

The new Gas Appliances Regulation (EU) 2016/426

Background and overview

A Whitepaper



What is happening?

As of 21 April 2018, the Gas Appliances Directive 2009/142/EC (GAD) will be replaced by the new Gas Appliances Regulation (EU) 2016/426 (GAR) for appliances burning gaseous fuels. It will include updates and enhancements to the existing rules included in the Gas Appliances Directive 2009/142/EC. This whitepaper provides an overview of the key changes.

The history of **GAD** in Europe

The GAD was originally implemented in 1990 but was modified in 1993 by Directive 93/68/EEC to make it a formal “CE Marking” directive and to make the conformity assessment modules more consistent with the other CE marking directives. Prior to European EN (European Norm) specifications and CE marking, individual states produced standards for gas appliances. As the need for standardization grew across Europe, EN standards started to be written. These standards are known as Harmonised Standards and are listed in a document called the Official Journal (OJ).

If a product meets a standard, which are considered state of the art, listed in the OJ, it has a “presumption of

conformity” to the Essential Requirements listed in the Directive. Innovative products where no standard exist, and therefore not listed in the OJ, could still be certified to the Gas Appliances Directive through using a technical solution that meets the same essential requirements as determined by a notified body.

In late 2009, the Commission introduced 2009/142/EC, a codified directive which brought together the original text of 90/396/EC and its amendments in a single document, and simplified the language in some places. This Directive came into force on 5 January 2010 and all appliance had to comply with the requirement in order that they could be sold in the EU.

Why is **GAD** being replaced by **GAR**?

Experience gained from implementing the Gas Appliances Directive showed the need to make some modifications in order to provide clarity and ensure legal certainty particularly with regards to definitions and the scope of the directive. The EU council also understand that there should be greater emphasis on Member States’ communication of the gas supply conditions that are used within their territory. They recognise that the currently published information is often not sufficient enough to allow designers

to correctly adjust their appliances to meet standards across the EU. Going forward, Member States would now

need to supply specific parameters that would be defined in Annex II of the Regulation.



Overview of GAR

The Regulation is aligned to the “New Legislative Framework” policy which was adopted in 2008 to help improve the internal market for goods and strengthen the conditions for placing a wide range of products with the EU. It also clarifies what requirements each gas appliance and fitting has to fulfil, introducing a harmonized content for the communication of gas supply conditions in EU countries, enabling the design and construction of safe and correctly performing products.

What does the Regulation cover?

- Appliances burning gaseous fuel (“appliances”) and fittings
- New or second hand appliances imported from a country outside of the EU
- All forms of supply including distance sales

The scope of the Regulation

This regulation applies to “appliances” and “fittings” and has the following exclusions:

- Products specifically designed for industrial processes carried out on industrial premises
- Products for use on aircrafts and railways
- Products for research purposes for temporary use in laboratories
- Appliances possessing historic or artistic value and not put into service e.g. antiques
- Persons who manufacture appliances on a non-professional basis and use the products exclusively for their own purposes.

What are the main changes?

- The scope of the Directive generally remains as it currently is, as the impact assessment carried out did not identify economic benefits to broadening the scope to include items such as installation components. Fittings, however are now required to be CE marked and go through the same conformity assessment procedures as appliances.
- The GAD exclusion for appliances having a normal water temperature exceeding 105°C has been removed. This would bring gas-fired steam generators, hot water boilers and steam boilers within the scope so long as they were used for one of the purposes listed (eg. space heating).
- The Regulation proposes to “disapply” the existing “rational use of energy” essential requirement 3.5 for products that are covered by one of the implementing measures of Directive 2009/125/EC on ecodesign requirements for energy-related products (the “Ecodesign Directive”). Other products would continue to have to meet this essential requirement.
- The definition of manufacturer has been clarified to “any natural or legal person who manufactures an appliance or fitting or who has an appliance or fitting, designed or manufactured, and markets that appliance or fitting under his name or trademark...” This change would classify own brand retailers as the manufacturer where historically all responsibility has been placed on the manufacturer.
- Manufacturers will be required to conduct and document a risk assessment of their appliance or fitting as part of compliance with the GAR. As part of this manufacturers must take into account the foreseeable misuse that might occur
- There are a number of changes to the essential requirements which will impact manufacturers. One of the most significant is that appliances shall be designed and constructed so that when normally used, they do not cause a concentration of carbon monoxide harmful to health. This previously only concerned flueless space heaters and therefore other type of appliances may need testing.
- The certificate shall have a maximum validity period of ten years from date of issue. **Notified bodies are required to inform manufacturers of changes in technology/regulation that affects certification.**

Early preparation is **key**

All manufacturers of gas appliances and fittings need to be aware their existing certification and the impact the change to the GAR will have on these and their on-going compliance and validity. After the date of adoption, compliance to the new GAR requirements will be mandatory therefore it is important to keep up to date with these changes and prepare for the impact on your business.

- As of the 21st April 2018, manufacturers will be required to hold GAR certification for any products that they are supplying into the EU which are not already in the supply chain. Products already in the distribution chain may still be supplied to consumers utilising the existing GAD certification.
- Look at existing product ranges and ensure they are to the latest product specification and approved standards.
- If you are placing fittings on the market these will be required to be CE marked and therefore you should prepare for the same conformity assessment procedures as undertaken by appliance manufacturers. Fitting certificates will no longer be a valid route to compliance.
- If you are a distributor, importer and supply "own brand" products, be aware that there are items in the regulation that will have direct implications on you.

Validity Periods

The GAR imposes a maximum ten-year validity period on EU Type examination certificates from the date of first issue. At the end of this ten-year period the certificate will expire and the manufacturer will need to reapply and an assessment of the products made to


ensure they remain compliant with the regulation.

The regulation also requires that notified bodies, as well as manufacturers, keep apprised of any changes to the state of the art and determine whether appliances

approved to type still meet the essential requirements of the regulation. If it is determined that further investigation is required they are obligated to inform the manufacturer accordingly and updating of the certification may be required.



Obligations on **Manufacturers**

- The provisions have been brought into line with the 2008 New Legal Framework (NLF), which is relevant, for example to the presumption of conformity and formal objections, and in some cases extend beyond it. For example, appliances manufactured solely for companies' own commercial use must now also be subjected to the complete conformity assessment procedure.
 - Intermediate products (fittings) intended for appliance manufacturers, such as safety devices, controlling devices or regulating devices and their sub-assemblies, must now also bear the CE mark. Previously these only required a "fitting certificate", however they have been brought into line with appliances and are required to undergo the same conformity assessment procedure. This will have a big impact on both manufacturers of these products and end appliance manufacturers who utilise these products as they will now need to look for this to be in place.
 - The manufacturer is also under an obligation to analyse and produce a documented risk assessment in order to identify the risks which apply to the appliance or fitting. The design and construction should then take into account the assessment.
 - In selecting the most appropriate solution, the manufacturer of an appliance or a fitting shall apply the principles set out below, in the following order:
 - eliminate or reduce risks (inherently safe design and construction)
 - take the necessary protection measures in relation to risks that cannot be eliminated
 - inform users of the residual risks due to any shortcomings of the protection measures adopted and indicate whether any particular precautions are required.
 - When designing and constructing the appliance, and when drafting the instructions, the manufacturer shall envisage not only the intended use of the appliance, but also the reasonably foreseen use. For example using a cooker to heat a room.
 - Products will need to be compliant with the generally acknowledged 'state of the art', which in practice will mean compliance with the current harmonised European Standards.
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- Appliances must be so designed and constructed as to remove any gas related risks due to hazards originating from electromagnetic phenomena. This has existed in many of the harmonised standards however this is now included within the new law.
 - Appliances shall be so designed and constructed that, when used normally, they do not cause a concentration of substances harmful to health, such as they would be likely to present a danger to the health of persons and domestic animals exposed.
 - The surface temperatures of external parts of appliances, with the exception of surfaces or parts which are associated with the transmission of heat, shall not under operating conditions present a danger to persons exposed, in particular to children and elderly people, for whom an appropriate reaction time shall be taken into account.

Obligations for **importers and distributors**

An importer or distributor shall be considered a manufacturer and subject to the obligations of the manufacturer, where an appliance or fitting is placed onto the market under their name or trademark or modifies a product

already placed on the market in such a way that compliance with the regulation may be affected.

This now introduces a greater onus on “own brand” suppliers to ensure

that the product is compliant and the procedures followed are as robust as that of product manufacturers.

Requirements relating to **Notified Bodies.**

The requirements relating to notified bodies and how they are appointed has also changed to ensure that the process for appointing and maintaining notification is more rigorous. The following points relating to this are key:

- Conformity assessment bodies shall have the requisite technical competence in the specific field and must have sufficient and appropriate experience to perform the conformity assessment procedures
- Personnel responsible for conformity assessment procedures shall have sound technical and vocational training, appropriate knowledge and understanding of the essential requirements and applicable harmonised standards.

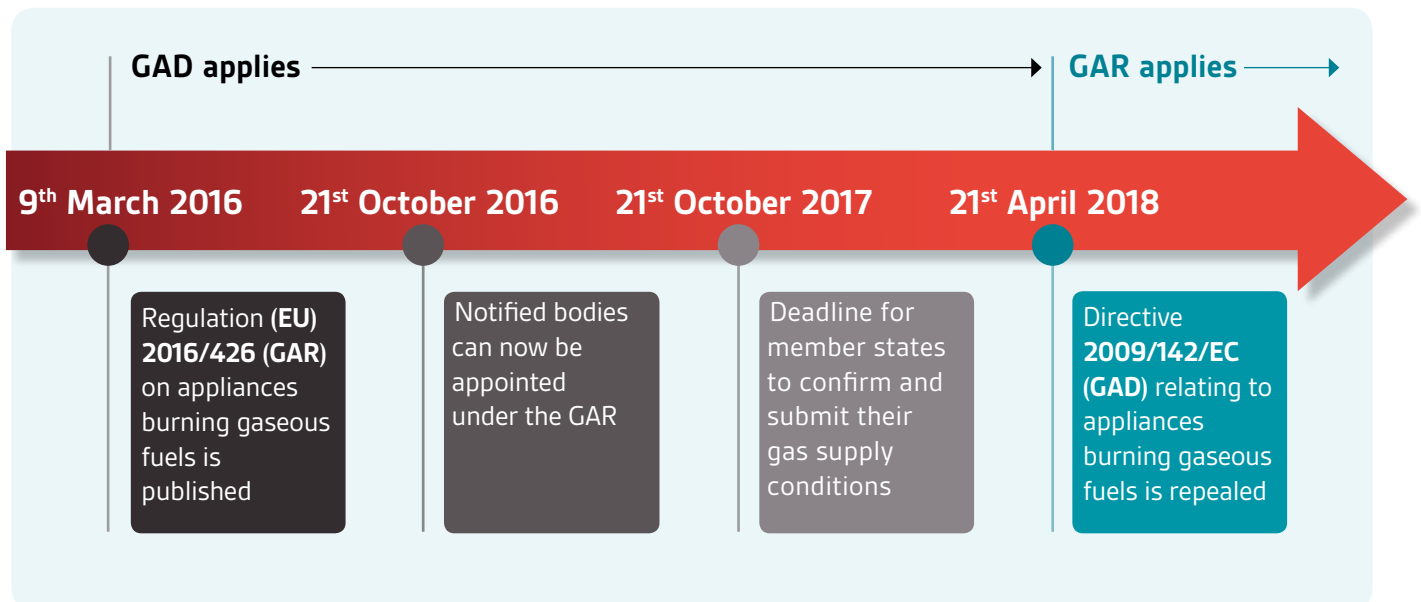
- Notified Bodies shall participate in activities and groups to ensure proper cooperation and coordination.

These additional requirements introduced will bring the quality and competence of Notified Bodies up to the level that BSI has been operating at throughout its time as a Notified Body and may also see some current Notified Bodies not being reaffirmed during the process if they cannot show the required competence and experience.





Critical Timescales



Summary

- After the 21st April 2018, the regulation on appliances burning gaseous fuel comes into force and products placed on the market, not already in the supply chain, must have a new EU type examination certificate.
- GAD will be withdrawn on the 21st April 2018 and EC Type Examination certificates to this directive will no longer be valid after this date.

When safety and quality matter most, trust the **BSI Kitemark**TM



If you're looking to demonstrate the quality of your appliance or fitting and differentiate it with an independent third party certification mark, the BSI Kitemark could be right for you.

All products certified with the BSI Kitemark are rigorously tested to the

latest standards. Regular batch or product audit testing is undertaken at our specialist gas laboratories and regular factory audits are carried out by our assessors to check quality during production.

The BSI Kitemark is voluntary, only available from BSI, and gives end users confidence in the performance and quality of the product.

Support from **BSI**

How BSI can help you through the changes. We will continue to monitor the proposed changes and keep all our clients updated as more information is released from the European Commission. This information will be available on our website

and we will be sending out regular updates. Our certification managers, test engineers, and other colleagues will be kept up to date on the changes so that we can let you know in advance about the impact these may have.

Please contact us,
our team will be happy to help you.

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