standards for motor vehicle refrigerant vapour compressor system
- SAE J2844:** Refrigerant Purity and Container Requirements for HFO-1234yf refrigerant used in MAC systems
- SAE J2843:** HFO-1234yf RRR Equipment for flammable refrigerant for MAC systems
- SAE J2888:** HFO-1234yf Service hose, fittings and couplers for mobile refrigerant systems service equipment
- SAE J2770:** HFO-1234yf Service standards for MAC systems
- SAE J2099:** Standard of purity for recycled HFC-134a and HFO-1234yf for use in MAC Systems
- ISO13043** Refrigerant systems used in MAC systems – safety requirements
- UL 1963**
- UL 1604**
- CE Marking** which includes:
 - PED:** Pressure Equipment Directive (Directive 97/23/EC)
 - ATEX 95:** Equipment Explosive Atmospheres Directive (Directive 94/9/EC)
 - EMC:** Electromagnetic Compatibility Directive (Directive 2004/108/EC)
 - LVD:** Low Voltage Directive (Directive 2006/42/EC)
 - Machinery:** Machinery Directive (Directive 2006/42/EC)
- Batteries and Accumulator Directive:** (Directive 2006/66/EC)
- WEEE:** Directive 2002/96/EC
- RoHS:** Directive 2002/95/EC

Operator and service engineer qualifications/training



- **What is needed?**
- **How does this fit with existing F-Gas requirements?**
- **Discussion on new issue regarding FGas training and qualification – EU wide**

Engineer training

Flammability	HFC-134a	HFO-1234yf
	No	Yes
Lower Flammability Level	N/A	6.2%
Upper Flammability Level	N/A	12.3%
AC System		
AC Type	Vapor Compression	Vapor Compression
AC Components	Can use either R-134a evaporator or HFO-1234yf evaporator	Use only evaporators which meet J2842
Storage, Handling		
Container Type	Light Blue Container, PMS Color 2975	White Container with Red Band
Product Storage	Do not expose to open flames, red hot surfaces, or temps in excess of 52C	Do not expose to open flames, red hot surfaces, or temps in excess of 52C
Personal Protective Equipment	gloves, goggles	gloves, goggles
Equipment		
Recovery/Recycling Equipment	Only use equipment that meets J2210, superseded by J2788 and is for use with R-134a	Only use equipment that meets J2843 and is for use with HFO-1234yf
Recovery Only	Only use equipment that meets J1732, superseded by J2810 and is for use with R-134a	Only use equipment that meets J2851 and is for use with HFO-1234yf
Leak Detectors	Only use equipment that meets J1627 or J2791 and is for use with R-134a	Only use equipment that meets J2913 and is for use with HFO-1234yf

Election of WG9 Chairman

Candidates are:

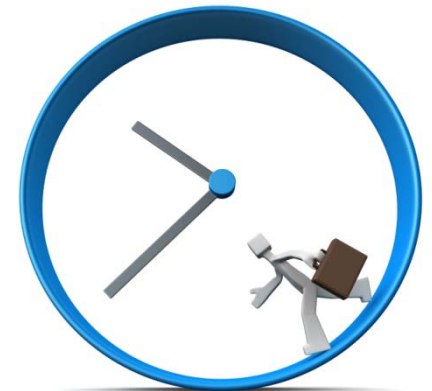
- **AICA/ Brain Bee, Andrea Cantadori**
- **AICA/ SPX, Alessandro Carluccio**
- **ASA/ Hella, Pete Bradley**

Guidance notes:

- **The Chairman will be elected by the WG9 members, based upon the personal presentations of candidates for their suitability and on the basis of a maximum of 2 votes per country.**

Workplan and schedule for future meetings

- **Work priorities**
- **Timescales for completion**
- **Next meeting date/location**



Any other business

- **R134a contamination**

What is the latest information, what needs to be done, what are the risks if contaminated R134a has been used?

- **1234YF availability**

The latest news...



Thank you!

