

January 2017



# From GAD to GAR

**Trust  
Quality  
Progress**

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- Transition to the GAR
  
- GAR Q & A list
  
- Specific:
  - State of art
  - Design method
  - Risk Analysis
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  - Obligations of economic operators
  - Transitional documents

# GAR overview & timeline

- GAD was originally implemented in 1990 as Directive 90/396/EC then modified:
  - 1993 Directive 93/68/EEC – formal Directive, 2 yr derogation period
  - 2009 Codified Directive – simplifying original text
- The Directive provides Essential Requirements and Conformity Assessment modules
  - Harmonised Standards offer route to presumption of conformity
  - Assessment against Essential requirements
  - Notified Bodies
  - Manufacturer's (Importers, Distributors) Declaration of Conformity
- Reviewed in light of experience and to
  - Provide clarity and legal certainty
  - Improve MS communication on gas quality and supply
  - Align with New Legislative Framework
- Regulation 2016/426...Appliances Burning Gaseous Fuels

# Regulation (EU) 2016/426

31.3.2016

EN

Official Journal of the European Union

L 81/99

**REGULATION (EU) 2016/426 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**  
**of 9 March 2016**  
**on appliances burning gaseous fuels and repealing Directive 2009/142/EC**  
**(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee <sup>(1)</sup>,

Acting in accordance with the ordinary legislative procedure <sup>(2)</sup>,

Whereas:

# GAR overview & timeline

- The scope is generally consistent with GAD
- 105degC limit for water temperature removed
- New definition of burning - fuel cells included
- ER for rational use of energy may be covered by Ecodesign - where applicable
- Definitions of and obligations on manufacturers, importers and distributors clarified
- Certificates will have a variable validity period capped at 10 years
- Strong reference to gas quality – esp. biogas; requirements on MS for informing of changes in gas quality

# GAR overview & timeline

- Indoor appliances shall:
  - Prevent build-up of unburnt gases or ensure no risk under worst case
  - Not present a danger to health due to CO or toxic components
- Appliances shall be so designed as to obviate gas related risks from:
  - Electrical hazards (take LVD and Machinery Directive into account)
  - Electromagnetic phenomena (take EMC-D and RED into account)
- Manufacturers will be required to execute a risk assessment as a step in the process to ensure compliance with GAR
- Increased evidence requirements at application stage – eg fittings instructions
- NoBo's must inform their certificate holders of any changes to State of the art which make affect products conformity
- Products installed and products in EU warehouses are not affected by the GAR

# GAR overview & timeline: Fittings

**Means “safety devices, controlling devices, or regulating devices and sub-assemblies thereof, designed to be incorporated into an appliance or to be assembled to constitute an appliance”**

- As per GAD – spare parts are excluded
- No fittings certificate required, but Fittings to carry the CE mark
- Declaration of Conformity required (DoC)
- DoC shall contain inter alia instructions for incorporation or assembly, adjustment, operation and maintenance etc.
- Implication for appliance manufacturer's it to start to gather evidence trail for fittings  
- DoCs

# Timeline





# Transition of the GAD to the GAR

- The requirements and rules to proof compliance with the GAR
  
- GAD-AC WG GAR – review GAD guidance sheets & propose to:
  - Delete
  - Update (content and/or editorial)
  
- Standards
  - Existing hEN GAD -> hEN GAR & publication in OJEU
  - Appliances > 105 °C
  - Appliances burning gas not associated with flames
  - Co-generation appliances
  
- Notification of NoBo's according to the GAR

# Transition of the GAD to the GAR

- Is considered to be (in most cases) an administrative process
  - Assuming that GAD process & documentations are up-to-date
- Using existing test results & test reports
- Add evidence to cover new / updated ER's
  - For majority of products: documents needed only
  - Exceptions eg: fsds & flueless
- Manufacturer has to update his documents / labels / DoC
- NoBo has to review manufacturer documentation and issue a GAR certificate and issue a new surveillance contract (if applicable)

# GAR Q & A list

- The European GAD-AC installed a WG GAR
  - Proposed an Q & A list
  - Accepted by GAD-AC (Nov 2016)
  - Informally accepted by EU desk office
- GAR implementing guide:
  - EU member states accepted this proposal of GAD-AC
  - Q&A list as the basis
  - To be issued by EU desk office
  - 1st draft expected in May 2017



# GAR Q & A list

- Can be used as guidance for manufacturers & NoBo's
  - Prevent unnecessary work
  - Aiming for a level playing field
- Provide guidance on transition of running products
  - Clarify the role and use of existing test reports, certificates and DoCs
  - Agree on pragmatic solutions
  - Try to reduce the administrative burden for manufacturer and NoBo
- Provide guidance on new ER's:
  - Risk Assessment (template of RA, role of (existing) GAD RA standards)
  - How to cover new ER's (specials)

# GAR Q & A list

- Clarify the impact of validity date of type testing certificates (10 years)
- Clarify the role of hENs, state of art & reasonable foreseeable use (as under GAD)
- Clarify how to fulfill responsibilities as manufacturer and NoBo
- Provide guidance on fittings:
  - GAR requires to affix CE mark, *except fittings designed and produced by the appliance manufacturer and used for its own purpose.*
  - DoC required (including eg instructions for incorporation or assembly)

<http://www.kiwaenergy.com/uploadedFiles/News/GAR%20Update%20Final%20NL.pdf>

# Specific - State of Art

## ■ Q&A list # 13

Question: What is meant by state of art?

Answer: State of art is a common understanding about technical knowledge on the minimum requirements needed to cover the ER of a directive / regulation.

Note: state of art is mentioned in the GAR in

- Whereas (30)
  - ESR: observation & clause 3.5
  - Annex III, cl 1.7 – responsibility of Notified Bodies
- 
- State of art does not necessary means ‘compliance with the latest standard’
    - RA should be state of art
  - Kiwa’s intention: GAR-AC will be used to define state of art

# Specific - State of Art

GAR, Module B, article 1.7

The notified body shall keep itself apprised of any changes in the generally acknowledged state of the art which indicate that the approved type may no longer comply with the applicable requirements of this Regulation, and shall determine whether such changes require further investigation. If so, the notified body shall inform the manufacturer accordingly.

# Specific - Risk assessment (ER 1.2)

- ER 1.2 requires a RA
  
- Q&A list - question nr. 4. - see separate document
  - Use of 'our' RA based standards
  - Link to the use of 'our' test based standards to proof degree of protection
  
- Q&A list – Annex B - example of a template - separate document
  - Includes the manufacturer's specification of design principle
  - Includes the manufacturer's specification of reasonable foreseeable use
  
- In practice: RA per certification application or per technology?



# Specific - Design principle (ER 1.3)

**Eliminate** - **protect** - **inform**

# Specific - Reasonable foreseeable use (ER 1.4)

## ■ Covered by GAD already – Article 3:

3. *For the purposes of this Directive, an appliance is said to be ‘normally used’ when it is:*

*(a) correctly installed and regularly serviced in accordance with the manufacturer’s instructions;*

*(b) used with a normal variation in the gas quality and a normal fluctuation in the supply pressure; and*

*(c) used in accordance with its intended purpose or in a way which can be **reasonably foreseen**.*

## ■ GAD – guidance

□ Document N389E of 2009

# Specific - Reasonable foreseeable use (ER 1.4)

## ■ N389E – 2009 quotes:

- So it come that "only those possibilities of misuse that I have already been reported and found unsafe has to be taken into account".
- When it is does not exist an harmonized standard for an appliance, it is the responsibility of the manufacturer and of the notified body to determine what can be reasonably foreseen or not when they perform the risk analysis. Requirements of HEN applicable to analog kind of appliances should be considered. Such analysis has to be traceable.
- Example of outdoor patio heater:  
indoor use is likely foreseen so that such appliances must be safeguarded (e.g. with an atm. sensing device?) in stead of bearing a warning notice only.

# Specific – Obligations of economic operators

- manufacturers, authorised representatives, importers, distributors
- Definition ‘manufacturer’ in GAR
  - ‘manufacturer’ means any natural or legal person who manufactures an appliance or a fitting or who has an appliance or a fitting designed or manufactured, and markets that appliance or fitting under his name or trademark or uses the appliance for his own purposes*
- GAR, Module B – type testing & GAR, Module D:
  - A formal mandate might be needed between manufacturer and its authorized representative

# Transitional documents

- Flowchart ER 1.2, 1.3 and 1.4 (new)
- Mandate for authorized representative (if applicable)
- Manufacturer declaration for the GAR approval (updated)
- Declaration for NON GAR Countries (updated)
- EU declaration of conformity of the fitting containing the instructions on how the fitting should be incorporated into an appliance or assembled to constitute an appliance (new)
- Other aspects if applicable, eg: for a combi-boiler evidence that materials and parts used in the construction of an appliance which may come into contact with water intended for human consumption not impair the quality of water;





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