

SITspa

Transition from GAD to the GAR



SITspa

Introduction

Dear Sit Customers,

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.

This will imply some changes to the present rules in place for our products in accordance with the Gas Appliances Directive 2009/142/EC.

GAR regulation can be found here:

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0426

More general information on these two legislative acts can be found in this website: http://ec.europa.eu/growth/sectors/pressure-gas/gas-appliances/directive_en

Timeframe

- GAR regulation published on OJEU L 81 of 31.03.2016, entered into force on 21.04.2016
- Application of GAR to the products put into the market from 21.04.2018

As a consequence of this legislation change many activities have to be put in place by all stakeholders in the gas industry, and the most important involve technical and documentation assessment made by the manufacturers and the Notified Bodies responsible for CE approval and production surveillance.

The practical implementation of some of these aspects has been agreed at European level among stakeholders and has been published as a guideline to help assure a smooth transition on the market from GAD to GAR, see annex file N519E-v2_GAD-AC_WG_GAR_QA_rev.6a-23Nov.16_2.pdf.



SITspa

We would like to inform you that we started all necessary activities with our European partners Notified Bodies to be compliant with our products to the GAR requirements and we have in place the following plan:

- Provide to the Notified Bodies all necessary information to update the existing GAD certificated to the new GAR by the <u>end of August 2017</u> for the products falling under the scope of GAR.
 - Please note that spare parts are not included in GAR scope
- Receive progressively the new GAR certificates and relevant documentation by the <u>end of</u>
 October 2017 and they will be made available in our website

We trust this information is useful to allow you to plan all your activities to satisfy on time the GAR requirements relevant for your Gas Appliances.

Should you have any questions on GAR implementation please contact our Sales Organization for further information.

Date 2016 - 11 – 23

Gas Appliances Directive - Advisory Committee Comité Consultatif de la Directive Appareils a Gaz

FOR INFORMATION

<u>CONCERNING</u>: Questions and Answers approved by GAD-AC in their meeting of 23 November 2016 NOTES:

- This document is made available for distribution to GAD-AC-members, and WG-GA members and the organisations these members represent.
- This document is forwarded to the Commission Services with the request to use it as a basis for a Commission Communication document preferably to be finalized on the 11 of May 2017.
- This document is intended for an audience that is aware of the content of both the GAD and GAR to a level that one may expect form a NB that is notified for the GAD and is a candidate for notification for the GAR.
- This document does not modify the GAD or GAR. It only reflects the consensus reached within GAD-AC on the interpretation of the GAD and GAR and the transition to the GAR

Item: n.a.

Gas Appliance Directive Advisory Committee (GAD-AC)

Q and A document on the implementation of the GAR

Document ref.: N519 v2

Approved by GAD-AC 23-11-2016

GAD-AC View on

Questions & Answers related to the Gas Appliances Regulation implementation

Date: 23 November 2016 GAD-AC Status: approved

Glossary of terms and acronyms

GAD –Directive 2009/142/EC on appliances burning gaseous fuels (GAD)

GAR -Regulation (EU) 2016/426/ on appliances burning gaseous fuels (GAR)

NB - Notified Body

GAD-AC - Gas Appliances-Advisory Committee

GAR-AC – Gas Regulation-Advisory Committee (to be established)

EN – 'European standard' means a standard adopted by a European standardisation organization hEN – 'harmonised standard' means a European standard adopted on the basis of a request made by the Commission for the application of Union harmonisation legislation (Note. A harmonised standard starts to give the legal effect called 'presumption of conformity' only once its reference has been published in the OJEU)

ER - Essential Requirements

DoC - manufacturer's Declaration of Conformity

OJEU - Official Journal of the European Union

Section: Certificates

1. <u>Question</u>: Will existing GAD EC type-examination certificates become invalid when the GAR applies?

Answer: No.

The GAD EC type-examination certificates will not become invalid. They have not been issued under an expiry condition. The GAD EC type-examination are only relevant for products put on the market under the GAD. To facilitate the transition to the GAR, the answer to questions #6 and #7 are relevant.

2. Question: Do GAD EC type-examination test reports stay valid?

Answer: Yes.

GAD EC type-examination test reports remain valid provided that the design of the product tested remains unchanged. The GAD EC type-examination test reports can be used by a GAR notified body in the framework of the EU type-examination to cover ERs which have remained equal in the GAR. This has to be checked by the GAR notified body.

3. Questions: Which ERs have changed and what is the impact.

<u>Answer:</u> Most of the ER did not change in such a way that this affects the design and construction of the appliance and or fitting. Some ERs of the GAD are reworded, some are new and some of them are updated in the GAR. This could affect specific types of appliances/fittings certified under the GAD in there construction and design.

The manufacturer shall examine the relevance of the ERs to his products.

<u>Annex A-1</u> of this document provides the comparison of the GAD and GAR ERs, whereas <u>Annex A-2</u> provides the (non-exhaustive list) of the GAR ERs which can be considered as the major changes compared to the GAD.

4. Question: Is a risk analyses needed?

Answer: Yes

GAR, Annex I, ER 1.2 requires explicitly a risk analysis to assess product safety covering risk for safety and health of persons and domestic animals.

The manufacturer shall submit the evidence of the risk analyses which covers all risks as mentioned in the GAR. Risks relevant to the risk analysis related to the GAR are:

I: Safety:

- Explosion (gas or steam),
- Fire.
- Hot surface temperatures,
- Poisoning (combustion gases, water and food),
- Suffocation.

II: Health of persons and domestic animals:

- Long term exposure to substances harmful to health

Existing technical requirements which incorporates a method for Risk Analysis (eg such as EN 15502 / EN 14459) can be used as the basis of the risk analyses to cover the safety risk.

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 foreseeable use (as stated in GAR, Annex I, ER 1.4).

Annex B of this document provides an example of a flowchart which is based upon the method as described in EN 15502, to determine compliance with GAR Annex I, ERs 1.2, 1.3 and 1.4.Following the risk analysis, the manufacturer shall select the most appropriate solution to cover the risk (as stated in GAR, Annex I ER 1.3), being either:

- (a) eliminate or reduce risks as far as possible (inherently safe design and construction);
- (b) take the necessary protection measures in relation to risks that cannot be eliminated;
- (c) inform users of the residual risks due to any shortcomings of the protection measures adopted and indicate whether any particular precautions are required.

Existing technical specifications (eg hENs, if applicable) can be used to proof the most appropriate solution.

Note: The above is line with the Blue Guide 2016 which states on page 41: After this assessment (ed: meaning risk assessment) a manufacturer may then choose to apply specifications given in harmonised standards to implement "risk reduction measures" which are specified by harmonised standards.

5. <u>Question:</u> Can a GAD EC-type certificate be used to cover Annex III, clause 1 (module B) of the GAR?

Answer: No.

The Gas Appliances Directive 2009/142/EC will be repealed with effect from April 21st 2018. An EU type-examination certificate as required from April 21st 2018 on has to refer to the Gas Appliances Regulation (EU) 2016/426.

6. Question: Can a DoC for the GAR be based upon a GAD module B certificate?

Answer: No

See previous answer.

7. <u>Question</u>: Does a new GAR module B EU type-examination certificate need to be issued from April 21st 2018?

Answer: Yes.

EC-type certificates make reference to the GAD. The GAD will be repealed with effect from April 21st 2018. From this date EU type-examination certificates are needed that refer to the GAR.

8. <u>Question:</u> Is an initial production inspection / audit needed prior to issuing the module B EU type-examination certificate?

Answer: No.

9. <u>Question</u>: Is an production inspection / audit needed to comply with the regulations of the GAR related to module C2 / D / E before the product is put on the market?

Answer: Yes.

10. Question: When will the validity of the certificate count from?

<u>Answer:</u> The validity period of the EU type-examination certificates starts from the date of issue of the certificate. To facilitate the transition to the GAR, the answer to question #18 is relevant.

11. <u>Question:</u> Can a NB issue an EU type-examination certificate having a finite validity period without performing surveillance for this product according to module C2, D or E?

<u>Answer:</u> Yes, such an EU type-examination certificate can be issued, specific conditions are applicable.

Section: Harmonized Standards - Technical Knowledge

12. Question: Is the use of hENs that are cited in the OJEU under the GAR mandatory?

Answer. No.

The technical basis for EU type-examination are the ERs, laid down in Annex I of the GAR. See Blue Guide 2016, clause 4.1.2.2 for further explanation of the role of harmonized standards and clause 4.1.3 of the Blue Guide on the other possibilities for the conformity of essential requirements.

13. *Question*: What is meant by state of art?

<u>Answer:</u> 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
- **14.** <u>Question:</u> Which NB is responsible to cover Annex III, clause 1.7 (information responsibility) on changes of the technical knowledge relevant for the product?

Answer. The NB issuing the Module B EU type-examination certificate.

15. <u>Question</u>: How should a manufacturer fulfill his responsibilities as described under GAR Annex III, clause 1.7 2nd paragraph?

<u>Answer</u>: According to GAR Annex III clause 1.7 2nd paragraph, the manufacturer shall inform the notified body that holds the technical documentation relating to the EU type- examination certificate of all modifications to the approved type that may affect the conformity of the appliance or the fitting with the essential requirements of this Regulation or the conditions for validity of the certificate. In addition the manufacturer is advised to keep himself apprised on the technical knowledge applicable for his product.

16. <u>Question</u>: How should a manufacturer fulfil its responsibilities that each individual product complies with the requirements of the GAR in such a way that this takes into account "the state of the art and current practice at the time of design and manufacture". (see *ER: observation 2*) and what NB is responsible for supervising this?

<u>Answer.</u> The manufacturer has -as a part of the production process- to ensure that each individual product is in conformity with the type described in the EU type-examination certificate and comply with the requirements of the GAR.

The manufacturer, after the design of a product, has to keep himself apprised on the changes in the state of the art applicable to his product and take appropriate actions if required. The manufacturer must therefore have procedures in place to ensure this.

The NB for the production surveillance will assess the suitability of these procedures.

Notes:

- for the GAD only the NB for surveillance was continually involved in monitoring the state of art, for the GAR both NB for the type testing and the NB for the surveillance are continually involved in monitoring the state of art.
- Both the NB for type testing and surveillance will be continually involved assessing the "state of the Art"
- **17.** <u>Question:</u> How can a NB fulfil his responsibilities as described under Annex III, clause 1.7, 1st paragraph?

<u>Answer:</u> NBs are deemed to be pursuing the generally acknowledged state of art when the following applies:

- Regular attendance at GAD-AC / GAR-AC meetings
- Regular attendance at GAR NB meetings;
- Regular review of available revisions of (h)ENs in the working field of the NB;
- Regular meeting with authorities / stakeholders in its member state (eg harmonization of accreditations, obtain market surveillance information).
- Regular review of trends in the non-conformities found during surveillance audits at manufacturers' sites.

Section: Practical Implementation

18. <u>Question</u>: Can NBs issue a GAR EU type-examination certificate before April 21st 2018 that have an legal effect from April 21st 2018 onwards?

<u>Answer:</u> As a pragmatic solution GAD-AC suggest the following as one of the possible solutions: According to Article 46(2a) of GAR, the Regulation shall apply from 21 April 2018, with the exception of Articles (inter alia) 19 to 35, which shall apply from 21 October 2016. According to Article 31(1), notified bodies shall carry out conformity assessments in accordance with the conformity assessment procedures provided for in Annex III. It would result that a notified body may perform all necessary tests and examinations so as to ensure compliance of a product with

Gas Appliance Directive Advisory Committee (GAD-AC)

Q and A document on the implementation of the GAR

Document ref.: N519 v2

Approved by GAD-AC 23-11-2016

the GAR. A notified body would therefore allowed to issue an EU-type examination certificate before 21 April 2018. However, it will be valid only for products placed on the market as from 21 April 2018 under Regulation (EU) 2016/426 and having a maximum validity period of 10 years from the date of issuance.

19. Question: Can a DoC be issued referring to the GAD after April 21st 2018.

<u>Answer:</u> No*, not for products that are put on the market in the EU after 21st April 2018. There is no transition period between GAD and GAR.

*For spare parts different considerations apply.

20. Question: Can a DoC be issued referring to the GAR (additionally to the reference to the GAD) before 21st April 2018

Answer: As a pragmatic solution GAD-AC suggest the following as one of the possible solutions: The GAR applies as from 21st April 2018. Before that date, all products must comply to the GAD and the DoC must refer it. Only products covered by a DoC under the GAD may be placed on the market and put into service. As from 21 April 2018, only products complying with the GAR (and therefore covered by an EU Declaration of Conformity under the GAR) will be allowed to be placed on the market. However, (for a short period) before that date, in order to facilitate transition and provided that the conformity of the product has verified also under the GAR (see point 19), manufacturers may make use of flexibility and refer to both legal acts (the GAD and the GAR) in their Declaration of Conformity, indicating the corresponding periods of application for each of them. They could use for example the following formulation based on the new model structure of EU Declaration of Conformity: "The object of the declaration described above is in conformity with the relevant Union harmonization legislation: Directive 2009/142/EC (until 20 April 2018) and Regulation (EU) 2016/426 (from 21 April 2018)".

21. *Question*: Clause 2.3 of Annex III mentions product checks once a year while clause 3.4.3 of Annex III related to production check is to be performed every 2 years. Are both required?

Answer: No.

Article 14 point 2 clearly states:

- The conformity of series-manufactured appliances and fittings with the requirements of this Regulation shall be assessed by means of the EU type-examination (Module B production type) set out in point 1 of Annex III, combined with one of the following modules, at the choice of the manufacturer:
- a) conformity to type based on internal production control plus supervised product checks at random intervals (Module C2), set out in point 2 of Annex III;
- (b) conformity to type based on quality assurance of the production process (Module D), set out in point 3 of Annex III;
- (c) conformity to type based on product quality assurance (Module E), set out in point 4 of Annex III;
- (d) conformity to type based on product verification (Module F), set out in point 5 of Annex III. 3.
- 22. Question: What should a DoC contain for the GAR?

<u>Answer</u>: See article 15 and Annex V of the GAR. The format for DoCs is about the same as before with some additional points to be added. See Annex C of this document as an example.

23. Question: Is a spare part within the scope of the GAR?

Answer: No.

Note: In paragraph 2.1 the Blue guide provides guidance for this. As a general rule it is stated in the Blue Guide that spare parts need to comply with the regulations that were in place when the final product containing the original part was put on the market.

24. Question: Is the definition of a fitting changed from the GAD to the GAR?

Answer. No

The wording , 'thereof' as introduced in the GAR definition of fitting was intended for clarification and does not intend to modify the definition of fittings.

25. *Question:* Should a fitting which is made available on the market comply with the GAR from 21st April 2018?

Answer: Yes

GAR art 3.2. Fittings shall only be made available on the market if they comply with this Regulation.

GAR art: 2 (15) 'placing on the market' means the first making available of an appliance or a fitting on the Union market;

26. *Question:* Should a fitting as defined in article 2(2) which is designed and produced by an appliance manufacturer for its own purposes comply with the GAR from 21st April 2018?

Answer: No.

According to GAR art 2 (15), such a fitting is not made available on the Union market. However, in such a case, the product which incorporates such a fitting must comply with the GAR.

As a consequence:

- An EU Declaration of Conformity (GAR art 15) is not required for the fitting. By drawing up the EU declaration of conformity of the appliance, the manufacturer of the appliance is responsible for the compliance of the appliance including the fitting.
- CE marking (GAR art 17) and inscriptions (GAR art 18) is not required to be placed on the fitting. By CE marking and inscription of the appliance, the manufacturer of the appliance is responsible of the CE marking and inscriptions of the appliance including the fitting.
- The appliance manufacturers shall draw up the technical documentation according to Annex III of the GAR which includes the documentation of the fitting as well.
- The appliance manufacturer shall have carried out the relevant conformity assessment procedure referred to in Article 14 (e.g Module B production type in combination with Module C2, D, E or F) of the appliance incorporating the fitting.
- **27.** <u>Question:</u> can a general purpose component –other than a fitting- which is not specially designed and intended to be incorporated into an appliance be used by the appliance manufacturer?

<u>Answer:</u> Yes, the appliance incorporating such (a) component(s) shall comply with the requirements of the GAR.

Annexes:

A-1

A-2

В

С

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
Q and A document on the implementation of the GAR	Approved by GAD-AC
and A document on the implementation of the GAK	23-11-2016

Annex A-1

The following table presents the differences between the essential requirements of Directive 2009/142/EC and Regulation EU) 2016/426:

	Directive 2009/142/EC (GAD) Annex I Essential requirement		Regulation (EU) 2016/426 (GAR) Annex I Essential requirement
	PRELIMINARY REMARK		PRELIMINARY OBSERVATIONS
	The obligations resulting from the essential requirements for appliances in this Annex also apply to fittings where the corresponding risk exists.		
			The essential requirements laid down in this Regulation are compulsory.
			The essential requirements are to be interpreted and applied in such a way as to take into account the state of the art and current practice at the time of design and manufacture as well as technical and economic considerations which are consistent with a high degree of energy efficiency and of health and safety protection.
1.	GENERAL CONDITIONS	1.	GENERAL REQUIREMENTS
1.1.	Appliances must be so designed and built as to operate safely and present no danger to persons, domestic animals or property when normally used as defined in Article 1(3) of	1.1.	Appliances shall be so designed and constructed as to operate safely and present no danger to persons, domestic animals or property, when normally used.
	this Directive.		Fittings shall be so designed and constructed as to fulfil correctly their intended purpose when incorporated into an appliance or assembled to
		1.2.	The manufacturer is under an obligation to analyse the risks in order to identify those which apply to his appliance or fitting. He shall then design and construct it taking into account its risk assessment.
		1.3.	In selecting the most appropriate solutions, the manufacturer shall apply the principles set out below, in the following order:
			(a) eliminate or reduce risks as far as possible (inherently safe design and construction);
			(b) take the necessary protection measures in relation to risks that cannot be eliminated; (c) inform users of the residual risks due to any shortcomings of the protection measures adopted and indicate whether any particular precautions are required.

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
Q and A document on the implementation of the GAR	Approved by GAD-AC
Q and A document on the implementation of the GAR	23-11-2016

1.2.	When placed on the market, all appliances must: — be accompanied by technical instructions intended for the installer, — be accompanied by instructions for use and servicing, intended for the user, — bear appropriate warning notices, which must also appear on the packaging. The instructions and warning notices must be in the official language or languages of the Member States of	1.4.	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 foreseeable uses. All appliances shall: (a) be accompanied by instructions for installation intended for the installer; (b) be accompanied by instructions for the user; (c) bear appropriate warning notices, which shall also appear on the packaging.
	destination.		
1.2.1.	The technical instructions intended for the installer must contain all the instructions for installation, adjustment and servicing required to ensure that those operations are correctly performed and that the appliance may be used safely. In particular, the instructions must specify: — the type of gas used, — the gas supply pressure used, — the flow of fresh air required: — for the combustion air supply, — to avoid the formation of dangerous unburned gas mixtures for appliances not fitted with the device referred to in point 3.2.3, — the conditions for the dispersal of combustion products, — for forced draught burners and heating bodies intended to be equipped with such burners, their characteristics, the requirements for assembly, to assist compliance with the essential requirements applicable to finished appliances and, where appropriate, the list of combinations recommended by the manufacturer.	1.6.1.	The instructions for installation intended for the installer shall contain all the instructions for installation, adjustment and servicing required to ensure that those operations are correctly performed so that the appliance may be used safely. The instructions for installation intended for the installer shall include also information on the technical specifications of the interface between the appliance and its installation environment allowing its correct connection to the gas supply network, the supply of auxiliary energy, the combustion air supply and the flue gas evacuation system.

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
Q and A document on the implementation of the GAR	Approved by GAD-AC
Q and A document on the implementation of the GAR	23-11-2016

1.2.2.	The instructions for use and servicing intended for the user must contain all the information required for safe use, and must in particular draw the user's attention to any restrictions on use.	1.6.2.	The instructions for use and servicing intended for the user shall contain all the information required for safe use and in particular shall draw the user's attention to any restrictions on use. The manufacturers shall note in the instructions where additional care is needed or where it would be advisable that any of the above work be carried out by a professional. This shall be without prejudice to national requirements to that effect. The manufacturer of the appliance shall include in the instructions accompanying the appliance all necessary information for adjustment, operation and maintenance of the fittings as part of the finished appliance, as appropriate.
1.2.3.	The warning notices on the appliance and its packaging must clearly state the type of gas used, the gas supply pressure and any restrictions on use, in particular the restriction whereby the appliance must be installed only in areas where there is sufficient ventilation.	1.6.3.	The warning notices on the appliance and its packaging shall clearly state the type of gas to be used, the gas supply pressure, the appliance category and any restrictions on use, in particular the restriction whereby the appliance shall be installed only in areas where there is sufficient ventilation so as to ensure that the risks presented by it are minimised.
1.3.	Fittings intended to be part of an appliance must be so designed and built as to fulfil correctly their intended purpose when incorporated in accordance with the instructions for installation. The instructions for installation, adjustment, operation and maintenance must be provided with the fittings concerned.	1.7.	The instructions for incorporation of the fitting into an appliance or its assembly in order to constitute an appliance and for its adjustment, operation and maintenance shall be provided with the fittings concerned as part of the EU declaration of conformity.
2.	MATERIALS	2.	MATERIALS
2.1.	Materials must be appropriate for their intended purpose and must withstand the technical, chemical and thermal conditions to which they will foreseeably be subjected.		Materials for appliances or fittings shall be appropriate for their intended purpose and shall withstand the mechanical, chemical and thermal conditions to which they will foreseeably be subjected.
2.2.	The properties of materials that are important for safety must be guaranteed by the manufacturer or the supplier of the appliance.		
3.	DESIGN AND CONSTRUCTION	3.	DESIGN AND CONSTRUCTION
			The obligations arising for appliances from the essential requirements set out in this point apply also to fittings, as far as relevant.
3.1.	General	3.1.	General

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
O and A decument on the implementation of the CAR	Approved by GAD-AC
Q and A document on the implementation of the GAR	23-11-2016

3.1.1.	Appliances must be so constructed that, when used normally, no instability, distortion, breakage or wear likely to impair their safety can occur.	3.1.1.	Appliances shall be so designed and constructed that, when normally used, no instability, distortion, breakage or wear likely to impair their safety may occur.
3.2.2.	Condensation produced at the start- up and/or during use must not affect the safety of appliances.	3.1.2.	Condensation produced at the start-up and/or during use shall not affect the safety of appliances.
3.1.3.	Appliances must be so designed and constructed as to minimise the risk of explosion in the event of a fire of external origin.	3.1.3.	Appliances shall be so designed and constructed as to minimise the risk of explosion in the event of a fire of external origin.
3.1.4.	Appliances must be so constructed that water and inappropriate air penetration into the gas circuit does not occur.	3.1.4.	Appliances shall be so designed and constructed that water and inappropriate air penetration into the gas circuit does not occur.
3.1.5.	In the event of a normal fluctuation of auxiliary energy, appliances must continue to operate safely.	3.1.5.	In the event of a normal fluctuation of auxiliary energy, appliances shall continue to operate safely.
3.1.6.	Abnormal fluctuation or failure of auxiliary energy or its restoration must not lead to an unsafe situation.	3.1.6.	Abnormal fluctuation or failure of auxiliary energy or its restoration shall not lead to an unsafe situation.
3.1.7.	Appliances must be so designed and constructed as to obviate hazards of electrical origin. In the area in which it applies, compliance with the safety objectives in respect of electrical hazards laid down in Directive 2006/95/EC of the European Parliament and of the Council shall be equivalent to fulfilment of this requirement.	3.1.7.	Appliances shall be so designed and constructed as to obviate any gas-related risks due to hazards of electrical origin. As far as relevant, the results of the conformity assessment in relation to the safety requirements of Directive 2014/53/EU of the European Parliament and of the Council or the safety objectives of Directive 2014/35/EU of the European Parliament and of the Council shall be taken into account.
		3.1.8.	Appliances shall be so designed and constructed as to obviate any gas-related risks due to hazards originating from electromagnetic phenomena. As far as relevant, the results of the conformity assessment in relation to the electromagnetic compatibility requirements of Directive 2014/53/EU or Directive 2014/30/EU of the European Parliament and of the Council (3) shall be taken into account.
3.1.8.	All pressurised parts of an appliance must withstand the mechanical and thermal stresses to which they are subjected without any deformation affecting safety.	3.1.9.	All pressurised parts of an appliance shall withstand the mechanical and thermal stresses to which they are subjected without any deformation affecting safety.
3.1.9.	Appliances must be so designed and constructed that failure of a safety, controlling or regulating device may not lead to an unsafe situation.	3.1.10.	Appliances shall be so designed and constructed that failure of a safety, controlling or regulating device may not lead to an unsafe situation.

Gas Appliance Directive Advisory Committee (GAD-AC)	Doc
Q and A document on the implementation of the GAR	-

Document ref.: N519 v2

Approved by GAD-AC 23-11-2016

3.1.10.	If an appliance is equipped with safety and controlling devices, the functioning of the safety devices must not be overruled by that of the controlling devices.	3.1.11.	If an appliance is equipped with safety and controlling devices, the functioning of the safety devices shall not be overruled by that of the controlling devices.
3.1.11.	All parts of appliances which are set or adjusted at the stage of manufacture and which should not be manipulated by the user or the installer must be appropriately protected.	3.1.12.	All parts of appliances which are set or adjusted at the stage of manufacture and which should not be manipulated by the user or the installer shall be appropriately protected.
3.1.12.	Levers and other controlling and setting devices must be clearly marked and give appropriate instructions so as to prevent any error in handling. Their design must be such as to preclude accidental manipulation.	3.1.13.	Levers and other controlling and setting devices shall be clearly marked and give appropriate instructions so as to prevent any error in operation/use. Their design shall be such as to preclude accidental operation.
3.2.	Unburned gas release	3.2.	Unburned gas release
3.2.1.	Appliances must be so constructed that the gas leakage rate is not dangerous.	3.2.1.	Appliances shall be so designed and constructed that the gas leakage rate is not dangerous.
3.2.2.	Appliances must be so constructed that gas release during ignition and re-ignition and after flame extinction is limited in order to avoid a dangerous accumulation of unburned gas in the appliance.	3.2.2.	Appliances shall be so designed and constructed that gas release at any state of operation is limited in order to avoid a dangerous accumulation of unburned gas in the appliance.
3.2.3.	Appliances intended to be used in indoor spaces and rooms must be fitted with a special device which avoids a dangerous accumulation of unburned gas in such spaces or rooms. Appliances which are not fitted with such devices must be used only in areas where there is sufficient ventilation to avoid a dangerous accumulation of unburned gas.	3.2.3.	Appliances intended to be used in indoor spaces and rooms shall be so designed and constructed as to prevent the release of unburned gas in all situations which could lead to a dangerous accumulation of unburned gas in such spaces and rooms.
	Member States may define on their territory adequate space ventilation conditions for the installation of such appliances, bearing in mind the features peculiar to them.		
	Large-scale kitchen appliances and appliances powered by gas containing toxic components must be equipped with the aforesaid device.		
		3.2.4.	Appliances designed and constructed to burn gas containing carbon monoxide or other toxic components shall not present a danger to the health of persons and domestic animals exposed.
3.3.	Ignition	3.3.	Ignition

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
O and A decument on the implementation of the CAR	Approved by GAD-AC
Q and A document on the implementation of the GAR	23-11-2016

	Appliances must be so constructed that, when used normally: — ignition and re-ignition is smooth, — cross-lighting is assured.		Appliances shall be so designed and constructed that, when normally used, ignition and re-ignition is smooth and cross-lighting is assured.
3.4.	Combustion	3.4.	Combustion
3.4.1.	Appliances must be so constructed that, when used normally, flame stability is assured and combustion products do not contain unacceptable concentrations of substances harmful to health.	3.4.1.	Appliances shall be so designed and constructed that, when normally used, the combustion process is stable and combustion products do not contain unacceptable concentrations of substances harmful to health.
3.4.2.	Appliances must be so constructed that, when used normally, there will be no accidental release of combustion products.	3.4.2.	Appliances shall be so designed and constructed that, when normally used, there will be no accidental release of combustion
3.4.3.	Appliances connected to a flue for the dispersal of combustion products must be so constructed that in abnormal draught conditions there is no release of combustion products in a dangerous quantity into the room concerned.	3.4.3.	Appliances connected to a flue for the dispersal of combustion products shall be so designed and constructed that in abnormal draught conditions there is no release of combustion products in a dangerous quantity into the indoor spaces or rooms concerned.
3.4.4.	Independent flueless domestic heating appliances and flueless instantaneous water heaters must not cause, in the room or space concerned, a carbon monoxide concentration likely to present a danger to the health of persons exposed, bearing in mind the foreseeable duration of their exposure.	3.4.4.	Appliances shall be so designed and constructed that, when normally used, they do not cause a concentration of carbon monoxide or other substances harmful to health, such as they would be likely to present a danger to the health of persons and domestic animals exposed.
3.5.	Rational use of energy	3.5.	Rational use of energy
	Appliances must be so constructed as to ensure rational use of energy, reflecting the state of the art and taking into account safety aspects.		Appliances shall be so designed and constructed as to ensure rational use of energy, reflecting the state of the art and taking into account safety aspects.
3.6.	Temperature	3.6.	Temperature
3.6.1.	Parts of appliances which are intended to be placed in close proximity to the floor or other surfaces must not reach temperatures which present a danger in the surrounding area.	3.6.1.	Parts of appliances which are intended to be installed or placed in close proximity to surfaces shall not reach temperatures which present a danger.
3.6.2.	The surface temperature of knobs and levers of appliances intended to be manipulated must not present a danger to the user.	3.6.2.	The surface temperature of parts of appliances intended to be handled during normal use shall not present a danger to the user.

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
Q and A document on the implementation of the GAR	Approved by GAD-AC
and A document on the implementation of the GAR	23-11-2016

3.6.3.	The surface temperatures of external parts of appliances intended for domestic use, with the exception of surfaces or parts which are associated with the transmission of heat, must not under operating conditions present a danger to the user and in particular to children, for whom an appropriate reaction time must be taken into account.	3.6.3.	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 the health and safety of persons exposed and in particular to children and elderly people, for whom an appropriate reaction time shall be taken into account.
3.7.	Foodstuffs and water used for sanitary purposes	3.7.	Contact with food and water intended for human consumption
	Without prejudice to the Community rules in this area, materials and components used in the construction of an appliance, which may come into contact with food or water used for sanitary purposes, must not impair their quality.		Without prejudice to Regulations (EC) No 1935/2004 (1) and (EU) No 305/2011 (2) of the European Parliament and of the Council, materials and parts used in the construction of an appliance which may come into contact with food or water intended for human consumption as defined in Article 2 of Council Directive 98/83/EC (3), shall not impair quality of the food or water.

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
O and A decument on the implementation of the CAR	Approved by GAD-AC
Q and A document on the implementation of the GAR	23-11-2016

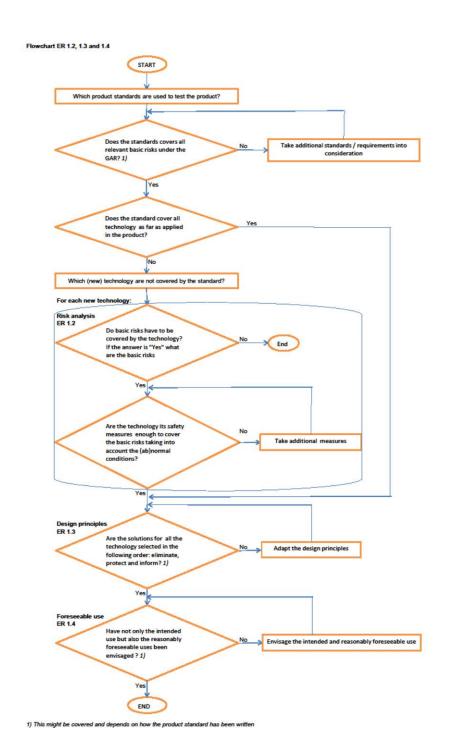
Annex A-2: New/updated ERs GAR 1.2, 1.3, 1.4, 1.6.2, 3.1.7, 3.1.8, 3.2.3, 3.2.4, 3.7 (which is a non-exhaustive list) and remarks compared to GAD.

GAR ER	Requirement	Remarks
1.2	The manufacturer is under an obligation to analyze the risks in order to identify those which apply to his appliance or fitting. He shall then design and construct it taking into account its risk assessment.	The documentation shall include an adequate analysis and assessment of the risk(s). See also Question 4 and 5
1.3	In selecting the most appropriate solutions, the manufacturer shall apply the principles set out below, in the following order: (a) eliminate or reduce risks as far as possible (inherently safe design and construction); (b) take the necessary protection measures in relation to risks that cannot be eliminated; (c) inform users of the residual risks due to any shortcomings of the protection measures adopted and indicate whether any particular precautions are	Identification of applied solutions has to be provided.
1.4	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 foreseeable uses.	Foreseeable use and misuse has to be taken in account.
1.6.2	The manufacturers shall note in the instructions where additional care is needed or where it would be advisable that any of the above work be carried out by a professional. This shall be without prejudice to national requirements to that effect.	The installation instructions shall clarify the professional skill required during the installation and maintenance of the product.
3.1.7	Appliances shall be so designed and constructed as to obviate any gas-related risks due to hazards of electrical origin. As far as relevant, the results of the conformity assessment in relation to the safety requirements of Directive 2014/53/EU of the European Parliament and of the Council (1) or the safety objectives of Directive 2014/35/EU of the European Parliament and of the Council (2) shall be taken into account.	The Manufacturer shall proof the obviation of any gasrelated risks due to hazards of electrical origin. In case the LVD and/or the RED are relevant, LVD and/or RED test reports and/or certificates shall be used by the manufacturer. The GAR NoBo shall assess the proof as delivered by the manufacturer. The GAR NoBo shall accept certificates issued by the RED NoBo. In case a RED certificate is not available, the GAR NoBo shall only accept test results coming from an accredited 17025 laboratory. For the LVD, the GAR NoBo's shall only accept test results coming from accredited 17025 laboratories.

3.1.8	Appliances shall be so designed and constructed as to obviate any gas-related risks due to hazards originating from electromagnetic phenomena. As far as relevant, the results of the conformity assessment in relation to the electromagnetic compatibility requirements of Directive 2014/53/EU or Directive 2014/30/EU of the European Parliament and of the Council (3) shall be taken into account.	The Manufacturer shall proof the obviation of any gas- related risks due to hazards of electrical origin. In case electromagnetic phenomena are relevant, EMC test reports and/or certificates shall be used by the manufacturer. The GAR NoBo shall assess the proof as delivered by the manufacturer. The GAR NoBo shall accept certificates issued by the EMC-D NoBo. In case an EMC-D certificate is not available, the GAR NoBo shall only accept test results coming from an accredited 17025 laboratory.
3.2.3	Appliances intended to be used in indoor spaces and rooms shall be so designed and constructed as to prevent the release of unburned gas in all situations which could lead to a dangerous accumulation of unburned gas in such spaces and rooms.	Whereas the GAD allows National ventilation as defined by a Member state to be considered sufficient for appliances without a special device (e.g. flame supervision device) to avoid dangerous accumulation of unburned gas, this is no longer foreseen by the GAR. For this reason, to comply with the GAR, all appliances used for indoor spaces and rooms shall be provided with a special device or measure preventing the release of unburned gas which could lead to the dangerous accumulation of unburned gas, or clear evidence is to be provided that the risk under the lowest possible ventilation conditions for normal operation, does not exist (For example crème Brule burners).
3.2.4	Appliances designed and constructed to burn gas containing carbon monoxide or other toxic components shall not present a danger to the health of persons and domestic animals exposed.	Health of persons and domestic animals needs to be considered in relation to burning gas containing CO or other toxic gasses. As consequence of ER 3.2.3 compliance with National ventilation requirements are not considered as being an appropriate safety measure. For this reason, to comply with the GAR, appliances intended to be used in indoor spaces and rooms and burning toxic gasses shall have an appropriate venting system for combustion gasses
3.7	Contact with food and water intended for human consumption Without prejudice to Regulations (EC) No 1935/2004 (1) and (EU) No 305/2011 (2) of the European Parliament and of the Council, materials and parts used in the construction of an appliance which may come into contact with food or water intended for human consumption as defined in Article 2 of Council Directive 98/83/EC (3), shall not impair quality of the food or water.	Although GAR ER 3.7 looks quite identical to the GAD ER 3.7, it now explicitly identifies the 'materials and partsintended for human consumption'. In case of relevance, the Manufacturer shall proof that materials and parts of an appliance shall not impair the quality of the food or water. The GAR NoBo shall assess the proof as delivered by the manufacturer. Certificates of a recognized body shall be used and accepted by the GAR NoBo. In case a certificate is not available, the GAR NoBo shall only accept test results coming from an accredited 17025 laboratory.

Gas Appliance Directive Advisory Committee (GAD-AC)	Document ref.: N519 v2
Q and A document on the implementation of the GAR	Approved by GAD-AC
and A document on the implementation of the GAR	23-11-2016

Annex B: Example of risk analysis



Gas Appliance Directive Advisory Committee (GAD-AC)

Q and A document on the implementation of the GAR

Document ref.: N519 v2

Approved by GAD-AC
23-11-2016

Annex C: Example of EU Declaration of Conformity (DoC)

	claration of	Contorn	mey (DOC)
We			
Company name:	Name of manufactur	er or authorised	representative
Postal address:	Any street		•
Postcode and City:	Postcode Any city	/	
Telephone number:	Telephone number		
E-Mail address:	E-Mail@anyway.cor	n	
declare that the DoC is issue	d under our sole respon	sibility and belong	gs to the following product:
Apparatus model/Product:	Apparatus		
Type:	Type or		
Batch:	Batch or		
Serial number:	Serial number		
Object of the declaration (id sufficient clarity where neces		_	ity; it may include a colour image o
Identification of the appara	atus		Adobe Reader allows upload of PDF files on
			UPLDAD
The object of the declaratio legislation: EMC Directive 2014/30/EU	n described above is in o	onformity with th	e relevant Union harmonisation
e.g. Low Voltage Directive	(LVD) 2014/35/EU		

	,,		
		 pecifications have	been applied:
 The following harmonised st Title, Date of standard/spec	tandards and technical s	 pecifications have	been applied:
 The following harmonised st	tandards and technical s	 pecifications have 	been applied:
 The following harmonised st Title, Date of standard/spec	tandards and technical s	pecifications have	been applied:
The following harmonised st Title, Date of standard/spec e.g. EN 55014, 2006 + A1	tandards and technical s		been applied:
The following harmonised standard/species. E.g. EN 55014, 2006 + A1	tandards and technical s		been applied:
The following harmonised st Title, Date of standard/spec e.g. EN 55014, 2006 + A1	tandards and technical s		been applied:
The following harmonised standard/spece. e.g. EN 55014, 2006 + A1	tandards and technical s		been applied:
The following harmonised standard/speceg. EN 55014, 2006 + A1 Notified body (where applic	tandards and technical s ification: :2009 + A2:2011		been applied: d body number:
The following harmonised standard/speceg. EN 55014, 2006 + A1 Notified body (where applic Name of notified body)	tandards and technical s ification: :2009 + A2:2011 able):	 4 digit notified	
The following harmonised standard/spece.g. EN 55014, 2006 + A1 Notified body (where applic Name of notified body)	tandards and technical s ification: :2009 + A2:2011 able):	 4 digit notified	
The following harmonised standard/speceg. EN 55014, 2006 + A1 Notified body (where applic Name of notified body)	tandards and technical s ification: :2009 + A2:2011 able):	 4 digit notified	
The following harmonised standard/spectors. Title, Date of standard/spectors. e.g. EN 55014, 2006 + A1 Notified body (where application in the standard information).	tandards and technical s ification: :2009 + A2:2011 able):	 4 digit notified	