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DIRECTORATE-GENERAL III  
INDUSTRY  
Industrial affairs II: Capital goods industries  
**Construction**

Brussels, 29 January 1999

**M/131 – EN**

MANDATE TO CEN/CENELEC  
CONCERNING THE EXECUTION OF STANDARDISATION WORK  
FOR HARMONIZED STANDARDS ON

**PIPES, TANKS and ANCILLARIES not in contact with water intended for human  
consumption**

RELATED TO THE FOLLOWING END USES :

- 18/33 DRAINAGE (including highways) AND DISPOSAL OF OTHER LIQUIDS AND GASEOUS WASTE**
- 20/33 SUPPLY OF FUELS, OIL AND OTHER LIQUIDS**
- 21/33 FIRE SUPPRESSION AND EXTINGUISHING SYSTEMS**
- 22/33 SUPPLY OF GASES, PRESSURE AND VACUUM SYSTEMS**
- 26/33 COMMUNICATIONS**
- 28/33 FIRE DETECTION AND ALARM**
- 32/33 SANITARY AND CLEANING FIXTURES**
- 33/33 STORAGE FIXTURES**

## **FOREWORD**

*This mandate is issued by the Commission to CEN/CENELEC within the context of the Council Directive of 21 December, 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (89/106/EEC), hereafter referred to as "the Directive" or "the CPD".*

*One of the aims of the Directive being the removal of technical barriers to trade in the construction field, in so far as they cannot be removed by means of mutual recognition among Member States, it seems appropriate that standardisation mandates cover, at least during a first phase of the mandating programme, construction products likely to be subject to technical barriers to trade.*

*This mandate is intended to lay down provisions for the development and the quality of harmonised European standards in order, on the one hand, to make "approximation" of national laws, regulations and administrative provisions (hereafter referred to as "regulations") possible and, on the other hand, to allow products conforming to them to be presumed to be fit for their intended use, as defined in the Directive.*

*In this respect, this mandate takes account of the basic principles prevailing in the regulations of Member States, particularly those described in chapters 3 and 4.2 of the Interpretative*

*documents, to which standardisers must refer. As stated by the Directive, the responsibility Member States have for construction works on their territory remains unchanged.*

*In order to fulfil the provisions of article 7.1 of the CPD the present mandate has been structured in the following way:*

*Chapter I Grounds. General conditions within the framework of the CPD.*

*Chapter II Execution of the mandate. Conditions regarding the programming, development and execution of the standardisation work.*

*Chapter III Harmonised standards. Conditions regarding the content and the presentation of the harmonised standards.*

## **CHAPTER I            GROUND S**

1. This mandate falls within the framework of the general policy of the Commission with respect to technical harmonisation and standardisation, as well as within the scope of the Directive. It replaces any previous mandate on the same products formerly issued on a provisional base by the Commission.

This mandate is based on article 7 of the Directive and has taken into consideration the Interpretative Documents<sup>1</sup> that serve as reference for the establishment of the harmonised standards (see article 12 of the Directive). It serves to ensure the quality of the harmonised standards for products, always with reference to the state of the art, with particular reference to the fitness of the products listed in annex 1 intended to be used in **DRAINAGE (including highways) AND DISPOSAL OF OTHER LIQUIDS AND GASEOUS WASTE, SUPPLY OF FUELS, OIL AND OTHER LIQUIDS, FIRE SUPPRESSION AND EXTINGUISHING SYSTEMS, SUPPLY OF GASES, PRESSURE AND VACUUM SYSTEMS, COMMUNICATIONS, FIRE DETECTION AND ALARM, SANITARY AND CLEANING FIXTURES, STORAGE FIXTURES**, enabling the works to satisfy the essential requirements set out in annex 1 of the Directive, provided that barriers to trade in these products exist and that the products fall within the scope of article 2.1 of the Directive;

2. Levels or classes of requirements for the works are under the responsibility of Member States and are not covered by the present mandate. As a consequence, they are not expected to be defined in the harmonised standard.
3. Levels or classes of requirements for the products may be determined either in the Interpretative Documents or according to the procedure provided for in article 20 (2) of the Directive. In either case, where levels or classes of requirements for products are determined, guidance is given in Annex 3 to this mandate. This is not the case for classes of convenience, which are classes of product performances developed as a means of convenience for specifiers, manufacturers and purchasers. Such classes of convenience are not covered by the present mandate and should not be defined within the harmonised standard. Nevertheless, the results of the determination of the product characteristics may be expressed using classes of convenience introduced by European standards. Articles 3.2 and 6.3 of CPD do not apply to such classes.

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<sup>1</sup> O.J. No. C 62, 28.02.1994

4. The harmonised standards resulting from this mandate must allow for products to comply with them even where performance does not need to be determined for a certain characteristic because at least one Member State has no legal requirement at all for such characteristic. Declaration of performance for such a characteristic, in this case, must not be imposed on the manufacturer if he does not wish to declare it.
5. Indications regarding the documents which should be taken into account to inform standardisers and manufacturers on national and harmonised legislation on substances classified as dangerous are given in Annex 4.

## CHAPTER II EXECUTION OF THE MANDATE

1. CEN/CENELEC will present the Commission with a detailed work programme, at the latest, **three months after approval of 83/189 Committee**.
2. The work programme should identify clearly the list of harmonised standards to be developed. For each harmonised standard it should :
  - indicate the name(s) of the product(s) to be covered;
  - define the characteristics, durability aspects, intended uses and the forms and materials to be covered (in accordance with Annexes 1, 2 and 3 of this mandate);
  - attach the list of supporting documents (e.g. work items on test methods, ...);
  - justify the timetable foreseen for its finalisation; and
  - identify the Technical Committee(s) responsible for the work.
3. Clear differentiation should be made between the item to become the harmonised standard for the product and the items to be used as supporting documents.
4. When a supporting test standard for one characteristic does not exist or is not in the work programme of the TC, a clear statement should be presented indicating whether CEN is able to produce one or not.
5. Any proposals for the addition of products, intended uses and materials and forms not included in the mandate but considered relevant by the TC should be presented separately from the work programme for further analysis by the Commission services. Standards prepared for products outside this mandate will not achieve the status of harmonised standards. In addition to the provisions of article 4.1 of the CPD, it must be taken into account that all the products included in the mandate have a system of attestation of conformity in accordance with the relevant Decision of the Commission; those products not included have not.
6. Any proposal for the addition of characteristics and durability aspects not included in the mandate but considered relevant by the TC should be proposed in a special chapter of the work programme for further analysis by the Commission services.
7. Where a classification system of the product performances is envisaged in Annex 3 of the present mandate, CEN/CENELEC are requested to make an appropriate proposal for its implementation.
8. CEN/TCs must give a technical answer for the determination of the characteristics of the mandate taking into account the conditions stated below; test methods suggested must be directly related to the relevant required characteristic and must not make reference to determination methods for characteristics not required by the mandate. Durability

requirements should be dealt with in the framework provided by the state of the art at present.

9. Reference to test/calculation methods must be in accordance with the harmonisation aimed at. In general, only one method should be referred to for the determination of each characteristic, for a given product or family of products. If, however, for a product or family of products because of justifiable reasons, more than one method is to be referred to for the determination of the same characteristic, the situation must be justified. In this case all referenced methods should be linked by the conjunction "or" and an indication of application should be given. In any other case, two or more test/calculation methods for the determination of one characteristic can be accepted only if a correlation between them exists or can be developed. The relevant harmonised product standard must then select one of them as the method of reference. Testing and/or calculation methods shall have, whenever possible, a horizontal character covering the widest possible range of products.
10. Within the work programme, CEN/CENELEC will also specify those cases where the performance-based approach will not be followed in the harmonised standard and will give the relevant justification.
11. After examination of the work programme and consultations with CEN/CENELEC, the Commission services will endorse the timetable and the list of standards or parts of standards which meet the terms of this mandate and which will be recognised as harmonised or supporting standards.
12. The terms of reference of this mandate may be subject to modification or addition, if necessary. Acceptance of the work programme by the Commission services does not imply acceptance of all the WIs listed as supporting standards. TCs will need to demonstrate the direct link between WIs and the needs for harmonisation of the products, intended uses and characteristics given in the mandate. Nor does acceptance exclude the possibility for further WIs to be added by CEN, in order to fully respond to the terms of the mandate
13. Representatives of the authorities responsible for national regulations have the right and shall be able to participate in the activities of CEN/CENELEC through their national delegations and to present their points of view at all stages of the drafting process of the harmonised standards.
14. The Commission may participate in standardisation activities as observer and has the right to receive all relevant documents.
15. CEN/CENELEC will immediately inform the Commission of any problem relating to the carrying out of the mandate and will present an annual progress report on work within the framework of the mandate.
16. The progress report will include a description of work carried out and information on any difficulties being met, whether political or technical, with particular reference to those that might lead the authorities of a Member State to raise objections or to resort to article 5.1 of the Directive.
17. The progress report will be accompanied by the latest drafts of each standard under the mandate and by updated reports on any subcontracted work.
18. Acceptance of this mandate by CEN/CENELEC will initiate the standstill procedure referred to in article 7 of Council Directive 83/189/EEC of 28 March 1983 modified by Council Directive 88/182/EEC of 22 March 1988 and the European Parliament and the Council Directive 94/10/EC of 23 March 1994.

19. Acceptance of this mandate by CEN/CENELEC can take place only after the work programme has been endorsed by the Commission services.
20. CEN/CENELEC will develop the draft harmonised European standards and of the relevant supporting standards on the basis of the work programme and will inform the Commission in good time that the draft is being circulated for public comment.
21. CEN/CENELEC will present the final drafts of the harmonised European standards and of the relevant supporting standards to the Commission services for confirmation of compliance with this mandate at the latest in accordance with the timetable agreed between CEN/CENELEC and the Commission and referred to in point II.2.d).
22. CEN/CENELEC members will publish the standards transposing the harmonised European standards at the latest 6 months after a positive vote in CEN/CENELEC. National standards covering the same scope will continue to be applicable until the date agreed between CEN/CENELEC and the Commission in accordance with point II.2.d)

### **CHAPTER III. HARMONISED STANDARDS**

1. Harmonised standards shall be prepared to allow those products listed in Annexes 1 and 2 to be able to demonstrate the satisfaction of the essential requirements. One of the purposes of the Directive being to remove barriers to trade, the standards deriving from it will therefore be expressed, as far as practicable in product performance terms (art. 7.2 of the Directive), having regard to the Interpretative Documents.
2. The harmonised standard will contain :
  - A detailed scope and field of application
  - A detailed description of the product or family of products covered and the relevant intended uses of the different products;
  - The definition of the characteristics of the products listed in Annex 2 of the mandate (expressed in performance terms, as far as practicable) that are relevant to the satisfaction of the essential requirements;
  - The methods (calculation, test methods or others) or a reference to a standard containing the methods for the determination of such characteristics;
  - Guidance on the characteristics that have to be stated within the labelling that will accompany the CE marking (depending on the intended use of the product) and on the way of expressing the determined values of these characteristics;
  - The classification system and the levels for the above values of characteristics, if required by the mandate;
  - The system for attestation of conformity as required in annex 3 of the mandate and the corresponding specific provisions for the evaluation of conformity.
3. A minimum or a maximum level of a given characteristic that has to be met by the family of products or a product may be identified by the harmonised standard only if required by agreement of Member States expressed by positive vote under the procedure of article 20 .
4. As far as possible, each standard will make reference to performances common to other standards developed under mandate and which constitutes a cohesive and compatible group

of harmonised European standards developed in parallel. CEN/CENELEC shall ensure consistency within the whole package.

5. A producer not wishing to meet a non-mandated European standard will be able to use the CE marking on his product by referring only to the relevant harmonised standard. On the other hand, if a non-mandated standard includes the entire content of the harmonised standard, compliance with the former standard will also give a presumption of conformity to the harmonised standard and will enable the bearing of the CE marking.

In the latter case, an appropriate system should be established in the European standard in order to clearly distinguish the CPD-related content from the remaining part of the standard.

6. Harmonised standards must permit construction products which allow works to meet the essential requirements and which are produced and used lawfully in accordance with technical traditions warranted by local climatological and other conditions to continue to be placed on the market.
7. The essential requirements being expressed in terms of performance of the works, the characteristics of the products should be also expressed in terms of performance so that, in referring to the harmonised European standards, the regulations may "approximate" evolving in terms of "performance requirements". As far as practicable and depending on the intended use mentioned in the annexes of this mandate, the standard shall include a definition of the durability in term of performance of the declared values of the product characteristics as well as suitable methods for its evaluation against the actions listed in Annex 2. If the durability is expressed in terms of classes of periods, articles 3.2 and 6.3 of the CPD will not apply.
8. The relevant systems for attestation of conformity, according to Article 13.3 and Annex III of the Directive, are listed in annex 3. For the establishment of the corresponding specific provisions of evaluations of conformity, the harmonised standard will take into account :
  - the different intended uses of the product mentioned in the annexes of this mandate and, if any, the different levels or classes of performance;
  - cases of individual (non series) production according to Article 13.5 of the Directive;
  - the recommendations of paragraph 3 of Annex 3
9. The label accompanying the CE marking will list all the characteristics to be declared according to the declared intended uses mentioned in the annexes of this mandate. In order to take into account existing regulations on products where performance for one or more characteristics may not be required, the label should allow the manufacturer the application of the "No performance determined" case for that or those characteristics.

(Draft 4.1)

ANNEX 1

FIELD OF APPLICATION \*

**PIPES, TANKS AND ANCILLARIES**

**NOT**

**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**

LIST OF PRODUCTS INCLUDED IN THE MANDATE

TO BE USED IN:

- 18/33 DRAINAGE (including highways) AND DISPOSAL OF OTHER LIQUIDS AND GASEOUS WASTE
- 20/33 SUPPLY OF FUELS, OIL AND OTHER LIQUIDS
- 21/33 FIRE SUPPRESSION AND EXTINGUISHING SYSTEMS
- 22/33 SUPPLY OF GASES, PRESSURE AND VACUUM SYSTEMS
- 26/33 COMMUNICATIONS
- 28/33 FIRE DETECTION AND ALARM
- 32/33 SANITARY AND CLEANING FIXTURES
- 33/33 STORAGE FIXTURES

FORMS	MATERIALS	PRODUCTS FOR CONSIDERATION
Kits	As indicated below for components	<b>Kits</b> , composed of pipes, fittings, adhesives and joints, including their supports, <i>to be used for transport and/or distribution and/or disposal of:</i>  <i>- water not intended for human consumption.</i>  <i>- fuel/gas for use inside buildings and independent system of building supply.</i>
Rigid components Flexible components Malleable components	<b>Cementitious materials :</b> (eg reinforced/fibred/ unreinforced/prestressed precast concrete, epoxide, fibre cement, ...)  <b>Metallic materials :</b> (eg steel, aluminium, copper, alloys, cast/ductile/grey/ malleable cast iron, ...)  <b>Organic materials :</b> (eg plastics, polymers, elastomers, PVC, PE,...)  <b>Glassy materials :</b> (eg glass, vitrified clay, ...)  <b>Composite</b> (eg glass fibre reinforced polyester, carbon fibre reinforced epoxy resins,...)	<b>Pipes</b>

**\* this mandate does not cover the products installed in industrial processes, nor in patrol stations.**

Cont.

FORMS	MATERIALS	PRODUCTS FOR CONSIDERATION
Components	<p><b>Cementitious materials :</b> (eg reinforced/fibred/unreinforced/prestressed precast concrete, epoxide, fibre cement, ...)</p> <p><b>Metallic materials :</b> (eg coated/mild/lined/stainless steel, aluminium, copper, alloys, ductile iron, cast iron, ...)</p> <p><b>Organic materials :</b> (eg plastics, rubber, ...)</p> <p><b>Glassy materials :</b> (eg glass, vitrified clay, ...)</p> <p><b>Composite</b> (eg glass fibre reinforced polyester, carbon fibre reinforced epoxy resins,...)</p>	<p><b>Tanks</b> and systems (including free standing tanks) used in fixed installation for supply or storage, <i>Except those tanks included in Industrial Processes and in other Mandates such as Waste Water Engineering, Sanitary Appliances, CP in contact with Drinking Water, etc.</i></p>
Components	Metals Rubber Plastics Chemical compounds	<b>Fittings</b> (including waste fittings for sanitary appliances), <b>adhesives, joints, joint sealings and gaskets</b>
Components	As indicated above for pipes	<b>Ducts and conduits</b> <i>Used for protection (the work carried out by CENELEC under the LVD 73/23/Eec shall be taken into consideration).</i>
Components	Plastics Metals Precast concrete	<b>Pipe and duct supports</b> <i>For the piping kits/systems and ducts mentioned above</i>
Components	Metals Rubber Plastics Composite Cast iron	<b>Valves and taps</b> <i>Regulator safety devices All valve families (eg Gate, Stop, Isolated, Float, Process,...)</i>
Components	Steel Cast steel Aluminium alloys Plastics	<b>Safety ancillaries for gas piping kits/systems</b> <i>Eg. Electric insulation units Safety devises Pressure controllers Filters</i>

**The following Directives must be taken into consideration, when appropriate :**

- 73/23/EEC of 19 February 1973, known as “Low Voltage Directive”
- 87/404/EEC of 15 May 1987, known as “Simple Pressure Vessels”, amended by 90/488/EEC
- 89/336/EEC of 3 May 1989, known as “Electromagnetic Compatibility”
- 89/392/EEC of 14 June 1989, known as “Machinery Directive”
- 94/9/EEC of 23 March 1989, known as “Protective Systems in Explosive Atmosphere”
- 97/23/EC of 29 May 1997, known as “Directive on Pressure Equipment”
- 93/68/EEC of 17 March 1993 amending all above Directives as well as the CPD



(Draft 4.1)  
ANNEX 2  
TECHNICAL TERMS OF REFERENCE

**Note : not all of the characteristics shown in the following tables will be relevant for every product in a particular family or sub-family. CEN/CENELEC should select the subset of characteristics applicable to a particular product from the full set provided.**

**PIPES, TANKS AND ANCILLARIES**  
**NOT**  
**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**

TO BE USED IN:

18/33 DRAINAGE (including highways) AND DISPOSAL OF OTHER LIQUIDS AND GASEOUS WASTE; 20/33 SUPPLY OF FUELS, OIL AND OTHER LIQUIDS; 21/33 FIRE SUPPRESSION AND EXTINGUISHING SYSTEMS; 22/33 SUPPLY OF GASES, PRESSURE AND VACUUM SYSTEMS; 26/33 COMMUNICATIONS; 28/33 FIRE DETECTION AND ALARM; 32/33 SANITARY AND CLEANING FIXTURES; 33/33 STORAGE FIXTURES

**1. PIPING KITS/SYSTEMS**

Used for water not intended for human consumption and fuel/gas intended for building heating/cooling systems. Pressurised or unpressurised, inside or outside (both underground and above ground) buildings. Including pipes, fittings, adhesives, joints and supports (and possibly special components, controllers and safety devices for gas installations). The products for fuel/gas are those products that which will be installed between the last pressure reduction station<sup>(1)</sup> or the first isolation valve<sup>(1)</sup> (whenever outside the buildings) and/or external reservoir<sup>(1)</sup> and the inlet of heating/cooling appliances in buildings.

<sup>(1)</sup> CEN-TCs could propose, with all related justifications, other limits (wording) to the EC services.

Characteristics of the PIPING KITS/SYSTEMS to be covered by the harmonised standard will be:

E R	PERFORMANCE CHARACTERISTICS	Durability <sup>(1)</sup>
<b>1</b>		<b>Y</b>  <i>(against corrosion, freeze-thaw, abrasion, UV, variation of temperature, ... As relevant)</i>
<b>2</b>	<b>Reaction to fire</b> <b>Tightness in case of fire</b> (for gas and fuel only) *	
<b>3</b>	<b>Crushing strength</b> <b>Internal and external pressure strength</b> <b>Longitudinal bending strength</b>	
<b>+</b>	<b>Mechanical resistance of support</b>	
<b>4</b>	<b>Maximum load for admissible deformation</b> <b>Resistance to high temperature</b> (for heating networks) <b>Impact resistance</b> <b>Tightness: Gas and liquid</b> <b>Permeability</b> <b>Resistance to pull out</b> (for gas networks)** <b>Penetration resistance</b> (for gas networks)** <b>Electrostatic behaviour</b> (for fuel networks)*** <b>Effectiveness of safety devices</b> <b>Release of dangerous substances</b>	
<b>5</b>	<b>Noise level</b>	
<b>6</b>	<b>Thermal properties</b>	

\* reference is made to the "Musterbauordnung" (Model Code for Construction) # 38.1, and to the "Technische Regeln für Gas-Installationen (DVGW-TRGI 1986/1996), in Germany.

\*\* reference is made to "Gassicherheitsgesetz LGB1-8280" (Länder regulation), and "öVGW-TR Gas 1985", in Austria.

\*\*\* reference is made to "Verordnung brennbarer Flüssigkeiten" BGB1 nr 240/1991, in Austria

<sup>(1)</sup> durability against very low temperature shall be taken into consideration when needed (geographic requirements)

**2. PIPES**

Rigid or flexible or malleable tubes used for the conveyance of fuel/gas intended for building heating/cooling appliances from the last pressure reduction station or the last isolation valve (whenever outside the buildings) and/or the external reservoir<sup>(1)</sup> to the inlet of heating/cooling appliances in the buildings, and of water not intended for human consumption. For pressured or unpressured systems, inside or outside buildings, underground or above ground installations.

<sup>(1)</sup> CEN-TCs may propose, with all related justifications, other limits (wording) to the EC services.

Characteristics of the PIPES to be covered by the harmonised standard will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTICS</b>	<b>Durability<sup>(1)</sup></b>
<b>1</b>		<b>Y</b>  <i>(against internal and External corrosion, freeze-thaw abrasion, UV, ..., as relevant)</i>
<b>2</b>	<b>Reaction to fire</b>	
<b>3</b>	<b>Crushing strength</b>	
<b>+</b>	<b>Internal and external pressure strength</b>	
<b>4</b>	<b>Longitudinal bending strength</b>	
<b>4</b>	<b>Maximum load for admissible deformation</b>	
<b>4</b>	<b>Dimensional tolerances</b>	
	<b>Resistance to high temperature</b> (for heating networks)	
	<b>Impact resistance</b>	
	<b>Weldability</b> (for gas networks)*	
	<b>Penetration resistance</b> (for gas networks)*	
	<b>Electrostatic behaviour</b> (for fuel networks)**	
	<b>Tightness: Gas and liquid</b>	
	<b>Permeability</b>	
	<b>Release of dangerous substances</b>	
<b>5</b>		
<b>6</b>	<b>Thermal properties</b>	

\* reference is made to "Gassicherheitsgesetz LGB1-8280" (Länder regulation), and "öVGW-TR Gas 1985", in Austria.

\*\* reference is made to "Verordnung brennbarer Flüssigkeiten" BGB1 nr 240/1991, in Austria

<sup>(1)</sup> Resistance to very low temperature shall be taken into consideration when needed (geographic requirements)

**3. TANKS, LEAKAGE ALARM SYSTEMS and OVERFILL PREVENTION DEVICES****3A. TANKS**

Tanks used in fixed installation, underground or above ground, pressurised or not, used for storage and/or supply of fuel/gas for building heating/cooling systems, and of hot or cold water not intended for human consumption. Excluding tanks used in industrial processes and those tanks already considered under other EC Mandates to CEN/CENELEC (as defined in Annex 1).

The Directives 87/404/EEC and 97/23/EEC have to be taken into account when internal pressure exceeds 0.5 bar.

Characteristics of the TANKS to be covered by the harmonised standard, besides those already covered by other above mentioned Directives, will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability<sup>(1)</sup></b>
<b>1</b>	<b>Mechanical resistance and stability</b>	<b>Y</b>  (against internal and external corrosion, ..., when relevant)
<b>2</b>	<b>Reaction to fire</b> <b>Resistance to fire</b>	
<b>3</b> +	<b>Crushing resistance</b> <b>Internal pressure</b> <b>Load bearing capacity</b> <b>Impact resistance</b> <b>Permeability</b> <b>Resistance to high temperature</b> (for heating networks) <b>Resistance to radiation</b> (for gas networks)* <b>Electrostatic behaviour</b> (for fuel networks)**	
<b>4</b>	<b>Tightness: Gas and liquid</b> <b>Surface Temperature</b> (for hot water tank in heating system only) <b>Release of dangerous substances</b>	
<b>5</b>		
<b>6</b>	<b>Thermal insulation</b> (related to Energy conservation)	

\* reference is made to "Gassicherheitsgesetz LGB1-8280" (Länder regulation), and "öVGW-TR Gas 1985", in Austria.

\*\* reference is made to "Verordnung brennbarer Flüssigkeiten" BGB1 nr 240/1991, in Austria

<sup>(1)</sup> Resistance to very low temperature shall be taken into consideration when needed (geographic requirements)

#### Family and subfamilies

### 3B. LEAKAGE ALARM SYSTEMS and OVERFILL PREVENTION DEVICES

Leakage alarm systems and/or overfill prevention devices for tanks, pre or post installed, including mechanical and/or electrical devices.

The Directives 73/23/EEC, 89/336/EEC and 94/9/EEC shall be taken into account, when appropriate.

Characteristics of the LEAKAGE ALARM SYSTEMS AND OVERFILL PREVENTION DEVICES to be covered by the harmonised standard, besides those already covered by the above mentioned Directive, will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability</b>
<b>1</b>		<b>Y</b>
<b>2</b>		
<b>3</b> +	<b>Effectiveness of leakage alarm system and/or of overfill prevention devices</b>	
<b>4</b>		
<b>5</b>		
<b>6</b>		

#### Family and subfamilies

### 4. FITTINGS, ADHESIVES, JOINTS, JOINT SEALINGS AND GASKETS

Elements for connecting one component to another, providing tightness to the system. For rigid, flexible and/or malleable pipes, for all tanks; for pressurised or unpressurised systems inside buildings or outside buildings, underground or above ground, and for ducts. Definition of these elements must indicate material, diameter and thread step if relevant.

Characteristics of the FITTINGS, ADHESIVES, JOINTS, JOINT SEALINGS AND GASKETS to be covered by the harmonised standard will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability<sup>(1)</sup></b>
<b>1</b>		<b>Y</b>
<b>2</b>	<b>Reaction to fire</b>	
<b>3</b>	<b>Crushing strength</b>	
<b>+</b>	<b>Internal pressure</b>	
<b>4</b>	<b>Maximum load for admissible deformation</b>	
<b>+</b>	<b>Dimensional tolerances</b>	
<b>4</b>	<b>Tightness: Gas and liquid</b>	
	<b>Resistance to high temperature</b> (for heating networks)	
	<b>Impact resistance</b> (for gas networks)*	
	<b>Weldability</b> (for gas networks)*	
	<b>Penetration resistance</b> (for gas networks)*	
	<b>Electrostatic behaviour</b> (for fuel networks)**	
	<b>Release of dangerous substances</b>	
<b>5</b>		
<b>6</b>	<b>Thermal insulation</b> (related to Energy conservation)	

\* reference is made to "Gassicherheitsgesetz LGB1-8280" (Länder regulation), and "öVGW-TR Gas 1985", in Austria.

\*\* reference is made to "Verordnung brennbarer Flüssigkeiten" BGB1 nr 240/1991, in Austria

<sup>(1)</sup> Resistance to very low temperature shall be taken into consideration when needed (geographic requirements)

#### Family and subfamilies

### 5. DUCTS\* and CONDUITS\*

Conduits, ducts or tubes used for the protection of cables, data and telecommunication lines, alarm systems, ...,

**\* the work carried out by CENELEC under the Low Voltage Directive 73/23/EEC shall be taken into consideration.**

Characteristics of the DUCTS and CONDUITS to be covered by the harmonised standard will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTICS</b>	<b>Durability</b>
<b>1</b>		<b>Y</b>
<b>2</b>	<b>Reaction to fire</b>	
	<b>Resistance to fire</b>	
<b>3</b>	<b>Release of dangerous substances</b>	
<b>4</b>		
<b>5</b>		
<b>6</b>		

#### Family and subfamilies

### 6. PIPE and DUCT SUPPORTS

Elements to support pipes, conduits and ducts (anchors not included).

Characteristics of the PIPE and DUCT SUPPORTS to be covered by the harmonised standard will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability</b>
<b>1</b>		<b>Y</b>
<b>2</b>	<b>Resistance to fire</b>	
<b>3 +4</b>	<b>Mechanical strength</b>	
<b>5</b>		
<b>6</b>		



**7. VALVES AND TAPS**

Device of the nature of a flap, lid, plug, etc., applied to a pipe and/or a tank to control or to release the passage of water not intended for human consumption and of gas/fuel intended for heating/cooling of the buildings. Definition of the valve/tap must indicate material, diameter and thread step if relevant

Characteristics of the VALVES AND TAPS to be covered by the harmonised standard will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability<sup>(1)</sup></b>
<b>1</b>		<b>Y</b>
<b>2</b>	<b>Reaction to fire</b>	
<b>3</b>	<b>Dimensional tolerances</b>	
<b>+</b>	<b>Internal pressure</b>	
<b>4</b>	<b>Tightness: Gas and liquid</b>	
<b>4</b>	<b>Effectiveness</b> <b>Resistance to high temperature</b> (for heating networks) <b>Mechanical strength</b> (for gas networks)* <b>Safeguard against overloading of handle</b> (for gas networks)* <b>Release of dangerous substances</b>	
<b>5</b>	<b>Noise level</b>	
<b>6</b>		

\* reference is made to "Gassicherheitsgesetz LGB1-8280" (Länder regulation), and "öVGW-TR Gas 1985", in Austria.

<sup>(1)</sup> Resistance to very low temperature shall be taken into consideration when needed (geographic requirements)

**8. SAFETY ANCILLARIES FOR GAS PIPING KITS/SYSTEMS**

Devices for safety in gas piping/tanking installations. The following are under consideration: a) Electric insulation units; b) Safety devices; c) Pressure controllers; and d) Filters

The Directive 73/23/EEC, 89/336/EEC and 94/9 shall be taken into consideration when relevant.

Characteristics of the SAFETY ANCILLARIES FOR GAS PIPING KITS/SYSTEMS to be covered by the harmonised standard, besides those already covered by the above mentioned Directive, will be:

<b>E R</b>	<b>PERFORMANCE CHARACTERISTIC</b>	<b>Durability<sup>(1)</sup></b>
<b>1</b>		<b>Y</b>
<b>2</b>		
<b>3</b>	<b>Tolerance in dimensions</b>	
<b>+</b>	<b>Mechanical strength</b>	
<b>4</b>	<b>Internal pressure</b>	
<b>4</b>	<b>Tightness/Pressure loss</b> <b>Control performance</b> <b>Response performance</b>	
<b>5</b>	<b>Noise level</b>	
<b>6</b>		

<sup>(1)</sup> Resistance to very low temperature shall be taken into consideration when needed (geographic requirements)

## ANNEX 3

## ATTESTATION OF CONFORMITY

**Note:** for products having more than one of the intended uses specified in the following families, the tasks for the approved body, derived from the relevant systems of attestation of conformity, are cumulative.

**Product family:**  
**PIPES, TANKS AND ANCILLARIES**  
**NOT**  
**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**  
**(1/5)**

**1. Levels and classes for product performances**

- 1.1 For the time being, the differences specified in Article 3.2 of the CPD do not seem to give rise to the need of a classification system for products for other characteristics than **reaction to fire** and **fire resistance**.
- 1.2 Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

**2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

Product(s)	Intended use(s)	Level(s) Or class(es)	Attestation of conformity system(s)
<b>-Piping kits</b> <b>-Pipes</b> <b>-Tanks</b> <b>-Leakage alarm systems and overfill prevention devices</b> <b>-Fittings, adhesives, joints, joint sealings and gaskets</b> <b>-Ducts and conduits for protection</b> (except those covered by the LVD) <b>-Pipe/duct supports</b> <b>-Valves and taps</b> <b>-Safety ancillaries</b>	in installations for the transport/distribution/storage of gas/fuel intended for the supply of building heating/cooling systems, from the external storage reservoir or the last pressure reduction unit of the network to the inlet of the boiler/heater/cooler system(s) of the building(s).	—	<b>3</b>
System 3: See CPD Annex III.2 (ii), Second possibility			



**3. Conditions to be applied by CEN on the specifications of the attestation of conformity system**

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under system 3, regarding the initial type testing of the product (to be required by the manufacturer in case of system 3)[see Annex III.1.a of the CPD], the task for the approved laboratory will be limited to the assessment of the following characteristics:

**- All characteristics except those, if relevant, requested in following tables 3/5, 4/5 and 5/5.**

<p style="text-align: center;"><b>Product family:</b> <b>PIPES, TANKS AND ANCILLARIES</b> <b><u>NOT</u></b> <b>IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION</b> <b>(2/5)</b></p>
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**1. Levels and classes for product performances**

1.1 For the time being, the differences specified in Article 3.2 of the CPD do not seem to give rise to the need of a classification system for products for other characteristics than **reaction to fire** and **fire resistance**.

1.2 Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

**2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s):

Product(s)	Intended use(s)	Level(s) or class(es)	Attestation of conformity system(s)
<b>-Piping kits</b> <b>-Pipes</b> <b>-Tanks</b> <b>-Leakage alarm systems and overfill prevention devices</b> <b>-Fittings, adhesives, joints, joint sealings and gaskets</b> <b>-Ducts and conduits for protection</b> (except those covered by the LVD) <b>-Pipe/duct supports</b> <b>-Valves and taps</b> <b>-Safety ancillaries</b>	in installations for the transport/disposal/storage of water not intended for human consumption	—	4
System 4: See CPD Annex III.2 (ii), Third possibility			

### 3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under system 4, the declaration will concern the following characteristics:

- All characteristics except those, if relevant, requested in following tables 3/5, 4/5 and 5/5.

**Product family:**  
**PIPES, TANKS AND ANCILLARIES**  
**NOT**  
**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**  
**(3/5)**

### 1. Levels and classes for product performances

1.1 According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **Resistance to fire**. CEN/CENELEC is requested to make reference to the standard(s) to be prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of resistance to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.

1.2 Reaction to fire and resistance to fire are risks for which the need for a classification has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will

request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

## 2. Systems of attestation of conformity

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

Product(s)	Intended use(s)	Level(s) or class(es) ( <i>Fire resistance</i> )	Attestation of conformity system(s)
<b>-Tanks -Ducts and conduits for protection</b> (except those covered by the LVD)	in installations in areas subject to resistance to fire regulations, used for the transport/distribution/storage of gas/fuel intended for the supply of building heating/cooling systems, from the external storage reservoir or the last pressure reduction unit of the network to the inlet of the heating/cooling system(s) of the building(s).	Any	<b>1</b>
System 1 : See CPD Annex III.2.(I), without audit-testing of samples			

## 3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under system 1, regarding the initial type testing of the product [see Annex III.1.a of the CPD], the task for the approved laboratory will be limited to the assessment of the following characteristics:

**- Resistance to fire**

3.3 For products under system 1, for the continuous surveillance, assessment and approval of the factory production control [see Annex III.1.g of the CPD], only parameters related to the following characteristic shall be of interest of the approved body:

**- Resistance to fire**

3.4 For products under system 1, for the initial inspection of the factory production control [see Annex III.1.f of the CPD], only parameters related to the following characteristic shall be of interest of the approved body:

**- Resistance to fire**

**Product family:  
PIPES, TANKS AND ANCILLARIES**

**NOT  
IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION  
(4/5)**

**1. Levels and classes for product performances**

- 1.1 According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **Reaction to fire**. CEN/CENELEC is requested to make reference to the standard(s) to be prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.
- 1.2 Reaction to fire is one performance characteristic for which the need for a classification system for products has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

**2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

Product(s)	Intended use(s)	Level(s) or class(es) <i>(Reaction to fire)</i>	Attestation of conformity system(s)
<b>-Piping kits</b> <b>-Pipes</b> <b>-Tanks</b> <b>-Leakage alarm systems and overflow prevention devices</b> <b>-Fittings, adhesives, joints, joint sealings and gaskets</b> <b>-Ducts and conduits for protection</b> (except those covered by the LVD) <b>-Pipe/duct supports</b> <b>-Valves and taps</b> <b>-Safety ancillaries</b>	in installations in areas subject to reaction to fire regulations, used for the transport/distribution/storage of gas/fuel intended for the supply of building heating/cooling systems, from the external storage reservoir or the last pressure reduction unit of the network to the inlet of the boiler/heater/cooler system(s) of the building(s),	any	1
	in installations in areas subject to reaction to fire regulations, used for the transport/disposal/storage of water not intended for human consumption.	A*,B*,C*	1
		A**,B**,C**	3
		A***,D,E,F	4
System 1: See CPD Annex III.2.(I), without audit-testing of samples System 3: See CPD Annex III.2 (ii), Second possibility System 4: See CPD Annex III.2 (ii), Third possibility			

- (\*) Materials for which the reaction to fire performance is susceptible to change during the production process  
 (\*\*) Materials for which the reaction to fire performance is not susceptible to change during the production process  
 (\*\*\*) Materials of class A that according to the Decision 96/603/EC do not require to be tested for reaction to fire

### 3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under system 1 and 3, regarding the initial type testing of the product (to be requested by the manufacturer in case of system 3)[see Annex III.1.a of the CPD], the task for the approved laboratory will be limited to the assessment of the following characteristics:

- **Euroclass characteristics for reaction to fire**, as indicated in the Commission Decision 94/611/EEC

3.3 For products under system 1, for the continuous surveillance, assessment and approval of the factory production control [see Annex III.1.g of the CPD], only parameters related to the following characteristic shall be of interest of the approved body:

- **Euroclass characteristics for reaction to fire**, as indicated in the Commission Decision 94/611/EEC

3.4 For products under system 1, for the initial inspection of the factory production control [see Annex III.1.f of the CPD], only parameters related to the following characteristic shall be of interest of the approved body:

- **Euroclass characteristics for reaction to fire**, as indicated in the Commission Decision 94/611/EEC

**Product family:**  
**PIPES, TANKS AND ANCILLARIES**  
**NOT**  
**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**  
**(5/5)**

#### 1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3.2 of the CPD do not seem to give rise to the need of a classification system for products for other characteristics than **reaction to fire** and **fire resistance**.

1.2 Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

#### 2. Systems of attestation of conformity

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s):

Product(s)	Intended use(s)	Level(s) or class(es)	Attestation of conformity system(s)
-Piping kits -Pipes -Tanks -Fittings, adhesives, joints, joint sealings and gaskets -Valves and taps	in installations subject to regulation on Energy conservation, used for the transport/disposal/storage of water not intended for human consumption, and for heating systems.	—	3
System 3: See CPD Annex III.2 (ii), Second possibility			

### 3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

- 3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.
- 3.2 For products under system 3, regarding the initial type testing of the product (to be required by the manufacturer in case of system 3)[*see Annex III.1.a of the CPD*], the task for the approved laboratory will be limited to the assessment of the following characteristics:
- **Thermal insulation.**
  - **Resistance to high temperature** (for heating networks)

(Draft 4.1)

ANNEX 4

DANGEROUS SUBSTANCES

**PIPES, TANKS AND ANCILLARIES**

**NOT**

**IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION**

European technical specifications must be adopted taking into account necessary legislation on substances classified as dangerous.

This results from the Interpretative Documents, where it is noted, in the introduction note to all six of them, that:

*"Concerning dangerous substances which are in construction products, classes and/or levels of performance to which technical specifications will refer, shall allow the levels of protection needed by the works to be guaranteed, taking into account the purpose of the works."*

In addition, outside the scope of the Directive, writers of technical specifications must take into account legislation which affects materials to be used for construction products and which are regulated for reasons not related to the incorporation of the construction products into the works.

In order to permit technical specifications writers to take into account the necessary legislation, a working document was elaborated by the Commission services (doc. CONSTRUCT 95/148 Rev. 1, of January 4, 1996). Specification writers should use this document as a guide but must also take account of any other relevant or dangerous substances which the working document does not yet include.