

Brussels, 13 October 2009

JBCE Position on the COM (2008) 809 Recast Proposal for a Directive on the Restriction of the Use of Certain Hazardous Substances (RoHS)

Our positions and proposals

- I. For General issues
 1. Exemption mechanism
 2. Conformity Assessment
- II. For Categories 8 and 9
 1. Exemption issue: we propose to change the text of Article 4.6 and ANNEX VI.
 2. Definition of the industrial monitoring and control instruments: we propose to change the text of Article 3(p) and ANNEX II for Category 9.
- III. For Air Conditioners Appliances
 1. RoHS scope: clarification is needed.
 2. The obligation of the importers to indicate its name and address on the EEE: reinterpretation is suggested.

I. General issues

1. Exemption mechanism

The following context is the same as the JOINT POSITION FROM DIGITALEUROPE, TECHAMERICA EUROPE AND JAPAN BUSINESS COUNCIL IN EUROPE (JBCE) on 24 August 2009.

24 August 2009

**PROPOSAL FOR A DIRECTIVE ON THE RESTRICTION OF THE USE
OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND
ELECTRONIC EQUIPMENT (ROHS) (RECAST) ¹**

COM (2008) 809 FINAL

***JOINT POSITION FROM DIGITALEUROPE, TECHAMERICA EUROPE AND
JAPAN BUSINESS COUNCIL IN EUROPE (JBCE)***

1- EXECUTIVE SUMMARY

- DIGITALEUROPE, TechAmerica Europe and JBCE strongly support the main underlying goals of the Commission's proposed revisions to the RoHS exemptions mechanism. In particular, we welcome the proposed expansion of the RoHS Exemptions criteria to allow for socio-economic aspects to be taken into account. We also support the Commission's proposal to harmonize the format for exemption requests;

- However, we express concern regarding some of the key proposals put forward, and believe the current text can be improved with a view to achieving the stated goals.
 - Member companies have been working with the existing exemptions mechanism for a number of years. Based on extensive experience with the process for handling exemptions under the existing Directive, we support exemptions to be reviewed and assessed periodically on a case-by-case basis. What has become critical for our global industry and its complex supply chain is to have better legal certainty, especially when an exemption is withdrawn, and a more timely and transparent decision-making process.

- At present, it is very difficult to predict how the proposed exemptions mechanism will operate in practice. If finally adopted, some provisions would exacerbate the legal

¹ This paper does not cover first periodical review of the existing RoHS Directive 2002/95/EC Annex

uncertainty which the proposal seeks to alleviate. There is also excessive procedural detail regarding many important items to be decided at a later stage;

- Although exemptions can be renewed, we understand that the proposed 4-year maximum validity limit could become the general rule. We are fully in favour of review periods to confirm the continued need of exemptions. However, until scientific evidence proves feasible substitute technologies have been invented and designed to work in manufacturing environments, no final sunset timelines should be fixed. The maximum validity limit and blanket timeframes for applications for renewals also raise significant legal uncertainty, and ignore the reality of specific investment and product cycles;
- In order to ensure greater legal security and predictability, we are proposing to define and introduce in the legal text a transparent procedure backed up by clear deadlines for all applications for renewals and decisions to either renew or delete exemptions. The assessment of exemptions and associated deadlines must be undertaken and defined on a case-by-case basis. All newly granted exemptions should at least be subject to a time-limited review process to be defined on a case-by-case basis taking into account all final RoHS exemptions criteria. The decision-making process should be carried out in a timely manner;
- All legal instruments (Commission Decisions) dealing with RoHS exemptions should specify (and amend the Directive so as to introduce) transitional arrangements to be defined on a case-by-case basis taking into account all final RoHS Exemptions criteria. We propose that during the lifetime of an exemption three sets of transitional arrangements are specified (“the review date(s)”, “the latest application date(s)” and finally “the sunset date”), and, where relevant, gradually evolve/be updated by the different Decisions affecting each exemption (all based on a case-by-case approach and the final RoHS Exemptions criteria);
- Applying concepts expressed in general and ambiguous terms, such as “in due time,” rather than helping to remove the legal ambiguities tends to exacerbate them. Industry needs legal certainty that a Decision on any application for renewal will be taken before an exemption reaches a potential expiry date. If applications are received by the deadline given, the exemptions concerned should remain valid until a decision is taken;

Once an exemption has been deleted, a minimum transition period of 18 months should be introduced so that manufacturers and their supply chains can make the switch to the substitute technology/application. Premature withdrawal of exemptions can have severe implications for Industry, customers, consumers and the society as a whole;

2- PROCEDURE AND CRITERIA FOR GRANTING EXEMPTIONS

DIGITALEUROPE, TechAmerica Europe and JBCE strongly support the main underlying goals of the Commission's proposals, namely reducing the administrative burden for both authorities and the applicants, speeding up the process and further increasing its transparency and legal certainty.

Our member companies have been working with the existing exemptions mechanism for a number of years. Based on extensive experience with the process for handling exemptions under the existing Directive, we support exemptions to be reviewed and assessed periodically on a case-by-case basis. What has become critical for our global industry and its complex supply chain is to have better legal certainty, especially when an exemption is withdrawn, and a more timely and transparent decision-making process.

In particular, we welcome the proposed expansion of the current RoHS Article 5(1)(b) and c) criteria for determining whether the restricted substances should be permitted in any particular specific applications to allow for socio-economic aspects to be taken into account. As long advocated by industry and described in the Commission's Impact Assessment, preparatory studies and extensive Industry contributions during the consultation process, business/commercial realities of manufacturers and potential associated impacts on customers, consumers and the society as a whole are currently under-represented in the RoHS exemptions mechanism. They should become an integral part of and be considered by decision-makers during the assessment process, so as to avoid adverse socio-economic impacts which might outweigh the environmental, health or consumer safety benefits caused by substitution. Each of the three pillars of the EU's Impact Assessment model (environmental, economic and social) must become an inherent part of the RoHS exemptions review process. By looking into detail at all environmental, economic and social impacts, the current mechanism will better align with the goals of Better Regulation, and its underlying Lisbon and Sustainable Development strategies. We also support the Commission's proposal to harmonize the format for exemptions' requests;

However, some of the main ideas put forward in the Proposal give us cause for concern, and believe the current text can be improved in a number of ways with a view to achieving the stated goals. At present, it is very difficult to predict how the exemptions mechanism will operate in practice. If finally adopted, some provisions would exacerbate the legal uncertainty which the proposal seeks to alleviate. There is also excessive procedural detail regarding many important items to be decided at a later stage through the Comitology procedure.

The paragraphs below provide an overview of perceived shortcomings and proposed changes:

- We feel it is important that the potential impacts of substitution on competition should be adequately addressed. Patents for substitute technologies should be freely available in the marketplace at reasonable cost, so as to avoid discrimination when an exemption is withdrawn, and guarantee the swiftest possible environmental solution. In addition, safety critical applications of products used in applications outside the scope of RoHS must be considered as their safety is directly impacted by exemption decisions relating to the Directive;
- The Commission has proposed a significant change to the current mechanism by introducing a 4-year maximum validity period for exemptions. Although exemptions can be renewed, there are indications that the 4-year maximum validity limit will be the general rule. We are fully in favour of review periods to confirm the continued need of exemptions for specific applications. However, until scientific evidence proves feasible substitute technologies have been invented and designed to work in manufacturing environments, no final sunset timelines should be fixed. The 4-year maximum validity limit and specified blanket timeframes for applications for renewals also raise significant legal uncertainties, and ignore the reality of specific investment and product cycles, thus creating an uncertain environment for product manufacturers owing to the risk that an exemption may be withdrawn;
- In order to ensure greater legal security and predictability, we are proposing to define and introduce in the legal text a transparent procedure backed up by clear deadlines for applications for renewals and decisions to either renew or delete exemptions to be defined on a case-by-case basis. The assessment of exemptions and associated deadlines must be undertaken and defined on a case-by-case basis. All newly granted exemptions should at least be subject to a time-limited review process to be defined on a case-by-case basis taking into account all final conditions set out in Article 5(1)(b). The decision-making process should be carried out in a timely manner:
 - All legal instruments (Commission Decisions) dealing with RoHS exemptions should specify (and amend the Directive so as to introduce) transitional arrangements to be defined on a case-by-case basis taking into account all final conditions set out in Article 5(1)(b). We propose that during the lifetime of an exemption three sets of transitional arrangements are specified and, where relevant, gradually evolve/be updated by the different Decisions affecting (renewing) each exemption (all based on a case-by-case approach and the final Article 5(1)(b) criteria):

1. The review date(s): always defined (and included in the relevant Annexes to the Directive) the first time an exemption is granted, and, where relevant, subsequently amended/updated every time it is renewed following a time-limited review process;
 2. The latest application date(s): always defined (and included in the relevant Annexes to the Directive) the first time an exemption is granted and, where relevant, subsequently amended/updated every time it is renewed;
 3. The sunset date: defined and included in the relevant Annexes to the Directive once a final Decision is taken to delete an exemption.
- All Commission Decisions “including” exemptions (i.e. giving new exemptions or renewing already existing ones; Measures/Decisions adopted in accordance with the amended Article 5(1)(b)) should specify transitional arrangements (and amend the Directive so as to introduce) indicating:
 1. The date(s) at which they will reviewed - or deleted (if a request for renewal is not submitted within the specified timeframes) - (“the review date(s)”), which should be established taking into account all final conditions set out in Article 5(1)(b); and
 2. A date(s) before the review date(s) by which applications must be received if the applicant wishes to renew and continue to rely on the exemption(s) after the review date(s) (“the latest application date(s)").

The Commission should acknowledge receipt of each application for renewing exemptions, and the date of such application (which should correspond to the date of receipt of the application at the Commission) should be communicated by the Commission to the applicant. The above will give certainty to applicants and to authorities in planning the work necessary to process applications;

- The Commission’s proposal new Article 5(2) states that it “shall decide in due time” on any application for renewal that is submitted within the specified timeframes. Applying concepts expressed in general and ambiguous terms, such as “in due time,” rather than helping to remove the legal ambiguities tends to exacerbate them. Industry needs legal certainty that a decision on any application for renewal will be taken before an exemption reaches a potential expiry date, thus avoiding the situation/legal vacuum where an exemption reaches such date but a decision to either renew or delete the exemption has not been taken. All

newly granted and renewed exemptions should therefore always remain valid after the specified review date until a decision on the application for renewal is taken, provided an application was made to the Commission by the latest application date(s) at the very latest. If applications are received by the deadline given, the exemptions concerned should remain valid until a decision is taken even if this is after the review date. This should ensure that exemptions do not become invalid by default if the authorities have not taken a decision;

- Once it is established that all the final conditions set out in Article 5(1)(b) no longer apply for a particular exemption (of part of it), the Commission should adopt a Decision to (either totally or partially) “delete” it (Measures/Decisions adopted in accordance with the newly proposed Article 5(1)(c)). The Decision should specify the date at which the exemption will be finally deleted (“the sunset date(s)”). Once an exemption has been deleted a minimum transition period of 18 months should be introduced to allow for lead times for changing manufacturing cycles, product re-designs and necessary changes in the supply chain. Premature withdrawal of exemptions can have severe implications for Industry, customers, consumers and the society as a whole. The withdrawal of an exemption generally results in significant technical and structural changes for every company’s supply chain and manufacturing process. In particular cases, without allowing a reasonable transition time, industry would be forced to adopt abrupt and, possibly, drastic measures in order to ensure continued compliance. This situation may result in negative effects to society.
- In order to ensure all required legal adaptations to the newly proposed mechanism above/below, the Commission should adopt (in a timely manner) a Decision, through the comitology procedure, to update the current RoHS Annex (as amended by the forthcoming overall revision of existing exemptions) and include all applicable review, latest application and sunset dates of all existing exemptions.

3- PROPOSED AMENDMENTS

<p>Proposed Recast RoHS Directive (COM(2008) 809 final)</p>	<p>DIGITALEUROPE, TechAmerica Europe and JBCE Proposed Amendments</p>
<p>Recital 14 NEW</p> <p>Exemptions from the prohibition for certain specific materials or components should be limited in their scope, in order to achieve a gradual phase-out of hazardous substances in electrical and electronic equipment, given that the use of those substances in such applications should become avoidable.</p> <p>Article 5 Adaptation of the Annexes to scientific and technical progress</p> <p>1. The Commission shall, for the purposes of adapting the annexes to scientific and technical progress, adopt the following measures:</p> <p>(a) any necessary amendments to Annex II</p> <p>(b) Include materials and components of EEE in Annexes V and VI where either of the following conditions is fulfilled:</p> <ul style="list-style-type: none"> - their elimination or substitution via 	<p>Recital 14 NEW</p> <p>Exemptions from the prohibition for certain specific materials or components should be limited in their scope, and be subject to time-limited reviews whose periods and duration would be determined on a case-by-case basis, in order to achieve a gradual phase-out of hazardous substances in electrical and electronic equipment, given that the use of those substances in such applications should become avoidable.</p> <p>Article 5 Adaptation of the Annexes to scientific and technical progress</p> <p>1. The Commission shall, for the purposes of adapting the annexes to scientific and technical progress, adopt the following measures:</p> <p>(a) any necessary amendments to Annex II</p> <p>(b) Include materials and components of EEE in Annexes V and VI where one of the following conditions is fulfilled:</p> <ul style="list-style-type: none"> - their elimination or substitution via

<p>design changes or materials and components which do not require any of the materials or substances referred to in Article 4(1) is scientifically or technically impracticable;</p> <ul style="list-style-type: none"> - the availability and reliability of substitutes is not ensured, - the negative environmental health consumer safety or socio-economic impacts caused by substitution are likely to outweigh the environmental, health or consumer safety and/or socio-economic benefits thereof; <p>(c) delete materials and components of EEE from Annexes V and VI where the conditions set out in point (b) are no longer fulfilled.</p> <p>Those measures designed to amend non essential elements of this directive shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(2).</p> <p>2. Measures adopted in accordance with point b of paragraph 1 shall have a maximum validity period of four years and may be renewed. The Commission shall decide in due time on any application for renewal that is submitted no later than 18 months before an exemption expires.</p> <p>3. Before Annexes are amended, the Commission shall inter alia consult producers of electrical and electronic equipment, recyclers, treatment operators, environmental organisations and employee and consumer associations.</p>	<p>design changes or materials and components which do not require any of the materials or substances referred to in Article 4(1) is scientifically or technically impracticable;</p> <ul style="list-style-type: none"> - the availability and reliability of substitutes is not ensured, - the negative environmental health consumer safety or socio-economic impacts caused by substitution are likely to outweigh the environmental, health or consumer safety and/or socio-economic benefits hereof; <ul style="list-style-type: none"> - the substitution would have a negative impact on competition due to a limited availability of substitutes, intellectual property restrictions on substitutes, or otherwise as determined by the Commission. <p>(c) delete materials and components of EEE from Annexes V and VI where the conditions set out in point (b) are no longer fulfilled</p> <p>Those measures designed to amend non essential elements of this directive shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(2).</p> <p>2. Measures adopted in accordance with point b of paragraph 1 may be renewed on a case-by-case basis and shall be valid until the Commission decides to either renew or delete the exemption in the context of a time-limited review, provided</p>
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4. As long as materials or components are included in Annexes V and VI to this Directive, on the basis of Article 5(1)(b) of this Directive, those applications shall also be considered exempted from the authorisation requirements set out in Article 58(2) of the regulation (EC) No 1907/2006.

an application for renewal is submitted within the specified timeframes. Where relevant, measures adopted in accordance with point c of paragraph 1 shall maintain the effects of the deleted materials and components of EEE in Annexes V and VI for a strictly necessary adaptation period to be decided on a case-by case basis. A decision in accordance with point c of paragraph 1 will be required where a decision not to renew an exemption is made following an application for renewal.

(a) Whenever a decision is taken to include materials and components of EEE in Annexes V and VI it shall specify:

- the specific materials and components of EEE to be included in Annexes V and VI;**
- if applicable, the amendment(s) to numberings in Annexes V and VI;**
- transitional arrangements:**
 - the date or dates at which the exemption(s) will either be renewed or deleted (hereinafter referred to as "the review date(s)"), which should be established taking into account all conditions set out in point b of paragraph 1;**
 - a date(s) before the review date(s) by which applications for renewal must be received if the applicant wishes to renew and continue to rely on the exemption after the review date(s) (hereinafter referred to as "the latest application date(s)"); materials and components of EEE in Annexes V and VI shall remain exempted from the requirements set out in Article 4(1) after the review date(s) until a**

decision on the application for renewal is taken, provided an application was made at least by the latest application date(s). Exemptions will be deleted from Annexes V and VI by the review date provided the latest application date has been reached and an application for renewal has not been made.

The Commission shall acknowledge receipt of each application for exemptions. The Commission shall assign a number to the application, which is to be used for all correspondence regarding the application until the review is deemed to be complete, and an application date, which shall be the date of receipt of the application at the Commission, and shall forthwith communicate that number and date to the applicant. Applications to include materials and components of EEE in Annexes V and VI shall contain the information defined in accordance with Article 6 following the regulatory procedure with scrutiny referred to in Article 18(2).

(b) Whenever a decision is taken to delete materials and components of EEE from Annexes V and VI it shall specify for each exemption:

- the materials and components of EEE to be deleted from the Annexes V and VI and/or, where measures have the effect of limiting the scope of an existing exemption(s), the required amendments to materials and components of EEE in Annexes V and VI;

– if applicable, the amendments to numberings in Annexes V and VI;

– transitional arrangements:

– the date(s) at which materials and components of EEE in Annexes V and VI will be deleted (the sunset date(s)) which, where relevant, shall guarantee a minimum transition period of 18 months for the appropriate qualification of substitutes with the requirements set out in Article 4(1) and the supply chains to orderly phase out the deleted materials and components of EEE; it shall be ensured that neither of the conditions set out in point b of paragraph 1 is still fulfilled.

3. Before Annexes are amended, the Commission shall inter alia consult producers of electrical and electronic equipment, recyclers, treatment operators, environmental organisations and employee and consumer associations.

4. As long as materials or components are included in Annexes V and VI to this Directive, on the basis of Article 5(1)(b) of this Directive, those applications shall also be considered exempted from the authorisation requirements set out in Article 58(2) of the regulation (EC) No 1907/2006.

Article 6

Implementing measures

The Commission shall adopt detailed rules for:

- applications for the exemption including a format and types of information to be provided when introducing those applications, including analysis of the alternatives and, if suitable alternatives are available, substitution plans as referred to in Regulation (EC) 1907/2006.
- Complying with the maximum concentration values of Article (4) (2)
- The implementation of Article 5(2), taking into account the need for legal certainty for economic operators pending a Commission Decision on renewal of exemptions.

Those measures designed to amend non essential elements of this directive shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(2)

Article 6

Implementing measures

The Commission shall adopt detailed rules for:

- applications for the exemption including a format and types of information to be provided when introducing those applications, including analysis of the alternatives and, if suitable alternatives are available, substitution plans as referred to in Regulation (EC) 1907/2006.
- Complying with the maximum concentration values of Article (4) (2)
- The implementation of Article 5(2), taking into account the need for legal certainty for economic operators **regarding review, latest application and sunset dates** of exemptions.

Those measures designed to amend non essential elements of this directive shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(2)

I. Indicative Structure for New RoHS Exemptions Annexes

No	Title	Review date	Latest application date	Sunset date
Exemption number	Description of Exemption	<p>Always defined (and included in the relevant Annexes) the first time an exemption is granted, and, where relevant, subsequently amended/updated every time it is renewed following a time-limited review process</p> <p>Measures/Decisions adopted in accordance with Article 5(1)(b)</p>	<p>Always defined (and included in the relevant Annexes) the first time an exemption is granted, and, where relevant, subsequently amended/updated every time it is renewed;</p> <p>Measures/Decisions adopted in accordance with Article 5(1)(b)</p>	<p>Defined and included in the relevant Annexes once a final Decision is taken to delete an exemption.</p> <p>The exemption will be deleted from the Annexes as of this date (where relevant, the date should guarantee sufficient transition time)</p> <p>Measures/Decisions adopted in accordance with Article 5(1)(c)</p>

DIGITALEUROPE, the organisation formerly known as EICTA, is the voice of the European digital technology industry, which includes large and small companies in the Information and Communications Technology and Consumer Electronics Industry sectors. It is composed of 61 major multinational companies and 40 national associations from 28 European countries. In all, DIGITALEUROPE represents more than 10,000 companies all over Europe with more than 2 million employees and over EUR 1,000 billion in revenues.

The Japan Business Council in Europe was established in 1999 as the representative organisation of Japanese companies operating in the European Union. Our membership consists of more than 60 leading multinational corporations that are active across a wide range of sectors, including electronics, automotive, and chemical manufacturing. The key goal of JBCE is to contribute to EU public policy in a positive and constructive way. In doing this, we can draw upon the expertise and experience of our member companies.

TechAmerica Europe (formerly AeA Europe) represents leading European high-tech operations with US parentage. Collectively we invest Euro 100 bn in Europe and employ approximately 500,000 Europeans. Our parent company, the TechAmerica (formerly AeA and ITAA), is the oldest and largest association in the US.

2. Conformity Assessment

Note) The following context is the same as the DigitalEurope..

2-1: ISSUE: CONFORMITY ASSESSMENT

The Commission proposal for a recast of directive 2002/95/EC aims at – among other things – aligning it with the principles (“New Approach”) upon which most other harmonizing product-related directives are based in the electro-technical sector. These principles have recently been revised, and published as the “New Legislative Framework” (NLF):

- Decision 768/2008/EC on a common framework for the marketing of products
- Regulation 765/2008/EC on accreditation and market surveillance
- Regulation 764/2008/EC on mutual recognition in the non-harmonized area

We would like to point out some specific issues with RoHS in comparison with other product regulations, and give some comments on how the NLF has been implemented in the Commission’s Recast proposal.

- Manufacturers use documentation to demonstrate conformity/compliance with the existing RoHS Directive and not tests and measurements as called for in Article 16 of the Recast proposal. This is in accordance with the Guidance Document that has been developed through Member State discussions within the "EU RoHS Enforcement Authorities Informal Network". (V1 - May 2006), which is used by national authorities across the EU.
- Such documentation may include test and measurement results obtained further up in the supply chain, i.e. materials and components suppliers.
- Article 7(2) of the Recast proposal refers to Module A “Internal production control” of Annex II to Decision No 768/2008/EC. Whilst we support the principle of using Module A “Internal production control”, in order to reflect the two points above, we believe that the 6th bullet “(- test reports)” listed under Technical Documentation in Module A should be changed to read:” — documents showing controls on sourcing and supply chain processes, or test reports.”
- In line with the compliance level under the existing RoHS Directive, as well as the Recast proposal, the assessment, test or measurement is based on the homogeneous material, and not complete products (as required in Article 16 of the

Recast proposal).

- Several aspects seem to be missing - in particular much of Chapter R5 "Safeguard procedures" which addresses MS actions with regard to non-compliant products.
- In relation to enforcement, it is important that steps are taken that are commensurate with the nature and the level of the risk. RoHS was designed to address risks arising from end of life equipment and so enforcement should be based on a risk assessment in that context. References to protecting consumers are inappropriate because pre-RoHS products did not present risks to consumers.
- The implementation is inconsistent - in some cases RoHS has copied and pasted the NLF, in others it has referenced it. The latter then causes problems as information is duplicated, and this gives the opportunity for future conflict.

We urge the EU Commission to ensure that the implementation of the NLF into the RoHS recast takes into account the specifics of RoHS. Specifically we call on the EU Commission to replace Article 16, paragraph 2 with the following text:

“Materials, components, and electrical and electronic equipment on which have been assessed in accordance with harmonised standards the references of which have been published in the Official Journal of the European Union, shall be presumed to comply with all the relevant requirements of this Directive to which such standards relate.”

Other proposed amendments are found below.

2-2: PROPOSED AMENDMENTS

RoHS Article	Comment/Proposed Change
<p>Article 3 : Definitions</p> <p>(g) “harmonised standard” means a standard adopted by one of the European standardisation bodies listed in Annex I to Directive 98/34/EC on the basis of a request made by the Commission in accordance with Article 6 of Directive 98/34/EC;</p>	<p>This text is consistent with the NLF (768/2008/EC) and indicates that the Commission will issue a standardisation mandate to CEN/CENELEC/ETSI for the development of harmonised standards under RoHS.</p> <p>Such a mandate does not exist today. It is likely to take the form of a “mandate for the development and adoption of European standards” and the content of this mandate is important – it should not be restricted to just standards for testing (e.g. EN 62321), but should be open enough to accommodate other standards that address other compliance methods currently used in industry i.e. controls on sourcing and supply chain processes.</p>
<p>Article 3 : Definitions</p>	<p>The following terms are used in RoHS, but are not defined:</p> <ul style="list-style-type: none"> - economic operators (see Article 12) - technical specification (see Article 7(4)) - recall (see Articles 7, 9, 10) - withdraw(al) (see Articles 7, 9, 10) <p><u>Proposal:</u></p> <p>The following definitions are given in 768/2008/EC and should be added to RoHS:</p> <p>economic operators shall mean the manufacturer, the authorized representative, the importer and the distributor;</p> <p>‘technical specification’ shall mean a document that prescribes technical requirements to be fulfilled by a product, process or service;</p>

RoHS Article	Comment/Proposed Change
	<p>'recall' shall mean any measure aimed at achieving the return of a product that has already been made available to the end user;</p> <p>'withdrawal' shall mean any measure aimed at preventing a product in the supply chain from being made available on the market;</p>
<p>The article corresponding to Article R9 "Formal objection to a harmonised standard" of 768/2008/EC is missing.</p>	<p>New article : "Formal objection to a harmonised standard"</p> <ol style="list-style-type: none"> 1. When a Member State or the Commission considers that a harmonised standard does not entirely satisfy the requirements which it covers and which are set out in ... [reference to the relevant part of the legislation], the Commission or the Member State concerned shall bring the matter before the Committee set up by Article 5 of Directive 98/34/EC, giving its arguments. The Committee shall, having consulted the relevant European standardisation bodies, deliver its opinion without delay. 2. In the light of the Committee's opinion, the Commission shall decide to publish, not to publish, to publish with restriction, to maintain, to maintain with restriction or to withdraw the references to the harmonised standard concerned in or from the Official Journal of the European Union. 3. 3. The Commission shall inform the European standardisation body concerned and, if necessary, request the revision of the harmonised standards concerned.
<p>The article corresponding to Article R31 "Procedure for dealing with products presenting a risk at national level" of 768/2008/EC is missing.</p>	<p>New article : "Procedure for dealing with products presenting a risk at national level"</p> <ol style="list-style-type: none"> 1. Where the market surveillance authorities of one Member State have taken action pursuant to Article 20 of Regulation (EC) No 765/2008, or where they have sufficient reason to believe that a product covered by this ... [act] presents a risk to the health or safety of persons or to other aspects of public interest protection covered by this ... [act], they shall carry out an

RoHS Article	Comment/Proposed Change
	<p>evaluation in relation to the product concerned covering all the requirements laid down in this ... [act]. The relevant economic operators shall cooperate as necessary with the market surveillance authorities.</p> <p>Where, in the course of that evaluation, the market surveillance authorities find that the product does not comply with the requirements laid down in this ... [act], they shall without delay require the relevant economic operator to take all appropriate corrective action to bring the product into compliance with those requirements, to withdraw the product from the market, or to recall it within a reasonable period, commensurate with the nature <u>and level</u> of the risk, as they may prescribe.</p> <p>The market surveillance authorities shall inform the relevant notified body accordingly.</p> <p>Article 21 of Regulation (EC) No 765/2008 shall apply to the measures referred to in the second subparagraph.</p> <p>2. Where the market surveillance authorities consider that non-compliance is not restricted to their national territory, they shall inform the Commission and the other Member States of the results of the evaluation and of the actions which they have required the economic operator to take.</p> <p>3. The economic operator shall ensure that all appropriate corrective action is taken in respect of all the products concerned that it has made available on the market throughout the Community.</p> <p>4. Where the relevant economic operator does not take adequate corrective action within the period referred to in the second subparagraph of paragraph 1, the market surveillance authorities shall take all appropriate provisional measures <u>commensurate with the nature and</u></p>

RoHS Article	Comment/Proposed Change
	<p><u>level of the risk</u> to prohibit or restrict the product being made available on their national market, to withdraw the product from that market or to recall it.</p> <p>They shall inform the Commission and the other Member States, without delay, of those measures.</p> <p>5. The information referred to in paragraph 4 shall include all available details, in particular the data necessary for the identification of the noncompliant product, the origin of the product, the nature of the non-compliance alleged and the risk involved, the nature and duration of the national measures taken and the arguments put forward by the relevant economic operator. In particular, the market surveillance authorities shall indicate whether the non-compliance is due to either:</p> <p>(a) failure of the product to meet requirements relating to the health or safety of persons or to other aspects of public interest protection laid down in this ... [act]; or</p> <p>(b) shortcomings in the harmonised standards referred to in ... [reference to the relevant part of the legislation] conferring a presumption of conformity.</p> <p>6. Member States other than the Member State initiating the procedure shall without delay inform the Commission and the other Member States of any measures adopted and of any additional information at their disposal relating to the non-compliance of the product concerned, and, in the event of disagreement with the notified national measure, of their objections.</p> <p>7. Where, within [period to be specified] of receipt of the information referred to in paragraph 4, no objection has been raised by either a Member State or the Commission in respect of a provisional measure taken by a Member State, that measure shall be deemed</p>

RoHS Article	Comment/Proposed Change
	<p>justified.</p> <p>8. Member States shall ensure that appropriate restrictive measures are taken in respect of the product concerned, such as withdrawal of the product from their market, without delay.</p>
<p>The article corresponding to Article R32 “Community safeguard procedure” of 768/2008/EC is missing.</p>	<p>New article : “Community safeguard procedure”</p> <p>1. Where, on completion of the procedure set out in Article [R31(3) and (4)], objections are raised against a measure taken by a Member State, or where the Commission considers a national measure to be contrary to Community legislation, the Commission shall without delay enter into consultation with the Member States and the relevant economic operator or operators and shall evaluate the national measure. On the basis of the results of that evaluation, the Commission shall decide whether the national measure is justified or not. The Commission shall address its decision to all Member States and shall immediately communicate it to them and the relevant economic operator or operators.</p> <p>2. If the national measure is considered justified, all Member States shall take the measures necessary to ensure that the non-compliant product is withdrawn from their market, and shall inform the Commission accordingly. If the national measure is considered unjustified, the Member State concerned shall withdraw the measure.</p> <p>3. Where the national measure is considered justified and the non-compliance of the product is attributed to shortcomings in the harmonised standards referred to in [Article R31(5)(b)], the Commission shall inform the relevant European standardisation body or bodies and shall bring the matter before the Committee set up by Article 5 of Directive 98/34/EC. That Committee shall consult the relevant European standardisation body or bodies and deliver its opinion without delay.</p>

RoHS Article	Comment/Proposed Change
<p>The article corresponding to Article R34 “Formal non-compliance” of 768/2008/EC is missing.</p>	<p>New article : “Formal non-compliance”</p> <p>1. Without prejudice to Article [R31], where a Member State makes one of the following findings, it shall require the relevant economic operator to put an end to the non-compliance concerned:</p> <p>(a) the conformity marking has been affixed in violation of Article [R11] or of Article [R12];</p> <p>(b) the conformity marking has not been affixed;</p> <p>(c) the EC declaration of conformity has not been drawn up;</p> <p>(d) the EC declaration of conformity has not been drawn up correctly;</p> <p>(e) technical documentation is either not available or not complete.</p> <p>2. Where the non-compliance referred to in paragraph 1 persists, the Member State concerned shall take all appropriate measures to restrict or prohibit the product being made available on the market or ensure that it is recalled or withdrawn from the market.</p>
<p>Article 7 : Obligations of manufacturers</p> <p>2. Manufacturers shall draw up the required technical documentation and carry out the internal production control procedure set out in module A of Annex II to Decision No 768/2008/EC or have it carried out.</p> <p>Where compliance of an EEE with the applicable requirements has been demonstrated by that procedure, manufacturers shall draw up an EC</p>	<p>RoHS has copied the text in 768/2008/EC, but has then added a reference to 768/2008/EC instead of itself (i.e. the “legislation” as stated in Article R2). This was not the case in the New Approach, and does not seem to be right approach for the NLF either. This approach is also not consistent with the way that RoHS has implemented other parts of the NLF e.g. Article 13 where the DoC contents have been included in RoHS, not referenced back to the NLF.</p> <p>In the case of the New Approach, directives copied and pasted the text from the New Approach and then modified it for the particular circumstances. By simply referencing the NLF (as is the case here) there is a risk of duplication / conflict with other text in RoHS. For example, the referenced text in the NLF states:</p> <p>“The manufacturer shall draw up a written declaration of conformity for a product model and</p>

RoHS Article	Comment/Proposed Change
<p>declaration of conformity and affix the CE marking.</p>	<p>keep it together with the technical documentation at the disposal of the national authorities for 10 years after the product has been placed on the market. The declaration of conformity shall identify the product for which it has been drawn up.”</p> <p>whilst Article 7(3) of the recast also states:</p> <p>“Manufacturers shall keep the technical documentation and the EC declaration of conformity for ten years after the EEE has been placed on the market.”</p> <p>At best this is duplication, at worst it could result in conflict because Article 7(3) can be changed during co-decision, or 768/2008 could be changed at some point in the future.</p> <p><u>Proposal:</u></p> <p>RoHS should:</p> <p>a) include a new Annex adapting the text in module A of Annex II of 768/2008/EC to the specific requirements of RoHS.</p> <p>replace Article 7(2) with text requiring the manufacturer to follow the internal production control procedure set out in this new annex of RoHS.</p>
<p>Article 7 : Obligations of manufacturers</p> <p>5. When deemed appropriate with regard to the risks presented by a product, manufacturers shall, to protect the health and safety of consumers, carry out sample testing of marketed EEE, investigate, and, if necessary, keep a register of complaints, of non-conforming EEE and product recalls, and shall keep distributors informed of any such monitoring.</p>	<p>RoHS was designed to address risks arising out of the presence of substances in products at the end of their life. It is important that this is reflected in the way that risks are assessed under the RoHS revision and in any decisions on enforcement action. RoHS was not designed to protect health and safety of consumers and so the reference in 5 below should be deleted.</p> <p>The same amendments should be made to Articles 9(5), 9(6) and 10(4).</p> <p>5. When deemed appropriate commensurate with the nature and level of the risks presented by a product, manufacturers shall, to protect the health and safety of consumers, carry out sample testing of marketed EEE, investigate, and, if necessary, keep a register of complaints,</p>

RoHS Article	Comment/Proposed Change
<p>8. Manufacturers who consider or have reason to believe that a EEE which they have placed on the market is not in conformity with the applicable Community harmonisation legislation shall immediately take the necessary corrective measures to bring that EEE into conformity, to withdraw it or recall it, if appropriate. Furthermore, where the EEE presents a risk, manufacturers shall immediately inform the competent national authorities of the Member States in which they made the EEE available to that effect, giving details, in particular, of the non-compliance and of any corrective measures taken.</p>	<p>of non-conforming EEE and product recalls, and shall keep distributors informed of any such monitoring.</p> <p>8. Manufacturers who consider or have reason to believe that a EEE which they have placed on the market is not in conformity with the applicable Community harmonisation legislation shall immediately take the necessary corrective measures to bring that EEE into conformity <u>and commensurate with the nature and level of the risk</u> to withdraw it or recall it, if appropriate.</p> <p>Furthermore, where the EEE presents a serious risk, manufacturers shall immediately inform the competent national authorities of the Member States in which they made the EEE available to that effect, giving details, in particular, of the non-compliance and of any corrective measures taken.</p>
Article 8 : Authorised representatives	Generally consistent with Article R3 of 768/2008/EC.
Article 9 : Obligations of importers	Generally consistent with Article R4 of 768/2008/EC.
Article 10 : Obligations of distributors	Generally consistent with Article R5 of 768/2008/EC.
Article 11 : Cases in which obligations of manufacturers apply to importers and distributors	Generally consistent with Article R6 of 768/2008/EC.
Article 12 : Identification of economic operators	Generally consistent with Article R7 of 768/2008/EC.
Article 13 : EC declaration of conformity	Generally consistent with Article R10 of 768/2008/EC.
Article 14 : General principles of the CE marking	Generally consistent with Article R11 of 768/2008/EC.
Article 15 : Rules and conditions for affixing the CE	It is reported that the reference to a Notified Body (NB) was a mistake. This appears to be the

RoHS Article	Comment/Proposed Change
<p>marking</p> <p>3. The CE marking shall be followed by the identification number of the notified body, where that body is involved in the production control phase.</p> <p>The identification number of the notified body shall be affixed by the body itself or, under its instructions, by the manufacturer or his authorised representative.</p>	<p>case as there is no reference to a NB in Article 7 “Obligations of manufacturers” – only internal production control (self certification).</p> <p>In recital 13 a notified body is mentioned in relation to medical devices, with the task of allowing quick responses to requested exemptions. Since these products have not previously been subject to the RoHS requirements, it is understandable that a quick process should be ensured for these critical products. If this is to be handled by the notified bodies defined under the medical devices directives, the provisions for such interventions should be given in a way such that it does not apply to other products covered by the scope of RoHS (e.g. by stating it in Annex VI).</p>
<p>Article 16 : Presumption of conformity</p> <p>Member States shall presume electrical and electronic equipment bearing the CE marking as conforming to this Directive.</p> <p>Electrical and electronic equipment on which tests and measurements have been performed in accordance with harmonised standards, the references of which have been published in the Official Journal of the European Union, shall be presumed to comply with all the relevant requirements of this Directive to which such standards relate.</p>	<p>IEC (future EN) Standards address testing of samples – not complete products.</p> <p>Many manufacturers use documentation to demonstrate conformity – in accordance with the “EU RoHS Enforcement Authorities Informal Network” guidance.</p> <p><u>Proposal:</u></p> <p>Replace para 2 with the following modified wording:</p> <p>“<u>Materials, components,</u> and electrical and electronic equipment on which tests and measurements have been performed, <u>or which have been assessed,</u> in accordance with harmonised standards the references of which have been published in the Official Journal of the European Union, shall be presumed to comply with all the relevant requirements of this Directive to which such standards relate.”</p>
<p>ANNEX VII : EC DECLARATION OF</p>	<p><u>Proposal:</u></p>

RoHS Article	Comment/Proposed Change
<p>CONFORMITY</p> <p>6. Where applicable, references to the relevant harmonised standards used or references to the specifications in relation to which conformity is declared:</p>	<p>For consistency with Article 7(4) and the new definition for “technical specifications” (see Article 3), change “specifications” to “technical specifications”:</p> <p>“6. Where applicable, references to the relevant harmonised standards used or references to the <u>technical</u> specifications in relation to which conformity is declared:”</p>
<p>ANNEX VII : EC DECLARATION OF CONFORMITY</p> <p>7. Where applicable, the notified body ... (name, number) ... performed ... (description of intervention) ... and issued the certificate: ...</p>	<p>It is reported that the reference to a Notified Body (NB) was a mistake (see above). This appears to be the case as there is no reference to a NB in Article 7 “Obligations of manufacturers” – only internal production control (self certification).</p> <p><u>Proposal</u>: Remove all references to a NB.</p>

II. Categories 8 and 9

We appreciate the general fact that the proposed recast text of the RoHS Directive takes into account the special characteristics of products covered by categories 8 and 9. However, the following two points are our great concern and we propose some changes.

1. Exemption issue

Exemptions are listed in ANNEX V (general) and ANNEX VI (categories 8&9). Because of the special characteristics of categories 8&9 equipment (e.g. safety, accuracy reliability, and so on) exemptions for categories 8&9 should be assessed specifically from the perspective of categories 8&9 equipment.* This is important for the existing general exemptions, as well, as the Oeko Institute has recommended: they should be assessed when categories 8&9 will be included in the RoHS scope (2014).

(* We are willing to take some technical data and explain these to you, if required.)

In order to carry out a process of assessment of all exemptions for categories 8&9 equipment separate from that for other categories, we propose to list in ANNEX VI both the existing general exemptions and solely the categories 8&9 specific exemptions (see attached Table).

Moreover, the starting time of the validity of these exemptions should be the time when the categories 8&9 will be included in the RoHS scope. Correspondingly, we propose to change the text of Article 4.6 from "Paragraph 1 shall not apply to the applications listed in ANNEXES V and VI" to ***"Paragraph 1 shall not apply to the applications listed in ANNEX V for categories 1 – 7 and 10. It shall not apply to the applications listed in ANNEX VI for categories 8 and 9 from 1st January 2014"***.

2. Definition of the industrial monitoring and control instruments

Article 3(p) of the Commission RoHS Recast Proposal contains the following definition: "industrial monitoring and control instruments" mean monitoring and control instruments designed for exclusively industrial or professional use. On the other hand, ANNEX II lists "Measuring, weighing or adjusting appliances for household or as laboratory equipment" as covered by category 9. As a result of this, there is a certain overlap, as well as a lack of clarity. Importantly,

1. "monitoring and control" by default includes processes/performance of "measuring,

weighing or adjusting”

2. “measuring, weighing or adjusting appliances used as laboratory equipment” are by default designed for professional use and therefore used only professionally.

In order to clarify this and avoid confusion, we recommend the following changes:

Article	COM Original Proposal	Recommendation
3 (p)	"industrial monitoring and control instruments" mean monitoring and control instruments designed for exclusively industrial or professional use.	Amend wording in 3 (p): "industrial monitoring and control instruments" mean monitoring and control instruments designed for exclusively industrial or professional use (e.g., laboratory equipment).
ANNEX II	9. Monitoring and control instruments, including Smoke detector Heating regulators Thermostats Measuring, weighing or adjusting appliances for household or as laboratory equipment Industrial monitoring and control instruments	Delete “or as laboratory equipment” in ANNEX II: 9. Monitoring and control instruments, including Smoke detector Heating regulators Thermostats Measuring, weighing or adjusting appliances for household or as laboratory equipment Industrial monitoring and control instruments

III. Air Conditioners Appliances

1. RoHS scope

i) Considering current RoHS Directive,

(RoHS) Article 2. Scope

1. ..., this Directive shall apply to electrical and electronic equipment falling under the categories 1, ... set out in Annex IA to Directive No 2002/96/EC (WEEE)

(WEEE) ANNEX IA

Categories of electrical and electronic equipment covered by this Directive

1. Large household appliances

(WEEE) ANNEX IB

List of products which shall be taken into account for the purpose of this Directive and which fall under the categories of Annex IA

1. Large household appliances

Electric heating appliances

Air conditioner appliances

it is clear that “Large Household Air Conditioners and Electric Heating appliances” are inside of RoHS scope.

Despite there is not an official precise interpretation in Europe about which Air Conditioners and Electric Heating appliances are “Large Household Appliances”, it is a common understanding that the “split type” Air Conditioners and space heating and cooling appliances such as “Air-to-Water Heat Pumps” which are typically installed in household environment, in spite they are always parts of “fixed installations”, are inside the RoHS scope.

Following this interpretation, most of the Air Conditioners manufacturers have made a big effort to meet RoHS requirements in their factories.

ii) Then, taking into consideration the European Commission proposal of 03/12/2008 and the 'Swedish proposal' (At European Council level – 03/09/2009) the exemption is as follows:

'b) equipment which is specifically designed as part of another equipment that does not fall within the scope of this Directive and can fulfil its function only if it is a part of that equipment.

c) equipment which is not intended to be placed on the market as a single functional or commercial unit.'

it could seem now the correct interpretation that, in spite of the fact that "Large Household Air Conditioners Appliances" must still fulfil RoHS Directive, the "split type" Air Conditioners and space heating and cooling appliances such as "Air-to-Water Heat Pumps" (or more specifically, the outdoor units and/or indoor units as the parts that they typically consist in), might be now out of RoHS scope, as far as they:

- are indeed "designed as part of another equipment that does not fall within the scope of this Directive and can fulfil its function only if it is a part of that equipment" (a "split system fixed installation"),
- and also are "equipment which is not intended to be placed on the market as a single functional or commercial unit".

If that interpretation was confirmed, we must express our concern about the impact of the newly added exemptions in Article 2.3. Our reasons are:

- In fact the industry already made all the efforts to fulfil RoHS for these type of products (based on the current law, RoHS scope as mentioned above (i)), so that it would create a worrisome precedent where legislation gets reviewed in favour of freeriders not having implemented the law for several past years.
- There is nowadays no technical reason to exclude these products of complying RoHS, due to the actual implementation in practise.
- Some member States (e.g. Italy) already require actions for such EEE parts based on

the existing legislation.

Neither this seems to be in line with the aim of the RoHS Directive, neither in line with the actual applied interpretations for the scope of RoHS by most of Member States as of today.

Therefore, in view of the arguments above, JBCE A/C WG is asking for an official clarification of the scope by the European Commission, being our position and understanding that the EEE parts of the “split type” Air Conditioners and space heating and cooling appliances such as “Air-to-Water Heat Pumps” (so typically the outdoor units and/or indoor units that they consist in) should be in the scope of RoHS.

This interpretation is especially necessary for this type of equipment, given the fact that the practical scope of application may be different between WEEE and RoHS, as it is argued in this document and in the position paper that we have also issued concerning the Commission recast and Swedish proposals amending WEEE Directive.

2. The obligation of the importers to indicate its name and address on the EEE

According to Art. 9 of RoHS proposal,

“3. Importers shall indicate their name, registered trade name or registered trade mark and the address at which they can be contacted on the EEE or, where that is not possible, on its packaging or in a document accompanying the EEE.”

JBCE A/C WG has a concern about this new obligation of the importer, apparently making necessary to add the importer name and address on the product. JBCE A/C WG understands that this requirement is not practically feasible, as it implies a huge disturbance in the logistics system. It should be considered that, in many cases, it may happen that a product produced for Europe is imported through several importers, or a that product is produced at the factory for more places than just Europe, so that it would not be possible to place the importer name in origin.

JBCE A/C WG would ask to the Commission to clarify this specific aspect, confirming

that “where that is not possible” can be widely interpreted as for the cases exposed above, and therefore being enough to indicate “their name, registered trade name or registered trade mark and the address” “in a document accompanying the EEE.

Contact

If you have any questions, for further information,
please feel free to contact us(info@jbce.org).

Kind regards,

A handwritten signature in blue ink that reads "Lars Brückner".

Lars Brückner

Chairman Environment Committee
Japan Business Council in Europe (JBCE)

Attached table

[NEW ANNEX IV]

COM Original Proposal	Solution
<p>ANNEX VI Applications exempted from the ban in Article 4(1) as regards Categories 8 and 9</p> <p>Equipment utilising or detecting ionising radiation</p> <p>1 Lead, cadmium and mercury in detectors for ionising radiation</p> <p>2 Lead bearings in X-ray tubes</p> <p>3 Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate</p> <p>4 Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons</p> <p>5 Lead in shielding for ionising radiation</p> <p>6 Lead in X-ray test objects.</p> <p>7 Lead stearate X-ray diffraction crystals</p> <p>8 Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers</p> <p>Sensors, detectors and electrodes (plus item 1)</p>	<p>ANNEX VI Applications exempted from the ban in Article 4(1) as regards Categories 8 and 9</p> <p><i>Exemption List I:</i></p> <p>Equipment utilising or detecting ionising radiation</p> <p>1 Lead, cadmium and mercury in detectors for ionising radiation</p> <p>2 Lead bearings in X-ray tubes</p> <p>3 Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate</p> <p>4 Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons</p> <p>5 Lead in shielding for ionising radiation</p> <p>6 Lead in X-ray test objects.</p> <p>7 Lead stearate X-ray diffraction crystals</p> <p>8 Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers</p> <p>Sensors, detectors and electrodes (plus item 1)</p>

COM Original Proposal	Solution
1a Lead and cadmium in ion selective electrodes including glass of pH electrodes	1a Lead and cadmium in ion selective electrodes including glass of pH electrodes
1b Lead anodes in electrochemical oxygen sensors	1b Lead anodes in electrochemical oxygen sensors
1c Lead, cadmium and mercury in infra-red light detectors	1c Lead, cadmium and mercury in infra-red light detectors
1d Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide	1d Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide
Others	Others
9 Cadmium in helium-cadmium lasers	9 Cadmium in helium-cadmium lasers
10 Lead and cadmium in atomic adsorption spectroscopy lamps	10 Lead and cadmium in atomic adsorption spectroscopy lamps
11 Lead in alloys as a superconductor and thermal conductor in MRI	11 Lead in alloys as a superconductor and thermal conductor in MRI
12 Lead and cadmium in metallic bonds to superconducting materials in MRI and SQUID detectors	12 Lead and cadmium in metallic bonds to superconducting materials in MRI and SQUID detectors
13 Lead in counterweights	13 Lead in counterweights
14 Lead in single crystal piezoelectric materials for ultrasonic transducers	14 Lead in single crystal piezoelectric materials for ultrasonic transducers
15 Lead in solders for bonding to ultrasonic transducers	15 Lead in solders for bonding to ultrasonic transducers
16 Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay	16 Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay
17 Lead in solders in portable emergency defibrillators	17 Lead in solders in portable emergency defibrillators
18 Lead in solders of high performance infrared imaging modules to	18 Lead in solders of high performance infrared imaging modules to

COM Original Proposal	Solution						
<p>detect in the range 8 – 14 µm</p> <p>19 Lead in Liquid crystal on silicon (LCoS) displays</p> <p>20 Cadmium in X-ray measurement filters</p>	<p>detect in the range 8 – 14 µm</p> <p>19 Lead in Liquid crystal on silicon (LCoS) displays</p> <p>20 Cadmium in X-ray measurement filters</p> <p>Exemption List II:</p> <p>1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.</p> <p>2. Mercury in straight fluorescent lamps for general purposes not exceeding:</p> <table border="1" data-bbox="1178 778 1794 1027"> <tbody> <tr> <td data-bbox="1178 778 1682 858">— halophosphate</td> <td data-bbox="1682 778 1794 858">10 mg</td> </tr> <tr> <td data-bbox="1178 858 1682 943">— triphosphate with normal lifetime</td> <td data-bbox="1682 858 1794 943">5 mg</td> </tr> <tr> <td data-bbox="1178 943 1682 1027">— triphosphate with long lifetime</td> <td data-bbox="1682 943 1794 1027">8 mg.</td> </tr> </tbody> </table> <p>3. Mercury in straight fluorescent lamps for special purposes.</p> <p>4. Mercury in other lamps not specifically mentioned in this Annex.</p> <p>5. Lead in glass of cathode ray tubes, electronic components</p>	— halophosphate	10 mg	— triphosphate with normal lifetime	5 mg	— triphosphate with long lifetime	8 mg.
— halophosphate	10 mg						
— triphosphate with normal lifetime	5 mg						
— triphosphate with long lifetime	8 mg.						

COM Original Proposal	Solution
	<p><i>and fluorescent tubes.</i></p> <p><i>6. Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminium containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight.</i></p> <p><i>7. -Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead),</i> <i>-lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications,</i> <i>-lead in electronic ceramic parts (e.g. piezoelectronic devices).</i></p> <p><i>8. Cadmium and its compounds in electrical contacts and cadmium plating except for applications banned under Directive 91/338/EEC27 amending Directive 76/769/EEC28 relating to restrictions on the marketing and use of certain dangerous substances preparations.</i></p> <p><i>9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators.</i></p> <p><i>11. Lead used in compliant pin connector systems.</i></p> <p><i>12. Lead as a coating material for the thermal conduction module</i></p>

COM Original Proposal	Solution
	<p><i>c-ring.</i></p> <p><i>13. Lead and cadmium in optical and filter glass.</i></p> <p><i>14. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight.</i></p> <p><i>15. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages.</i></p> <p><i>16. Lead in linear incandescent lamps with silicate coated tubes.</i></p> <p><i>17. Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications.</i></p> <p><i>18. Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb) as well as when used as speciality lamps for diazo-printing reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7:Pb).</i></p> <p><i>19. Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary</i></p>

COM Original Proposal	Solution
	<p><i>amalgam in very compact Energy Saving Lamps (ESL).</i></p> <p><i>20. Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCD).</i></p> <p><i>21. Lead and cadmium in printing inks for the application of enamels on borosilicate glass.</i></p> <p><i>22. Lead as impurity in RIG (rare earth iron garnet) Faraday rotators used for fibre optic communications systems.</i></p> <p><i>23. Lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm or less with NiFe lead frames and lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm or less with copper lead frames.</i></p> <p><i>24. Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors.</i></p> <p><i>25. Lead oxide in plasma display panels (PDP) and surface conduction electron emitter displays (SED) used in structural elements; notably in the front and rear glass dielectric layer, the bus electrode, the black stripe, the address electrode, the barrier ribs, the seal frit and frit ring as well as in print pastes.</i></p>

COM Original Proposal	Solution
	<p><i>26. Lead oxide in the glass envelope of Black Light Blue (BLB) lamps.</i></p> <p><i>27. Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers</i></p> <p><i>30. Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more.</i></p> <p><i>31. Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting).</i></p> <p><i>32. Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes.</i></p>