Introduction to ZMWG Comments

The Zero Mercury Working Group (ZMWG) believes that mercury-added products and processes should be generally prohibited, with exceptions provided for limited allowable uses. This “negative list” approach is particularly well suited for processes, since none identified warrant continuation indefinitely, and for new products where non-mercury alternatives are available.

Nevertheless, ZMWG supports starting from a simplified text, recognizing the conceptual approaches are still open for discussion and there are important issues raised by this draft text. The alternative basis for initiating discussions - draft document INC 4/3 - does not reflect the progress made by the contact group on products and processes at INC 3, and is overly complicated due to the number of brackets and alternatives. Accordingly ZMWG offers these comments on the discussion paper to contribute constructively to the process, by focusing on aspects of the paper which may not be addressed in discussions on the different overall approaches or bracketed text.

Structurally, we note the draft text in this paper does NOT incorporate an exemption process. Rather, it assumes some prohibitions will receive delayed effective dates which will apply to all parties (via Annex C, Part II). We do not favor this approach because only parties legitimately needing more time to comply should be subject to later effective dates. Moreover, it is quite possible that once the policy mandates of this treaty become clear, the transitions may move more quickly than currently anticipated, as manufacturers respond to the anticipated market changes. An exemption process can be more dynamic and responsive to changing market conditions.

Article 6. Mercury-added products

Restriction of production, import and export

1. Each Party shall not allow the manufacture, import or export of [all mercury-added products except those included in Annex C] [:

   (a) [Mercury-added products listed in Part I of Annex C]

   (b) [Mercury-added products listed in Part II of Annex C once the phase out date specified for that product has expired.]

ZMWG Comment: Trade with non-Parties is not covered in this present paper, nor is trade of equipment used to manufacture the phased out products. Trade to non-parties should be strictly controlled to avoid loophole creation, and to encourage as many countries as possible to ratify the treaty. Restrictions on equipment exports are necessary to avoid dumping of old obsolete technologies to developing countries, with the hazards this entails.
Assembled products

2. Mercury-added products for which the manufacture, import or export is not allowed under this Article should not be incorporated in assembled products.

**ZMWG Comment:** The policy position is appropriate, but the use of “should” suggests the obligation is non-binding, which will undermine its effectiveness.

New products

3. Each Party shall [not allow] [discourage] the manufacture of mercury-added products that were not manufactured in the territory of that Party at the date of entry into force of this Convention for it, except where the product [:

(a) Is intended to replace an existing mercury-added product that contains more mercury per unit than the new product;

(b) Is listed in Part III of Annex C.

3bis. To the extent that a new product is developed and manufactured within the territory of a Party, that Party shall provide information on its development in the report referred to in paragraph 8, including information on the environmental and health impacts of this product.

**ZMWG Comment:** The present language in the draft text has two very important problems. First, it would allow new products because less mercury is used, without regard to whether mercury free alternatives are also available. For the vast majority of products, the treaty should be directing and promoting the available mercury free alternatives, not mere reductions.

Second, the draft text authorizes new production capacity for any product listed in Part III of Annex C. Therefore, new factories to produce frivolous mercury products such as wheel weights and jewelry would be allowed, simply because the products are listed in Part III of Annex C. While we understand Part III of Annex C is intended to send a market signal to manufacturers that they should transition away from their mercury-added products, this text may inappropriately send the opposite message by authorizing new factories to make these products regardless of societal need or benefit. Accordingly, careful consideration is warranted on both the link in this paragraph to Part III of Annex C, and the need for and purpose of Part III of Annex C.

In summary, a much stronger policy position against new products, or expanding production capacity for most existing products, is required.

Notification of proposals to list products in Annex C

4. Any Party may submit a proposal to the Secretariat for listing a mercury-added product in Part I, II or III of Annex C.

Review of Annex C

5. The body established under Article [25bis] shall examine the information provided by Parties under paragraph 3 and the proposals made by Parties according to paragraph 4, and make
recommendations to the Conference of the Parties.

6. [No later than] every [five] years from the date of entry into force of the Convention, the Conference of the Parties shall review and revise Annex C, as appropriate, taking into account the recommendations received from the body established under Article [25bis].

7. The rules governing the amendment of this Annex shall be subject to the procedures specified in Article 28.

**ZMWG Comment:** Streamlined procedures for Annex C amendments should be considered, such as those in the Montreal Protocol, particularly if the Annex will include mercury content limits for lamps and similar types of technical specifications which may need to be modified often as the technology evolves.

**Reporting (the content of this paragraph might be moved to Article 22 itself)**

8. Each Party shall include in its reports submitted under Article 22, data on the production and trade of mercury-added products and measures taken in accordance with paragraph 11.

**ZMWG Comment:** The reporting requirements on manufacture and exports should apply to all mercury-added products, not just those in Parts I and II of Annex C, so that the [5] year reviews can take into account the global data provided on use and trade, and treaty effectiveness can be evaluated.

**Further efforts by the Parties**

9. Nothing in this Article shall prevent a Party from imposing additional requirements in an effort to protect human health and the environment from exposure to mercury, provided that they are consistent with the provisions of this Convention and in accordance with [relevant international obligations][the World Health Organization recommendations and guidance].

**ZMWG Comment:** Preserving a Party’s authority to impose more stringent requirements than what the treaty requires, is an appropriate policy objective, but the limitations to such authority suggested here appear to be either unnecessary (compliance with relevant international obligations is a given) or potentially inappropriate (WHO guidance should not supersede domestic law).

**Exclusions**

10. The following categories of products are not subject to the provisions of this Article:

    (a) Products for essential military uses;

    (b) Products for scientific research;

    (c) Products for use as replacement parts for major equipment; and

    (d) Products for cultural/heritage uses.

**ZMWG Comment:** Exclusions (c) and (d) may be misplaced or overbroad. Replacement parts is
an issue associated with switches and relays, because they are sometimes components of larger machinery where non-mercury switches have not been made for that particular machine. However, for other mercury-added products listed in Annex C, the mercury free alternatives (i.e., batteries) are typically identical to the original, and thus can be used as drop-in replacements. Note Part III of Annex C already contains an exclusion for switches in maintenance applications, so we question the need for this exclusion here.

The exclusion for cultural/heritage uses appears unnecessary given the products identified for phase-out in Annex C. In addition, the term ‘cultural/heritage uses’ could be loosely defined by some, and thus has the potential to undermine some product phase-outs such as soaps and cosmetics.

**Dental Amalgam**

11. Each Party shall take measures to reduce the use of dental amalgam taking into account their domestic circumstances and relevant international guidance.

**ZMWG Comment:** In order to achieve the desired policy objective, appropriate short–term and longer term measures to phase down amalgam use should be specified in this paragraph, such as measures to protect workers, pregnant women and children; and measures to promote mercury free alternatives in the marketplace and professional communities.
Part I: Prohibited: products for which non-mercury alternatives are globally accessible as well as economically and technically feasible

<table>
<thead>
<tr>
<th>Mercury-added Products</th>
<th>[Allowable-use] [Exemptions]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries [except those listed in Part III]</td>
<td>[Button batteries with a mercury content less than 2%wt]</td>
</tr>
<tr>
<td>Switches and Relays [except those listed in Part III]</td>
<td>[Electric switches exclusively for maintenance purposes]</td>
</tr>
<tr>
<td>Compact fluorescent lamps below 30 watt with a mercury content exceeding [X] mg</td>
<td></td>
</tr>
<tr>
<td>Linear fluorescent lamps - Triband phosphor - T2, T5, T8, T12 &amp; long life &gt; 25,000 hours with a mercury content exceeding [X] mg</td>
<td></td>
</tr>
<tr>
<td>General purpose high pressure sodium (vapor) lamps with a mercury content exceeding [X] mg</td>
<td></td>
</tr>
<tr>
<td>Soaps and cosmetics</td>
<td></td>
</tr>
<tr>
<td>Pesticides and biocides</td>
<td></td>
</tr>
</tbody>
</table>

[Part II: Phase out: Products for which a transition period is needed to allow Parties to phase out their use based on their social and economic circumstances]

<table>
<thead>
<tr>
<th>Mercury-added Products</th>
<th>[Phase-out Date]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sphygmomanometers</td>
<td>[20XX]</td>
</tr>
<tr>
<td></td>
<td>[X years after the entry into force of the instrument for the Party] *</td>
</tr>
<tr>
<td>Thermometer for medical use</td>
<td>[20XX]</td>
</tr>
<tr>
<td></td>
<td>[X years after the entry into force of the instrument for the Party] *</td>
</tr>
</tbody>
</table>

[*Note] This is one possible form of a transitional arrangement. It is a grace period of X years given to each Party for the specific product concerned.]

[Part III: Products remaining under review, including products for which economically and technically feasible non-mercury alternatives are currently unavailable]

<table>
<thead>
<tr>
<th>Mercury-added Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Button batteries with a mercury content less than 2%wt</td>
</tr>
<tr>
<td>Measuring devices for industrial use</td>
</tr>
<tr>
<td>Electric switches exclusively for maintenance purposes</td>
</tr>
<tr>
<td>All lamps except those listed in Part I</td>
</tr>
<tr>
<td>Pharmaceutical products (human and veterinary uses) including topical antiseptics</td>
</tr>
</tbody>
</table>

[Other products not listed in any other parts, including] [fireworks, jewelry, photographic films and paper, wheel weights, gyroscopes, telescopes, recoil softeners in rifles, tire balancers, medical equipment other than measuring devices as mentioned in Part II.]

ZMWG Comment: Button cell batteries, measuring devices besides fever thermometers and blood pressure cuffs (i.e., barometers, manometers), and topical antiseptics, all have available and fully
functional mercury free alternatives manufactured by multiple manufacturers, and thus warrant phase-out. Similarly, dental amalgam should be subject to both a phase down provision, and a phase-out mandate in the Annex. Please see our separate factsheets on button cells and amalgam for additional information.

The exclusion for industrial use measuring devices appears too broad and undefined, since mercury free alternatives for many industrial uses are or will be available by the time the treaty comes into force. These measuring devices are already covered by state legislation in the USA, and most will soon be banned in the EU.

As noted above, we question the need for a Part II of Annex C, since an exemption process appears to us a better way of providing delayed effective dates for those parties legitimately needing them. Also as noted above, the need for and purpose of Part III requires careful consideration, particularly as it relates to the authorization of new products.
Article 7. Manufacturing processes in which mercury or mercury compounds are used

Restriction of use
1. Each Party shall not allow the use of mercury or mercury compounds in the manufacturing processes listed in Annex D, except in accordance with [an exemption] [the transition period] listed in and not later than the phase-out date specified in that Annex.

ZMWG Comment: As in the case of products, the restrictions in this proposed text do not include anything on the export of equipment as a way of stopping north-south dumping of mercury process equipment.

Measures for facilities
2. Each Party with one or more facilities that use mercury or mercury compounds in the manufacturing processes listed in Annex D shall:

   (a) Take measures to reduce, and where feasible eliminate, mercury emissions and releases from those facilities; and

   (b) Include in its reports submitted under Article 22, information on the measures taken under this paragraph.*

   [*Note] The content of this paragraph might be moved to Article 22 itself.

   (c) [Register all facilities within its territory no later than one year after the entry into force of this Convention for the Party, and submit this register to the Secretariat for distribution to all Parties. The registration shall include] [Inform the Secretariat on] the number and types of facilities that use mercury or mercury compounds in the manufacturing processes listed in Annex D, including the estimated annual amount of mercury used;

VCM
[Operative paragraph to address VCM production as possible alternative to point 2. in Annex D]

ZMWG Comment: This paragraph is problematic if intended as an alternative to including VCM in Annex D. VCM production should be listed in the Annex, with some transitional arrangement, since it accounts for 20-25% of total global mercury consumption. The treaty should require deployment of a mercury free alternative as soon as possible, using an exemption process to provide whatever transitional relief may be required.

New facilities
[3. Each Party shall not allow the use of mercury or mercury compounds at new facilities using the manufacturing processes listed in Annex D. Such facilities shall not be eligible for exemptions.]

ZMWG Comment: As with products, a clear and stronger policy position against any new processes, or expanding production capacity for existing processes, is required. The linkage here to Annex D may not be necessary and may greatly limit this provision's reach depending upon how the
process categories in Annex D are ultimately worded.

**Information exchange**

4. The Conference of the Parties may encourage the exchange of information on possible measures and [best available] techniques to reduce emissions and releases of mercury [and mercury compounds] from the manufacturing processes listed in Annex D.

**Review of Annex D**

5. [No later than] every [five] years from the date of entry into force of the Convention, the Conference of the Parties shall decide, based on recommendations received from the [expert] body established under Article [25bis], taking into account recent technical and economic developments and any other relevant available information, to review and revise Annex D as appropriate.

**Clarification of definition**

6. “Manufacturing processes in which mercury or mercury compounds are used” shall not include processes using mercury-added products and manufacturing processes of mercury-added products.**

[Notes] **Could be moved to the chapeau of Annex D or to the Article on definitions
Annex D: Manufacturing processes in which mercury or mercury compounds are used

The following draft list is proposed as a possible starting point for the discussion of listing of processes in the Annex.

<table>
<thead>
<tr>
<th>Manufacturing process not allowed under Article 7</th>
<th>[Allowable-use] [Exemptions]</th>
<th>[Phase-out date]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chlor-alkali production</td>
<td></td>
<td>[2020][2025]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[X years after the entry into force of the instrument for the Party]*</td>
</tr>
<tr>
<td>[2. Vinyl chloride monomer production]</td>
<td></td>
<td>[20XX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[X years after the entry into force of the instrument for the Party]*</td>
</tr>
<tr>
<td>3. Other production processes in which mercury or mercury compounds are used as [catalysts] [electrodes or catalysts]</td>
<td>[describe allowable-use or exemption and the period for which it is valid]</td>
<td>[20XX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[X years after the entry into force of the instrument for the Party]*</td>
</tr>
</tbody>
</table>

[*Note] This is one possible form of a transitional arrangement. It is a grace period of X years given to each Party for the specific process concerned.

ZMWG Comment: Other processes identified by the contact group at INC 3 as appropriate for listing, such as sodium methylate production, may not be captured in the Annex depending upon how item 3 is ultimately worded. Mercury free alternatives for the production of sodium methylate are already used worldwide.

Other examples falling within the bracketed text in item 3 include processes associated with the use of at least five phenylmercury compounds used as catalysts in polyurethane systems to make coatings, adhesives, sealants and elastomers (phenylmercury acetate, phenylmercury propionate, phenylmercury 2-ethylhexanoate, phenylmercury octanoate and phenylmercury neodecanoate). These processes will shortly be banned in the EU because of the availability of mercury free alternatives and the potential for significant releases of mercury to the environment associated with their life cycle.