Reference No: **CABF-R-001 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Art 1 Para 2(a)**	CABF Recommendation
Question:	Can piping running within the premises of the user be considered conveyance pipelines (Art 1 Para 2(a))?
Answer:	No Pipelines are considered to be conveyance pipelines when running over public area. Pipelines going from one installation to another within the premises of the user are not considered to be conveyance pipelines and are not excluded from PED (Art 1 Para 2(a)). Even if one or more of these installations is excluded from PED, i.e. storage tanks. See also WPG, (to be amended when new numbering system of guidelines is established)
Reason:	---
Original Reference:	TRG 1/C Rev 2
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No:	Conformity Assessment Body Forum PED/SPV (CABF)
CABF-R-002 rev 1	CABF
Relation to PED:	CABF Recommendation
Art 1 Para 2	

Question:

Are offshore process / production installations included within the scope of the PED?

Guideline related to :

- Article 1 Para 2(a)
- Article 1 Para 2(i)
- Article 1 Para 2(n) and
- current Guideline A/37
- current Guideline A/27

Answer:

Yes

Reason:

This is the intent of the directive.

Notes :

FOIs (Fixed Offshore Installations) – PED applies as for onshore installations, no exceptions.

FPSOs (Floating Production Storage Offloading Units – generally ship shaped) – Marine Systems and Equipment are excluded in line with Article 1 paragraph 2(n)

FPPs (Floating Production Platforms – generally semi-submersible MOUs) – Marine Systems and Equipment are excluded in line with Article 1 paragraph 2(n)

JUPPs (Jack-Up production platforms – a type of MOU) – Marine Systems and Equipment are excluded in line with Article 1 paragraph 2(n) Marine Systems and Equipment, are those that would be found on any similar seagoing vessel during normal trading, such as bilge, ballast, fuel etc. and are excluded in line with Article 1 paragraph 2(n).

Well Control Equipment (including for example, BOP and driller's choke and kill manifolds) is excluded in line with Article 1 paragraph 2(i) (well control equipment)

Extent of the installation: in line with the intent of the pipeline exclusion Article 1 paragraph 2(a), the installation extends from the inboard flange of the isolation device on the incoming process line to the inboard flange of the isolation device on the outgoing process line.

	Ancillary Systems (such as chemical injection, air, nitrogen, etc.) are included. For MOUs, FPSOs, FPPs, JUPPs where the ancillary systems are take offs from the marine systems, they should be included within PED up to their interface with the marine systems. Subsea Process / Production Installations are included within PED (as defined by current Guideline A/37 2003-11-03) although the risk assessment shall take account of the location and associated risk to personnel.
Original Reference:	TRG 0010 Rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-003 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Point 3.2.2 of Annex I**	CABF Recommendation

Question:	Which hydrostatic test pressure shall be used for pressure equipment under PED jurisdiction that is designed, constructed and tested according to a National Code?
Answer:	The minimum test pressure is to be considered according to point 7.4 of Annex I of the PED.
Reason:	---
Original Reference:	TRG 0011 Rev 2
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-004 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III Module A2**	CABF Recommendation

Question:

What activity is required of a Notified Body when performing monitoring of the final assessment as required by Module A2?

In particular must the notified body assess the manufacturer's technical documentation?

Answer:

The Manufacturer must comply with the requirements for internal production control, Module A.

The notified body shall verify that the manufacturer actually performs and has performed the final assessment accordance with point 3.2 of Annex I . The final assessment consists of:

- Final Inspection – assess visually and by examination of documents compliance with requirements of directive
- Proof test - test each item of pressure equipment for pressure containment, usually hydrostatic test.
- Inspection of safety devices – as applicable for e.g. with respect to assemblies

The Notified Body therefore must:

1. Review the number of items produced since the last visit and determine the number of samples required for final assessment under his surveillance.
2. Select samples of pressure equipment and perform or have performed the final assessment*.
3. Review documentation prepared by the manufacturer that demonstrates the final assessment has been performed on all pressure equipment produced.

* Scope of final inspection

The final inspection involves assessing visually and by examination of accompanying documents, compliance with the requirements of the Directive. This means that the documents, necessary to establish compliance with the Directive (technical documentation, joining procedures and personnel certification, material certification, NDT personnel certification, operating instructions, etc.) shall be available during final assessment. It is not intended that the notified body approve the documentation, only checks that it is available and complete. If the documentation is unavailable or incomplete, the final inspection cannot be concluded and CE marking shall not be affixed, neither can the NB give permission to affix its id number.

See also guideline 6/2

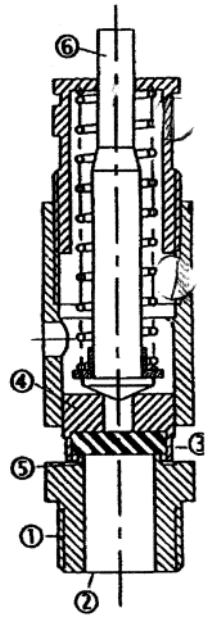
Reason:	The description of the final inspection in point 3.2.1 of Annex I includes a visual assessment together with an examination of the accompanying documents to assess conformance with the requirements of the directive. It would not be possible to assess compliance with the directive if the appropriate documentation (Technical Documents) were not available for examination by the Notified Body.
Original Reference:	TRG 0012 Rev 1
Approved by CABF on:	2016-03-15/16
Note:	

Reference No: **CABF-R-005 rev 2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Point 1.3 of Annex I,**	CABF Recommendation

Question:

Is it acceptable to CE-mark pressure equipment designed in a way that involves a known or obvious risk for misuse?

Example: A safety valve has a disc that is connected to a rod as indicated in the picture. An external force or load applied to the rod (position 6 in the picture) will increase the set pressure or block the function of the safety valve.



Answer:

No.

The design of the pressure equipment must be modified to eliminate the hazards which can be reasonably foreseen and identified in the Hazard Analysis.

Reason:

PED in point 1.3 of Annex I requires that an adequate warning against misuse of the equipment must only be regarded as a solution to the problem in cases where it is not possible to modify the equipment.

Original Reference: CABF-R-005 rev 1

Approved by CABF on: 2016-03-15/16

Note:

Reference No: **CABF-R-006 rev2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex I, Section 7.0, Para All**	CABF Recommendation

Question:

What is the meaning in PED Annex I, clause 7 heading:

Certain Pressure Equipment?

Answer:

The values of clause 7 are (if no demonstration about equivalent level of safety has been made) applicable as follows:

- Clause 7.1 applies to pressure equipment made of steel, steel castings or aluminum
- Clause 7.2 applies to welding joints of metallic pressure equipment
- Clause 7.3 applies to pressure vessels and shall be considered to all types of pressure equipment
- Clause 7.4 applies to pressure vessels and shall be considered to all types of pressure equipment
- Clause 7.5 applies to steels for pressure equipment

Where a material is not explicitly mentioned in section 7.1 to 7.5, it must possess property values that provide for an overall level of safety equivalent to that assured above.

Reason:

Certain pressure equipment mean the pressure equipment, to which the sub clauses 7.1 to 7.5 apply on the basis of wording in them.

See also Guidelines: G/13; G/14; G/17; G/18; G/22; H/6

Original Reference: CABF-R-006 rev1

Approved by CABF on: 2016-03-15/16

Note:

Reference No: **CABF-R-007 rev2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III, Module B**	CABF Recommendation

Question: For what conditions should a new EU-type examination (production type) be considered for different versions of pressure equipment?

Answer: When the differences between the versions affect the level of safety a new EU-type examination (production type) should be performed.

If the following features are fulfilled, it can be presumed that different versions of pressure equipment are to be treated in the same EU-type examination (production type):

a) same technical specifications, e.g. design or materials
b) same classification group of fluids
c) manufactured by the same manufacturer using the same manufacturing processes
d) similar geometrical forms (i.e. of bodies, of connections and of inspection openings)
e) in the case of different max. allowable pressure PS, the main equipment parts are assessed in all circumstances
f) same foreseeable intended use / working conditions
g) same approval of the procedure for the permanent joining for the foreseen material groups and wall thickness areas
h) no significant difference in results of hazard analysis

Reason: ---

Original Reference: CABF-R-007 rev1

Approved by CABF on: 2016-03-15/16

Note: Any lists in this document are for guidance and are not exhaustive

Reference No: **CABF-R-009 rev2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III**	CABF Recommendation

Question: What must be considered by the Notified Body or user inspectorate when examining the design of pressure equipment in the context of modules B, G and H1?

Answer:

1. Limits of the Design Examination

The examination covers the pressure-bearing walls of the pressure equipment to the pressure-equipment-side connection flanges, screw connections or, in the case of permanent connections, to the first joints. The examination also encompasses the load-bearing elements and the loads arising from reaction forces. For this purpose the documents submitted by the client for the design examination, alongside the specification (regulations, standard etc.), must contain all the details required for the examination of the pressure equipment.

2. Conduct of the Design Examination

2.1 The dimensioning of the pressure-bearing vessel parts is examined for compliance. In particular (but not only) to establish whether:

- the pressure equipment reliably withstands the loads arising from the intended operating conditions (especially the permissible pressures and temperatures),
- pulsating loads and additional loads (e.g. from bearing forces, wind and snow loads, nozzle forces/moments, stresses from temperature differentials) have been adequately considered in the design examination documents.

For this purpose the examiner shall be able to carry out his own calculations and shall carry them out whenever he deems it necessary in order to check the conformity with applicable requirements of the Directive.

2.2 The design is examined for compliance. In particular, but not only, with a view to the following aspects:

- Suitability of the materials according to Annex I Section 4 of the PED for pressure-bearing parts and for non-pressure-bearing, welded on parts, including the intended quality verification documents,
- Suitability of the procedures for permanent joining and the filler materials of the joints,
- Compliance with the design rules for joints and governing the avoidance of loads inappropriate for the materials,
- Type of heat treatment before/after welding or forming,
- Type and scope of the non-destructive and/or destructive testing,
- Design appropriate for testing purposes with a view to the conduct of final assessment and proof test and, where relevant, the periodic in-service inspections and maintenance,

2.3 Result of the Design Examination

The result of the design examination is documented in an examination report, which will also contain essential information (such as cyclic loading, quick-acting closure, NDT) for manufacture and operation.

Reason: ---

Original Reference: CABF-R-009 rev1

Approved by CABF on: 2018-06-05/06

Note: The guideline also applies for the manufacturer's examiner in the context of module H.

Reference No: **CABF-R-0010 rev1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex I, Section 3.1.2**	CABF Recommendation

Question:	Are the welding procedure qualification records certified by an organization that is today a notified body or a recognized third-party organization acceptable for the purpose of the qualification of permanent joining procedures even though the organization was not a notified body or a recognized third-party organization at the time of qualification?
Answer:	Yes.
Reason:	This is the procedure that most conformity assessment bodies have adopted since 29.11.1999.
Original Reference:	CABF-R-0010
Approved by CABF on:	2016-03-15/16
Note:	

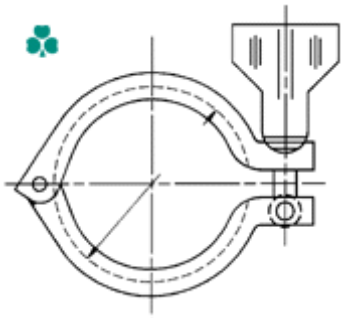
Reference No: **CABF-R-011 rev2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex I Par 3.3, Art. 6(6) + 8(3)**	CABF Recommendation

Question:	Is the notified body identification number sufficient information to satisfy the requirements of Article 6(6) and 8(3); regarding marking with the name and address or other means of identification of the manufacturer or the importer?
Answer:	No. – The number associated with the CE marking identifies the notified body, not the manufacturer. Where the manufacturer chooses not to use his name and address, then the marking used shall be a publicly recognized trade mark or other mark that is sufficient for the Member States to locate the manufacturer's offices.
Reason:	NOTE: Where the component is small, information can be given on a label attached to the equipment (Guideline H/13).
Original Reference:	CABF-R-011 rev1
Approved by CABF on:	2016-03-15/16
Note:	

Reference No: **CABF-R-012 rev1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex I Par 4.3**	CABF Recommendation

Question:

What are the material certification requirements in respect of ferrule type clamps similar to that shown below, bearing in mind WGP guideline G/8 ?



Answer:

Where the analysis of hazards and risks confirms that the use of such components is acceptable, clamps of the above type must be considered as main pressure bearing parts. As such the material certification must meet the requirements laid down in Annex 1 § 4.3 as clarified by guideline G/5.

Moreover the requirements must apply to each component part, since failure of any component part of the clamp would result in a sudden release of pressure energy.

Reason:

Failure would result in a sudden release of pressure energy, this being the criteria laid down in guideline G/8.

See also guideline G/6

Original Reference:	CABF-R-012
Approved by CABF on:	2016-03-15/16
Note:	

Reference No: **CABF-R-013 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III Module A2 and C2**	CABF Recommendation

Question:	Should the Notified Body issue a document to the manufacturer according to module A2 or C2?
Answer:	Yes. Depending on the accreditation requisites, the kind of document can vary (examples: inspection report, authorisation to use the notified body's identification number).
Reason:	The Directive does not mention any document for these modules in Appendix III. Nevertheless, the manufacturer needs to have a written authorisation to use the notified body's identification number behind the CE-mark.
Original Reference:	CABF-R-013 rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-014 rev2**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Points 4.1 and 7.5 of Annex I**	CABF Recommendation

Question:

How should Guideline G-17 be interpreted when using materials with specifications that does not ensure specified impact properties in the manufacture of pressure equipment?

Answer:

1 Guideline G-17 asks the question “Shall a steel grade selected for a pressurised part always have specified impact properties?” The answer given is “Yes” and then an exception is described together with a number of conditions and notes.

2 This answer raises a number of questions that result in wide differences in interpretation. It is the intention of this Conformity Assessment Body Recommendation to provide guidance to Notified Bodies/User Inspectorates and pressure equipment manufacturers on how this should be applied.

3 The philosophy of the approach out lined below takes account of the hazard analysis performed by the manufacturer in relation to the toughness necessary to avoid brittle fracture in the finished pressure equipment. Some design codes provide rules that take account of the actual operating conditions including; actual material, installed thickness, temperature, method of processing, etc. When followed in their entirety, these rules provide confidence that under the actual operating conditions the material will behave in a ductile manner and so avoid brittle fracture.

4 The exception concerns “ductile materials which are not subject to a ductile/brittle transition at the foreseeable conditions the equipment will be exposed to”.

Such materials are those that have a metallurgical structure that is not predisposed to ductile/brittle transition Examples of such materials are: pure aluminium, austenitic stainless steel.

Also, where the design code provides specific rules that take account of the anticipated or actual conditions prevailing e.g. material, thickness, temperature, etc. and indicates this provides appropriate confidence that the material will not behave in a brittle manner and therefore does not require specified impact properties.

5 “The justification for omission of the impact properties shall be based on the most adverse possible combination of all elements of the steel grade specification, such as:
- the full permissible range of the chemical analysis
- the extreme mechanical properties

as documented and permissible in the specification and not on the values of the actual deliveries”.

As the specified range of chemical analysis for some materials could in the extreme, result in brittle behaviour, the consequence of the worst combination of chemistry must be considered. Where appropriate, such materials could be accepted if the chemical composition and mechanical properties are restricted to acceptable levels in the purchase order and in the particular material appraisal.

EXAMPLES: In the case of a Carbon Manganese steel the chemical composition may be restricted to: Carbon Max. 0.23%, Sulphur Max. 0.025% Phosphorus Max. 0.035%.
Other restrictions may include:

- avoiding inter-metallic phases
- avoiding large grain sizes
- placing limits on mechanical properties

Manufacturers and Notified Bodies must demonstrate that they have taken this into account in documenting PMAs.

6 Furthermore subsequent manufacturing processes affecting the impact properties of the material shall be taken into account, when making the above assessment.
Following all the rules in the design Code will generally ensure that this requirement is met however additional requirements may also be necessary to ensure that all ESRs have been met.

EXAMPLES: forming, heat treatment, welding.

Manufacturers and Notified Bodies must take this into account.

7 However verification testing of specified impact property may not be required in cases where there is no doubt about the fulfilment of the essential safety requirement on sufficient toughness to avoid brittle fracture."

EXAMPLE: Most Austenitic Stainless Steels, Aluminium.

8 Reason – Impact property values are the most common way to fulfil the essential safety requirement of toughness specified in point 4.1a of annex I

Although impact testing of materials is the commonly accepted route to demonstrate materials have specified minimum toughness, it is not the only route.

EXAMPLE: Restrictions on operating temperatures,
fracture mechanics,
specific rules within a design Code applicable to specified conditions

9 Note 1 – "Every harmonized European steel standard has specified impact properties."

No additional comment necessary

10 Note 2 – "A "history of safe use" alone cannot replace the need for the specification of impact properties. This notion is inextricably linked to a particular code, set of safety factors and safety philosophy and

can therefore not necessarily be transferred to a different safety philosophy/concept".

Following the requirements of an established design Code alone does not provide a "presumption of conformity" and a simple claim by the manufacturer that they "have followed the specified Code" is not in itself justification. Established Codes may be used as the basis for meeting the essential safety requirements however it is necessary to compare the selected Code requirements to the essential safety requirements and identify and address any deviations. This requires those using the Code to have a good understanding of the principles involved, rather than mechanistic following of rules for their own sake.

The use of materials without assured impact properties is only justified when used in the context of the established product Code that provides appropriate rules for prevention of brittle fracture and all the technical requirements of that Code are fulfilled.

Reason:

Original Reference: CABF-R-014 rev 0

Approved by CABF on: 2016-03-15/16

Note: editorially amended 2017-12-11

Reference No: **CABF-R-015 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Points 3.4 and 2.4 of Annex I**	CABF Recommendation
Question:	Must a manufacturer provide information concerning in-service inspections in the Operating Instructions?
Answer:	Yes. When required as a result of the manufacturer's analysis of hazards and risks or by other design criteria, the manufacturer shall provide minimum recommendations for inspections by the user. This information should be written in the Operating Instructions. Some examples are: possible methods, frequency, cycles.
Reason:	Note 1: The user is responsible for the in-service inspection of the equipment and compliance with any national requirement. Note 2: Reference to a design code alone is not sufficient to satisfy the ESR's Note 3: "In-service inspection" are the activities undertaken during the operational life of the equipment to ensure its continued safety. Note 4: National legislation exists in Member States. Nothing in this recommendation changes that situation for example increasing the inspection intervals or the responsibilities for carrying out the inspections.
Original Reference:	CABF-R-015 rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-016 rev 3**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Articles 6 and 14**	CABF Recommendation

Question:

May a manufacturer place pressure equipment on the market under his name when it has been produced and conformity assessed by another manufacturer under the Pressure Equipment Directive (PED)?

Answer:

Yes, but the manufacturer placing this pressure equipment on the market under his name must be aware, that in this case he will become the manufacturer of the pressure equipment in the sense of the PED and that he has to fulfil the obligations of a manufacturer laid down in article 6. Therefore the following shall be fulfilled:

1. a written arrangement on this issue between the two parties shall exist. This is to ensure that all parties are aware of all the legal obligations and to safeguard against safety and commercial issues such as counterfeiting;

2. a) the manufacturer placing the equipment on the market shall apply an appropriate conformity assessment procedure and engage the services of a notified body where required, the number of which shall accompany the CE-marking;

   b) the notified body whose number is on the pressure equipment shall take full responsibility for the conformity assessment procedure applied to the equipment, taking account of records of any previous conformity assessment if possible;

3. the manufacturer placing the equipment on the market shall be able to provide the market surveillance authorities with the technical documentation on request or appoint an authorised representative for this task

Reason:

This concept is sometimes called “own brand labelling”. The person or entity placing on the market must demonstrate conformity with the Directive– taking a previously approved product from one manufacturer and just changing the name on the product is not sufficient to demonstrate conformance with the Directive.

See also guideline D/10

Original Reference: CABF-R-016 rev 2

Approved by CABF on: 2016-03-15/16

Note:

Reference No: **CABF-R-017 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III and IV**	CABF Recommendation
Question:	Is the Notified Body or the User Inspectorate responsible for the content of the Declaration of Conformity issued by the manufacturer, or his authorized representative established within the Community?
Answer:	No, it is the responsibility of the manufacturer, or his authorized representative established within the Community, that the Declaration of Conformity is available and in accordance with Annex IV. Nevertheless it is recommended that the draft Declaration of Conformity is examined by the Notified Body or the User Inspectorate (at least on a time to time basis) during (monitoring of) the final assessment.
Reason:	In Annex III the tasks of the Notified Body or the User Inspectorate for the different conformity assessment procedures (modules) are listed. The examination of the Declaration of Conformity is not listed. It is important for the later use of the Declaration of Conformity (e.g. during the assessment of an assembly, in the commissioning phase or during later in-service inspection) that the information is complete and correct.
Original Reference:	CABF-R-017 rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-018 rev 1**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to PED: **Point 2.2.3 of Annex I ; CABF-R-009 rev 1**	CABF Recommendation
Question:	A manufacturer applies to a Notified Body for a module that includes the NB to assess the design. As part of the technical documentation the manufacturer submits the drawings and an output summary of the computer generated calculations. Is this acceptable?
Answer:	No, The manufacturer is responsible for designing the pressure equipment. Design includes the preparation of drawings together with the justification that demonstrates that the equipment has adequate strength for the operating conditions envisaged. The manufacturer enable the Notified Body to carry out a full design examination must therefore prepare all documentation necessary to demonstrate this. The Notified Body is required to perform the “necessary examinations” in order to verify that the applicable ESRs have been met. In order to achieve this, the Notified Body must review the work performed by the manufacturer. Generally this requires the manufacturer to submit (or make available) the full set of calculations so that the NB may verify that all aspects of the design have been correctly identified analysed and input by the manufacturer. Note 1: The examining Notified Body may make its own verification calculation (CABF-R-009 rev 1).
Reason:	In Annex III (conformity assessment procedures) only the result of design calculations is mentioned as a part of the technical documentation. However the obligation on the Notified Body may only be discharged with a full assessment of the design.
Original Reference:	CABF-R-018 rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-019 rev 3**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Point 3.1.2 of Annex I	CABF Recommendation
Question:	With reference to WGP F/6, F/8 & F/12, what conditions should be applied for the validity period of permanent joining personnel qualifications for use on pressure equipment in Categories II, III & IV, where harmonised standards are not used?
Answer:	Permanent joining personnel qualifications shall be subject to the same requirements for initial validity period and maximum prolongation as set out in the current harmonised standards if available.
Reason:	Meeting the requirement in point 3.1.2 of Annex I to “perform examinations & tests as set out in the appropriate harmonised standards or equivalent examinations and tests” includes not just the initial examination and testing, but the ongoing verification of competence.
Original Reference:	CABF-R-019 rev 2
Approved by CABF on: 2020-11-17	
Note:	

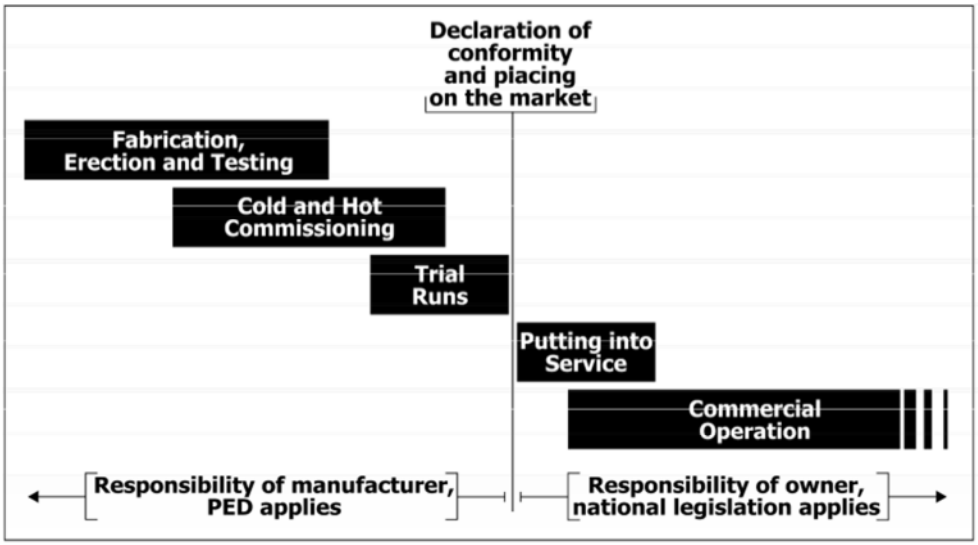
Reference No: **CABF-R-020 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Annex III Module B(design type), (3.2)(6) and Module H1, (12)(4.3)	CABF Recommendation
Question:	Is it possible to use an EU-type examination certificate — design type issued under Module B (design type) by Notified Body "X" to satisfy the design examination requirements for a manufacturer's Quality System under Module H1 which is approved by Notified Body "Y"?
Answer:	No
Reason:	Both Module B (design type) and Module H1 require a Certificate to be issued by a Notified Body following a successful design examination. However, it is Notified Body "Y", responsible for the Quality System that is required to issue the EC Design Examination Certificate under Module H1 [PED Annex III, Module H1, (12)(4.3)].
Original Reference:	CABF-R-020 rev 0
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-021 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Annex III EU-type examination – design type (2)	CABF Recommendation
Question:	Pressure equipment design code requires that the effects of fatigue shall be assessed, either by analysis or test. Codes that include detailed requirements for fatigue testing are for example harmonized standards EN 14359:2006 Gas-loaded accumulators for fluid power applications EN 13445-3:2009 Unfired pressure vessels – Part 3: Design EN 14917:2009 Metal bellows expansion joints for pressure applications EN 14585-1:2006 Corrugated metal hose assemblies for pressure applications. Part 1: Requirements. Is it possible to apply module B (design type) if the manufacturer opts for fatigue testing to verify the adequacy of design?
Answer:	No
Reason:	Fatigue testing is an experimental design method. The experimental design method may not be used in the context of module B (design type).
Original Reference:	CABF-R-021
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-022 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Article 5	CABF Recommendation
Question:	For complex assemblies, comprising several sub-assemblies and numerous pieces of pressure equipment, hot-commissioning is a long-drawn-out process. During this process some parts of the assembly are utilized by the manufacturer to start-up, test etc. other equipment. Example: A running instrument air system is an essential prerequisite for commissioning of the rest of an assembly. Questions: Is the use of already CE-marked sub-assemblies by the manufacturer of a bigger assembly during his hot-commissioning phase an operation within the scope of national legislation for operation and in-service inspection of pressure equipment? Has the manufacturer of an assembly therefore to subject himself to the rules for registration, operation, inspection prior to service and in-service etc. decreed by the member state in which he erects his assembly? Note: Other national regulations, especially for health and safety on site, are not an issue of this CABF-R and will of course be applicable.
Answer:	No. The obligation for registration, operation, inspection prior to service and in-service lies with the owner.
Reason:	Operation in the sense of national legislation for operation and in-service inspection of pressure equipment starts when an assembly is “put into service”, which is defined as the moment of first use by the end user. (see Blue Guide § 2.3.2)
Original Reference:	CABF-R-022
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-023 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Annex III Module G	CABF Recommendation
Question:	In accordance with Annex III, NDT reports are considered quality-relevant fabrication documents and are to be kept as part of the technical documentation for duration of 10 years by the manufacturer. Does the obligation to archive these documents also include the original radiographs?
Answer:	No. If during the manufacturing process the radiographs have been assessed and the results have been properly documented in corresponding test reports by qualified personnel, the radiographs do no longer have to be regarded as primary manufacturing documents and need not be archived. It is then sufficient to keep the corresponding test reports.
Reason:	The test reports about the radiographs describe in sufficient detail the assessment, the testing parameters, and test results provided the assessment and documentation of the results are carried out by qualified personnel.
Original Reference:	CABF-R-023
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-024 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: Point 4.2 (c) of Annex I	CABF Recommendation
Question:	Is a particular appraisal of a PMA by a notified body required for pressure equipment in category III as it is stated in point 4.2 (c) of Annex I even if the manufacturer has an approved quality system for design, manufacture, final inspection and testing according to module H?
Answer:	Yes
Reason:	The Pressure Equipment Directive in point 4.2 (c) of Annex I stipulates clearly that the PMA for pressure equipment in categories III and IV must be approved by the notified body in charge of the conformity assessment procedure. In case of module H the PMA for pressure equipment in category III must be approved by the notified body responsible for the assessment of the quality system.
Original Reference:	CABF-R-024
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-025 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Recital 7**	CABF Recommendation
Question:	What are the activities preceding and following the point in time at which an assembly is placed on the market by the manufacturer and who bears responsibility?
Answer:	The typical sequence of activities is shown in the figure below.  Note 1: Trial Runs may include, but are not limited to, functional tests, performance tests and tests of safety devices. Note 2: Putting into service includes, but is not limited to, pre-service inspections according national regulations carried out by inspection bodies. Note 3: Putting into Service tasks can be subcontracted from the owner to the manufacturer.
Reason:	
Original Reference:	CABF-R-025
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-026 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Article 2 (2)** **Article 13 (2)** **Article 19 (1)**	CABF Recommendation
Question:	Is it possible to CE mark and certify „lamellas“ (in this instance a series of stacked dimpled plates) under a conformity assessment module or module combination according to the PED (see picture). 
Answer:	Yes, these lamellas can be considered as pressure vessels and therefore they can be CE marked. However, if they are to be used as a component in a heat exchanger, they have to undergo an additional assessment by the heat exchanger manufacturer and its conformity assessment body.
Reason:	
Original Reference:	CABF-R-026
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-027 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Point 4.3 of Annex I**	CABF Recommendation
Question:	What must a competent body take into account when assessing the quality system of a material manufacturer?
Answer:	The competent body shall, when assessing the quality system, evaluate the capability of the material manufacturer to produce materials covered by the QA-certificate. This implies that for each production site, production process, grade, dimensional range, heat treatment condition etc., it shall be verified by production-data that the manufacturer, with statistical confidence, meets the minimum requirements of the specifications covered by the scope of the QA-certificate. The QA-certificate shall at least include information about the name of the manufacturer, the production location, material type, form of product and expiry date.
Reason:	-
Original Reference:	CABF-R-027
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-028 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Article 20 and 32**	CABF Recommendation
Question:	A notified body has approved the quality system of a manufacturer of pressure equipment and the approval is valid for 3 years from the issue date (June 11, 2010). During this time the notified body has lost his status as a notified body (date of expiry / withdrawal November 10, 2011). May the manufacturer affix the CE marking and the number of this notified body to the pressure equipment if the final assessment is made after the date of expiry or withdrawal of notification?
Answer:	No
Reason:	If an organisation loses his status as a notified body the quality system approval is no more valid.
Original Reference:	CABF-R-028
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-030 rev 2**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III type examination - design type (3) and (7)** **Annex III module F (3) and (4.1)** **Guideline D/5**	CABF Recommendation
Question:	The conformity of pressure equipment is to be assessed in accordance with modules B (design type) + F. The EU-type design examination – design type certificate has been issued by notified body X and the manufacturer requests product verification from notified body Y. During the product verification notified body Y finds out that the EU-type examination – design type certificate and the technical documentation annexed to the certificate does not contain all the information that is required in module B (design type) and in the design code that is the basis of design examination. May the notified body Y verify the product to be in conformance with the requirements of PED even though notified body Y, based on the data in the EU-type examination – design type certificate, cannot satisfy himself that the requirements of Annex I and design code are met?
Answer:	No. If notified body Y finds that the data in the EU-type examination – design type certificate is inadequate for verification or the product hasn't been manufactured in accordance with the approved technical documentation notified body Y shall ask the manufacturer to provide the supplementary technical documentation for notified body X's approval before continuing the verification.
Reason:	In modules B (design type) + F it is notified body Y who shall verify that the pressure equipment conforms to the requirements of PED and to the type described in the EU-type examination – design type certificate. Notified body Y cannot take the responsibility of design approval that belongs to notified body X.
Original Reference:	CABF-R-030 Rev 1
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-031 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Point 3.2.2 of Annex I,** **Guidelines D/11 and A/22**	CABF Recommendation
Question:	A safety bursting disc is mainly constituted of : -the disc itself -the holder of the disc Can the manufacturer justify not carrying out a proof test of the bursting disc holder?
Answer:	No
Reason:	ESR 3.2.2 Proof test states that final assessment of pressure equipment must include a test for the pressure containment aspect, which will normally take the form of a hydrostatic pressure test. It allows other tests of a recognised value to be carried out if it is harmful or impractical neither of which would normally be considered relevant in the case of a bursting disc holder manufactured from plate or bar stock.
Original Reference:	CABF-R-031
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-032 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Point 3.2.2 of Annex I**	CABF Recommendation
Question:	Pressure gauges are used for indication of the pressure of hydrostatic tests during (final) inspection by manufacturers under supervision of a notified body. This applies to conformity modules A2, B (production type), C2, D, D1, E, E1, F, G and H1. These pressure gauges should be referring to a national standard by calibration. In order to comply with point 6.2.6 and 6.2.7 of ISO/IEC 17020:2012, the pressure gauges applied during this hydrostatic test under supervision of a Notified Body needs to be calibrated. What are acceptable methods for the calibration of pressure gauges?
Answer:	There are the following options which are acceptable calibration 1a) Notified Body uses his own calibrated gauge, calibrated by a National Accredited Testing Laboratory (NATL) for testing. 1b) Notified Body has a calibrated mother gauge, calibrated by a National Accredited Testing Laboratory (NATL), which is for calibration the manufacturer's testing gauges, used during the hydrostatic test for the final inspection. 2) Manufacturer uses calibrated mother gauge, calibrated by a National Accredited Testing Laboratory (NATL), which is used for calibration of testing gauges used during the hydrostatic test for the final inspection. See EN 13445-5 for this option 3) Manufacturer uses only test gauges calibrated by a National Accredited Testing Laboratory (NATL). See EN 13445-5. 4) Manufacturer has no calibrated mother gauge and uses a service supplier/sub contractor for calibrating the testing gauges, with a calibrated mother gauge, which is calibrated by a National Accredited Testing Laboratory (NATL) To 2); 4): The Notified Body performing the proof testing shall verify the calibration done by the manufacturer or the subcontractor on the manufacturer's behalf. The Notified Body shall inspect and review the calibration reports, mother gauge calibration certificates and method statements of calibration. If necessary the Notified Body inspects the calibration and facilities used. Remark: In the case the conformity assessment module is not under supervision of the notified body the manufacturer has to comply with the minimum requirements for calibration set out in the standard used for the product.
Reason:	Conformity assessment by a Notified Body under accreditation requires high standards for calibration and control of measuring devices, including pressure gauges. In order to realise measuring results that refer to a national standard, agreement on a uniform approach seems necessary as National Accreditation Bodies may have different guidelines for their assessment of accredited bodies.
Original Reference:	CABF-R-032
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-033 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Application Code**	CABF Recommendation
Question:	Is it admissible for a Notified Body to conduct conformity assessment utilizing a product standard and supporting standards not available in a verified translation and/or which is not well understood by the personnel in charge of conformity assessment activities?
Answer:	No
Reason:	The primary actors making the decision of certification (head of notified body, certification office, QA manager, supervisor, inspector etc.) must understand the basis of the conformity assessment that they are certifying. Where used a product standard is a fundamental part of this process.
Original Reference:	CABF-R033
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-034 rev 1**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Point 2.10 of Annex I**	CABF Recommendation
Question:	When a safety accessory is applied to a refrigeration system for the prevention of failure due to external fire is it permissible that the pressure surge during operation of the safety accessory exceeds 1,1 x PS?
Answer:	Yes. The limitation of the pressure surge to 1,1 x PS does not apply for the case of heating by an accidental external fire (see EN 764-7 clause 6.1.4). For such cases the limit for the pressure surge shall be established in an analysis of hazards and risks under special consideration of the intended/permitted conditions of installation of the vessel. Note: The set pressure of the safety accessory shall be equal to or lower than PS except for cases where another safety accessory protects the pressure equipment from exceeding PS under all other foreseeable conditions.
Reason:	Guideline E/2 states that the limitation of the short duration pressure surge to 1.1 x PS does not apply for fire engulfment.
Original Reference:	TRG 117 Rev 2
Approved by CABF on: 2016-03-15/16	
Note:	

Reference No: **CABF-R-036**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Annex I, sections 4.2 and 4.3**	CABF Recommendation
Question:	What are material certification requirements for category II, III or IV pressure equipment with main pressure-bearing parts of glass?
Answer:	Pressure equipment manufacturer shall prepare a particular material appraisal (PMA) where he defines the properties, testing and certification requirements of glass. The glass manufacturer shall issue an inspection certificate EN 10204 type 3.1*) or 3.2. In this document the glass manufacturer shall affirm that the glass conforms with the PMA and provides test results as specified in the PMA. *) Type 3.1 certificates are sufficient only if the material manufacturer has a quality-assurance system in compliance with the last paragraph in point 4.3 of Annex I.
Reason:	There is no harmonized material standard for glass, therefore the procedure of particular material appraisal is necessary. The data supplied by material producer may be used as a guide when preparing the PMA. The glass sample that will be used for testing shall be of same heat and fabricated under representative manufacturing conditions as the finished glass product. The principles of standard EN 10204 may be applied also to non-metallic products.
Original Reference:	TRG 126 Rev 0
Approved by CABF on: 2016-06-21	
Note:	

Reference No: **CABF-R-037**	Conformity Assessment Bodies Forum PED/SPVD CABF PED/SPVD
Relation to PED: **Annex I, section 4.3; Guideline G-05**	CABF Recommendation
Question:	What are the certification requirements for sight glass materials?
Answer:	For the main pressure-bearing parts of equipment in categories II, III and IV an inspection certificate EN 10204 type 3.1 or 3.2 is required. Test report EN 10204 type 2.2 issued by the material manufacturer is sufficient for category I equipment or if the sight glass is not a main pressure bearing part (main pressure bearing parts see Guideline G-06).
Reason:	Sight glasses are pressure-loaded parts and the material manufacturer shall certify that the material complies with a specification. The certificate type depends of the application. The standard EN 10204 may be applied also to non-metallic products.
Original reference:	TRG 123 Rev 4
Approved by CABF on: 2017-06-20/21	
Note:	

Reference No: **CABF-R-038**	Conformity Assessment Bodies Forum PED/SPVD CABF PED/SPVD
Relation to PED: **Annex III, Module H1 (4.3)**	CABF Recommendation
Question:	How long shall the EU design examination certificate (module H1) be valid?
Answer:	The EU design examination certificate is valid as long as the module H1 is valid unless an amendment or supplement to the standard on which the design of pressure equipment is based requires an amendment to the technical documentation of the design. When the quality system is reassessed the EU design examination certificates may be renewed.
Reason:	The EU design examination certificates are a part of the quality system in module H1.
Original reference:	TRG 127 Rev 2
Approved by CABF on: 2017-06-20/21	
Note:	

Reference No: **CABF-R-039**	Conformity Assessment Bodies Forum PED/SPVD CABF PED/SPVD
Relation to PED: **Annex III, Module H (3.1)**	CABF Recommendation
Question:	What is meant by the phrase *"the technical documentation for one model of each type of pressure equipment intended to be manufactured*"?
Answer:	For all applications against Directive 2014/68/EU, the manufacturer shall submit technical documentation for one model of each type of pressure equipment intended to be manufactured. The documentation must provide a description or concept of an item or assembly that identifies the repeatable outputs that account for all variations and relevant properties that constitute the range of items proposed.
Reason:	The purpose of this element of module H is to assess the output of the manufacturer's design processes and ensure they address the essential safety requirements of the Directive that apply to the products. Where the manufacturer uses harmonised product standards, one example for each standard is likely to be sufficient. Where the manufacturer has a range of product types, the model selected should consider variables such as standard(s) used, geometry, application and complexity. This may result in multiple technical files being required to address the full scope of approval being sought.
Original reference:	TRG 129 Rev 1
Approved by CABF on: 2017-06-20/21	
Note:	

Reference No: **CABF-R-040 rev1**	Conformity Assessment Bodies Forum PED/SPVD CABF PED/SPVD
Relation to PED: **Annex III Module B § 3.1-7) and 3.2-7) and H1 § 4.4**	CABF Recommendation
Question:	Module B in § 3.1-7) and 3.2-7) and H1 in § 4.4 of Annex III of the Directive 2014/68/EU require the NB to monitor the state of the art Generally recognized; Where this suggests that the approved type may no longer comply with the applicable requirements of this Directive, it shall determine whether further examination is necessary. If this is the case, the notified body shall inform the manufacturer accordingly. Should this technical, regulatory and normative monitoring be a part of the conformity assessment of the design according to these modules? *"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 Directive, and shall determine whether such changes require further investigation. If so, the notified body shall inform the manufacturer accordingly."*
Answer:	Yes, only if the approved type may no longer comply with the applicable requirements of the Directive, the notified body shall inform the manufacturer accordingly.
Reason:	This requirement applies and shall be carried out only if the relevant certificate is no longer in conformity with the applicable requirements of the directive.
Original reference:	TRG 132 Rev 1
Approved by CABF on: 2017-11-14/15	
Note:	Editorially amended by Technical Secretariat 2018-01-25

Reference No: **CABF-R-041**	Conformity Assessment Body Forum PED/SPV (CABF) CABF
Relation to SPVD: **Recital (24), Article 17, Annex I 3.2**	CABF Recommendation

Question:	Is it acceptable that the welding processes are approved and welders or welding operators are qualified by a notified body that is notified for the tasks of Directive 2014/68/EU Annex I, 3.1.2 but not for the tasks of Directive 2014/29/EU?
Answer:	No. The notified body shall be notified for the tasks of directive 2014/29/EU.
Reason:	Even though the approval or qualification process in both directives is the same, the text of SPVD Article 17 is clear.
Original Reference:	TRG 141 Rev 0

Approved by CABF on: 2018-06-05/06

Note:

Reference No: **CABF-R-042**	Conformity Assessment Bodies Forum PED/SPV (CABF) CABF
Relation to PED: **Annex III Modules D, D1, E, E1, H, H1**	CABF Recommendation
Question:	What are the essential differences between a quality system certified to ISO9001:2015 and the requirements of the Directive's quality modules?
Answer:	1. Some elements of ISO 9001:2015 are not required for the Pressure Equipment Directive. These are: a. Section 4 (Context of the Organisation) b. Section 10.3 (Continual Improvement) c. A Process-based approach. 2. Some elements of Annexe III are not specifically included in ISO 9001. These include: a. The requirement in Annex III, Modules D1 and E1 para 5.2, and Modules D, H and H1 para 3.2 for written policies, procedures and instructions for all elements relevant to the production of CE-marked product. b. The requirement in Annex III Modules D1 and E1 para 5.5, and Modules D, H and H1 para 3.5 to obtain Notified Body approval of any proposed changes to the quality system. 3. According to Annex III Modules D1 and E1 para 5.3, and Modules D, H and H1 para 3.3, where a manufacturer is certified to ISO 9001 the Notified Body shall presume conformity. 4. The auditing team shall have at least one member experienced as assessor in the pressure equipment technology concerned, and knowledge of the applicable requirements of this Directive.
Reason:	ISO 9001:2015 is harmonised with the New Legal Framework, 768/2008/EU, which identifies the requirements for the Modules listed above but it is not a mandatory requirement for approval to the quality modules. The Blue Guide 2016 Annex 5 gives advice on the relationship between ISO 9001:2008 and the quality system modules, but not ISO9 001:2015.
Original Reference:	TRG 135 Rev 3
Approved by CABF on: 2019-06-04/05	
Note:	

Reference No: **CABF-R-043 rev1**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **Annex I, 3.1.2**	CABF Recommendation
Question:	For pressure equipment in category I, when a conformity assessment procedure from higher categories is chosen (e.g. module B or G), is it required that the operating procedures and personnel for permanent joining are approved by a notified body or a recognized third-party organization and that examinations and tests are performed as set out in the appropriate harmonized standards (or equivalent)?
Answer:	No. It is the category of pressure equipment that defines the approval under Annex I, 3.1.2, not the conformity assessment procedure.
Reason:	For pressure equipment in category I it is not required that the operating procedures and personnel for permanent joining are approved by a notified body or a recognized third-party organization. Moreover, suitable approvals and qualifications that do not necessarily meet the requirements of the appropriate harmonized standards (or equivalent) are also valid. See also PED Guidelines B-11 and B-25.
Original Reference:	TRG 144 Rev 2
Approved by CABF on: 2019-11-26/27 (editorially amended 2020-01-27)	
Note:	

Reference No: **CABF-R-044**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **Article 1, paragraph 2 (k)**	CABF Recommendation
Question:	According to Article 1 paragraph 2 (k), blast furnaces, including furnace cooling systems, hot-blast recuperators and some other items of connected pressure equipment, are excluded from the scope of the PED. Does this exclusion also apply to the interconnecting piping between the items of pressure equipment mentioned in Article 1 paragraph 2(k)?
Answer:	Yes
Reason:	If the blast furnace is including the mentioned items of pressure equipment, it is as well including the interconnecting piping.
Original Reference:	TRG 148 Rev 0
Approved by CABF on: 2019-11-26/27	
Note:	

Reference No: **CABF-R-045**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex I 3.2.2** **PED Annex III**	CABF Recommendation
Question:	Where an assembly consists of items of pressure equipment already tested (hydrostatically pressure tested and CE marked (where applicable). Does the integration test of the assembly, consisting of a leak test, need to be witnessed by the EU-CAB as part of the "proof test"?
Answer:	Attendance of the EU-CAB at the final proof test is specified in PED Annex III, according to the applicable Conformity Assessment Module. For the purpose of assessing the risks, the EU-CAB may classify the connections to be tested according to article 4 and Annex II PED Annex II. Where joints are classified as article 4.3, or Cat I, the Notified Body may take into account leak tests performed by the manufacturer to decide on attending the leak testing or verify the test results based on the records which are provided by the manufacturer. Where leakage poses a pressure hazard, the test on leak tightness is to be considered part of the final proof test.
Reason:	A final proof test is intended to; • verify tightness. • detect defects (e.g. due to faulty welding filler material, improper material • selection) • detect areas with insufficient strength, e.g. defects in base material of moldings or semi-finished products (incorrect forming or heat treatment) • establish a beneficial residual stress field. (source: *the Principles for the Assessment of Assemblies (version 17)* for an assembly containing equipment already subjected to a conformity assessment, only the first bullet remains applicable. Reference is made to guideline C-07 where the following reasoning is given for "items" of pressure equipment, of the purpose of this situation, the word "item is replaced by "joint" *According to article 14 paragraph 6 (a) the global conformity assessment procedure shall comprise assessment of each item of pressure equipment making up the assembly and referred to in Article 4 (1) which has not been previously subjected to a conformity assessment procedure and to a separate CE marking.* *The assessment procedure shall be determined by the category of the "joint", which may be based on the conditions of the assembly.* For welded joints, Guideline C-15 indicates the joint can be categorised by the diameter of the connection and Applying this method to non-permanent joints, it follows that for joints categorised as article 4.3 or category I, the notified body may take into account leakage tests performed by the manufacturer. Considerations that have influenced the before mentioned justification:

	From PED Annex I: 3.2.1 Final inspection *"Test carried out during manufacture may be taken into account…"* From PED Annex I: .2.2. Proof test *"Final assessment of pressure equipment shall include a test for the pressure containment aspect."* A Leak test is considered to be part of the proof test to confirm pressure containment yet is not by itself a proof test. Leakage through non-permanent joints does not cause a pressure hazard in most cases, although it may result in a hazard based upon the properties of the released fluids. (i.e. fluid group 1, fire, explosion, or toxicity) Since non- permanent joints are often disconnected after testing and before transportation, or during its service life, a leak test only confirms leak tightness at one moment in time, where a strength test has value for the entire service life of the pressure vessel. Guideline E-03 on leakage of pressure equipment: All hazards arising from pressure shall be assessed for the intended use and the intended contained fluid(s) Guideline C-15 on categories of permanent joints in Cat I or SEP. There is no requirement for the Notified Body to witness a proof test of those joints. From the Principles for the Assessment of Assemblies (version 17): The final proof test is intended to; • verify tightness. • detect defects (e.g. due to faulty welding filler material, improper material • selection) • detect areas with insufficient strength, e.g. defects in base material of mouldings or semi-finished products (incorrect forming or heat treatment) • establish a beneficial residual stress field. 6.2.3.2.4 Tie-in welds, golden welds and similar connections: Second bullet: If … connections are non-permanent (e.g. flanged, threaded) connections, a leak tightness test may be acceptable. If special requirements for tightness exist (e.g. dangerous fluid), the leak test shall be carried out with an appropriate high pressure and application of adequate sensitive leak detection methods.
Original Reference:	TRG 162 Rev 1
Approved by CABF on: 2024-06-04/05	
Note:	

Reference No: **CABF-R-046**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex I 3.1.3**	CABF Recommendation
Question:	In 2022 a new edition of the standard EN ISO 9712 " Non-destructive testing - Qualification and certification of NDT personnel" was published. The previous 2012 edition had been referenced in the OJ as harmonized standard but as of 3.4.2024, this reference has been withdrawn. Do valid certificates which were issue under the 2012 edition before 3.4.2024 still provide presumption of conformity with the essential requirements of the PED?
Answer:	Yes, certificates which were issued under the 2012 edition before 3.4.2024 and which have not yet expired, may be deemed to provide presumption of conformity and therefor may be accepted in the conformity assessment procedure. However, any renewal/re-certification needs to be performed in accordance with the 2022 edition of the standard.
Reason:	The transition period from the publication of the new edition to the date of withdrawal of the 2012 edition from the list of harmonized standards was much shorter than the time span of validity of certificates according to the standard. Recent changes to the standard were mainly not addressing qualification and competence but the procedure of revalidation. In contrast to Annex I 3.1.2 for the approval of welders, in Annex I 3.1.3 no harmonized standard is mentioned for the approval of NDT personnel.
Original Reference:	TRG 164 Rev 0
Approved by CABF on: 2024-06-04/05	
Note:	

Reference No: **CABF-R-047**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex I 3.1.2**	CABF Recommendation
Question:	A competent third party is approving a person to perform permanent joints as referred to in para. 3.1.2 of Directive 2014/68/EU. Q1: Is it mandatory for the competent third party to conduct a theoretical examination of the person? Q2: Who decides whether such an examination should be conducted?
Answer:	A1: No A2: The competent third party has to decide which examinations to perform based on ESR 3.1.2.
Reason:	EN ISO 9606-1:2017 is the current harmonized standard for welder qualification. The theoretical test in this standard is the “Job Knowledge” test of the informative Annex B. In section B.1 of this Annex it is stated that “The test of job knowledge is recommended, but is not mandatory”.
Original Reference:	TRG 166 Rev 1
Approved by CABF on: 2024-06-04/05	
Note:	Some Member State(s) have made the job knowledge test mandatory by way of a national foreword to the standard.

Reference No: **CABF-R-048**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Article 2 (5)**	CABF Recommendation
Question:	Is a device intended to connect two ends of pipes together, commonly referred to as "coupling", as pressure accessory according to article 2 (5) of the PED?
Answer:	No. It is usual for a coupling to be a component of pressure equipment. However, if the coupling has an auxiliary function such as to act as a stop end, as in the case of quick release hydraulic couplings, and is placed on the market fully in compliance with the ESR's it may fulfil the definition of a pressure accessory, see also Guideline A-08.
Reason:	
Original Reference:	TRG 167 Rev 1
Approved by CABF on: 2024-06-04/05	
Note:	

Reference No: **CABF-R-049**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex III**	CABF Recommendation
Question:	In the conformity assessment according to PED Modules A2 and C2 the engaged Notified Body has to perform a monitoring of the manufacturers final assessment by means of unexpected visits. The monitoring is related to a specific scope which has to be agreed between the manufacturer and the Notified Body. This scope can be defined in terms of - start and end date of the monitoring - location of the monitoring - product range (types, models etc.) - specific orders/projects - range of specific serial numbers Is it acceptable, that the manufacturer engages more than one Notified Body to perform the monitoring in accordance with PED Modules A2 or C2 for products within the same scope?
Answer:	No.
Reason:	PED Modules A2 and C2 require the Notified Body to establish that the manufacturer actually performs final assessment in accordance with point 3.2 of PED Annex I and to take samples of pressure equipment at the manufacturing or storage premises in order to conduct checks. Should one or more of the items of pressure equipment or assembly not conform, the notified body shall take appropriate measures. Engagement of more than one Notified Body for the same scope would increase the risk that competences and responsibilities are not sufficiently clear and that necessary measures are not taken.
Original Reference:	TRG 168 Rev 1
Approved by CABF on: 2024-06-04/05	
Note:	

Reference No: **CABF-R-050**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex I, No. 2.2.3**	CABF Recommendation
Question:	Does the PED have requirements on the content of a FEA/FEM report?
Answer:	No, there are no specific requirements for a FEA/FEM report. Annex I, No. 2.2.3 a) states that there are 3 calculation methods for determining the allowable stresses for the vessel. Annex I, No. 2.2.3 b) requires that appropriate design calculations shall be used. To be able to verify that an item of pressure equipment is capable of withstanding the loads / actions (forces, temperature, time, e.g.) it will be exposed to, the CAB conducting the conformity assessment must receive sufficient information and appropriate calculations to verify the FEA/FEM is performed correctly.
Reason:	EN13445-3 Annexes B (DBA- Direct Route) & C (DBA – Method based on stress categories) have requirements on the calculations to be performed. There are no requirements for the information in the report itself. A typical report must include sufficient information to allow the CAB to verify the FEA/FEM results. The minimum information is likely to include: • Summary of the scope including loads / actions (forces, temperature, time, e.g.) • Software name and version used • Analysis type • Mesh size and refinement • Material properties • Convergence and analysis of the results • Conclusion and comment on output If annex B is used, reference to § B.5 Methodology should be made. If Annex C is used, reference should be made to table C-3 (EN 13445-3).
Original Reference:	TRG 134 Rev 5
Approved by CABF on: 2025-07-01/02	
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Reference No: **CABF-R-051**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Article 2, paragraph 18**	CABF Recommendation
Question:	Must a user, who manufacturers pressure equipment, such as a vessel or piping, for his own use, CE-mark this equipment?
Answer:	Yes
Reason:	The new definition of "manufacturer" of pressure equipment in PED 2014/68/EU (reflecting the NLF wording) intends to clarify that a manufacturer, being a person who manufacturers pressure equipment in view of its placing on the market under his own name may also use such equipment for his own purposes. It is not meant to change the scope of PED. It was always the intention of PED that pressure equipment, even for own use, needs to be CE-marked, while industrial installations are not in the scope of PED. Pressure equipment and assemblies, which have been assessed by a user inspectorate, shall not bear the CE marking, even though their conformity is assessed in accordance with modules A2, C2, F or G. Note: Article 14, Paragraph 7 (interest of experimentation) is not affected.
Original Reference:	TRG 139 Rev 3
Approved by CABF on: 2025-07-01/02	
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Reference No: **CABF-R-052**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Article 13**	CABF Recommendation
Question:	How to determine the PS and the category of a pressure equipment containing either only a liquid at a maximum pressure P1, or only a gas (for example, for inserting or emptying) at a maximum pressure P2?
Answer:	The pressure PS of the equipment is the maximum value of the pressures P1 and P2 according to Article 2, item 8. The category of the equipment is determined, on the basis of reasonably foreseeable conditions, by retaining the highest category, taking into account the pressure P1 considering the use in liquid and the pressure P2 considering the use in gas. The manufacturer shall clearly state in his instruction manual that the end user must take appropriate precautions to avoid using liquid above the pressure P1 and gas above the pressure P2. The marking and labelling (on the pressure equipment or data plate) shall also include a warning highlighting the particularities of using this equipment.
Reason:	For example, a vessel is designed for use: - Group 2 liquids only, at a maximum pressure P1 of 500 bar, - gas (nitrogen) at a maximum pressure P2 of 4 bar for inerting operations. Fluids are not mixed. Without ambiguity, it is based on the highest-pressure value (P1). PS pressure is 500 bars. The classification is based on the reasonably foreseeable conditions of use of the vessel whichever is higher: • use with a group 2 liquid at a maximal pressure of 500 bars (PS). Based on table 4, the category would be category I or lower • use of group 2 gas (nitrogen) at a maximal pressure of 4 bars. Based on table 2, the category would be category III or lower The vessel is a category III vessel according to PED Article 13 (2)
Original Reference:	TRG 158 Rev 1
Approved by CABF on: 2025-07-01/02	
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Reference No: **CABF-R-053**	Conformity Assessment Bodies Forum PED/SPVD (CABF) CABF
Relation to PED: **PED Annex I,** **No. 3.2.1**	CABF Recommendation
Question:	According to PED guideline F-02 NDT test reports must be available for the final inspection. Is it therefore mandatory for the manufacturer to provide a separate NDT document for each of the inspected welds or group of welds to the Notified Body?
Answer:	No, the results may be made available to the Notified Body in form of a summary document, provided that • individual test reports must be available on request of the Notified Body • traceability of the results to the personnel performing the NDT is maintained • where imperfections exceeding the allowable limits are identified, a detailed report is generated and made available to the Notified Body • radiographic films or, in the case of digital radiography, files must be made available upon request for further review, for all the welds. This ensures transparency and facilitates thorough analysis of any significant defects. • requirements of the applied NDT standards/specifications/codes in particular EN ISO 17635, chapter 8 regarding the contents of the document are satisfied • the content of the document is accepted by the Notified Body This document does not impact the reporting requirements from the applied standards.
Reason:	If guideline F-02 was interpreted to mean a separate document per weld or group of welds, it could in large projects lead to hundreds, or even thousands of documents. It is therefore enough to present a summary document with essential parameters of the performed NDT.
Original Reference:	TRG 170 Rev 2
Approved by CABF on: 2025-07-01/02	
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