

FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021



* Question 13.2 amended by Luxembourg on 16 June 2022

REPORTING PERIOD:

16 August 2017 to 31 December 2020

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party

Luxembourg

Date on which its instrument of ratification, accession, approval or acceptance was deposited

21 September 2017

Date of entry into force of the Convention for the party

20 December 2017

2. Information on the national focal point

Full name of the institution

Ministry of the Environment, Climate and Sustainable Development

Title of National Focal Point

Mr.

Name of National Focal Point

Jerome Faé

Mailing address

4, Place de l'Europe
L-1499 Luxembourg-Kirchberg

Telephone number

+352 247 868 56

Fax number

{Empty}

E-mail

jerome.fae@mev.etat.lu

Second E-mail

{Empty}

Web page

{Empty}

3. Information about the contact officer submitting the reporting format if different from the above

Focal Point is submitting the national report

- ☒ Information is submitted by the national focal point
- ☐ Information is submitted through the national focal point by the contact officer

▼ ART. 3: MERCURY SUPPLY SOURCES AND TRADE

3.1. Does the party have any primary mercury mines that were operating within its territory at the date of entry into force of the Convention for the party?

- ☐ Yes
- ☒ No

Additional information on this question if needed
{Empty}

3.2. Does the party have any primary mercury mines that are now in operation that were not in operation at the time of entry into force of the Convention for the party?

- ☐ Yes
- ☒ No

3.3. Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year that are located within its territory?

- ☐ Yes
- ☒ No

If the party answered No above, please explain.

Not applicable since no traders and operating facilities (or even government) within territory known to have individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year.

3.4. Does the party have excess mercury available from the decommissioning of chlor-alkali facilities?

- ☐ Yes
- ☒ No

3.5. *Has the party received consent, or relied on a general notification of consent, in accordance with article 3, including any required certification from importing non-parties, for all exports of mercury from the party's territory in the reporting period?

- ☐ Yes, exports to parties
- ☐ Yes, exports to non-parties
- ☒ No

Additional information if needed

{Empty}

3.6. Has the party allowed the import of mercury from a non-party?

- ☒ No
- ☐ Yes
- ☐ The importing party has relied on paragraph 7 of article 3

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 4: MERCURY-ADDED PRODUCTS

4.1. Has the party taken any appropriate measures to not allow the manufacture, import or export of mercury-added products listed in Part I of Annex A of the Convention after the phase-out date specified for those products?

- ☒ Yes
- ☐ No
- ☐ Yes (implementing paragraph 2 of article 4)

If yes, please provide information on the measures.

The appropriate measures to not allow the manufacture, import or export of mercury-added products listed in Part I of Annex A of the Convention after the phase-out dates specified for those products have been implemented in accordance with the provisions of article 5 and Annex II of the European Union (EU) Regulation 852/2017 on mercury of 17 May 2017*. The text of EU Regulation 852/2017 on mercury can be found in the Official Journal of the European Union under <https://eur-lex.europa.eu/eli/reg/2017/852/oj>.

*EU Regulation 852/2017 complements the Union acquis and lays down the provisions that are needed to ensure the complete alignment of the Union acquis with the Minamata Convention on mercury and it includes actions that go even beyond the requirements of the Minamata Convention. Therefore, Annex II of EU Regulation 852/2017 contains even stricter provisions for some of the mercury-added products with regard to phase-out dates and mercury content (compared to Part I of Annex A of the Minamata Convention) .

The EU Regulation 852/2017 on mercury was transposed into national Luxembourg law in 2019 : "Luxembourg mercury law of 2019" (Loi du 16 mai 2019 concernant certaines modalités d'application et les sanctions du règlement (UE) 2017/852 du Parlement européen et du Conseil du 17 mai 2017 relatif au mercure et abrogeant le règlement (CE) n° 1102/2008). The text of our national mercury law can be found in the Official Journal of the Grand-Duchy of Luxembourg under <https://legilux.public.lu/eli/etat/leg/loi/2019/05/16/a341/jo>.

4.3. Has the party taken two or more measures for the mercury-added products listed in Part II of Annex A in accordance with the provisions set out therein?

- ☒ Yes
- ☐ No

If yes, please provide information on the measures.

Luxembourg has taken two or more measures for the mercury-added products listed in Part II of Annex A in accordance with the provisions set out therein. These measures include for instance:

- i) Setting national objectives aiming at dental caries prevention and health promotion, thereby minimizing the need for dental restoration;
- ii) Setting national objectives aiming at minimizing its use;
- (iii) Promoting the use of cost-effective and clinically effective mercury-free alternatives for dental restoration;
- (v) Encouraging representative professional organizations and dental schools to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices;
- (viii) Restricting the use of dental amalgam to its encapsulated form;
- (ix) Promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

These measures have been or are currently being implemented in accordance with article 10 of EU Regulation 852/2017 on mercury and, as foreseen by that same article, by our national plan concerning the progressive phase-down on the use of dental amalgam (national amalgam plan). Luxembourg has adopted its national amalgam plan on the progressive phase-down of use of dental amalgam on 3rd October 2019. The plan can be found on the webpage of the Ministry of Health under <https://sante.public.lu/fr/publications/p/plan-national-amalgame/index.html>.

The national amalgam plan has as objectives a lifelong dental caries prevention, easy access to treatments with mercury-free materials, objective communication on risks and alternatives to reduce the use of amalgam dental and professional amalgam waste management to avoid environmental contamination. The plan also provides measures to support its implementation and evaluation.

More specifically with regard to restricting the use of dental amalgam to its encapsulated form, this provision was implemented in accordance with article 10 paragraph 1 of EU Regulation 852/2017 : "From 1 January 2019, dental amalgam shall only be used in pre-dosed encapsulated form. The use of mercury in bulk form by dental practitioners shall be prohibited."

Further, the provision under paragraph 2 of article 10 was implemented: "From 1 July 2018, dental amalgam shall not be used for dental treatment of deciduous teeth, of children under 15 years and of pregnant or breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient."

With regard to best environmental practices in dental facilities, a series of rules of good practices have to be observed in dental offices (see also answer to question 11.1 on mercury wastes), for instance the requirement for dental offices to be equipped with amalgam separators to retain and collect amalgam particles, including those contained in wastewater (according to paragraph 4 of article 10 of EU Regulation 852/2017).

4.4. Has the party taken measures to prevent the incorporation into assembled products of mercury-added products whose manufacture, import and export are not allowed under article 4?

- ☐ Yes
- ☒ No

4.5. Has the party discouraged the manufacture and the distribution in commerce of mercury-added products not covered by any known use in accordance with article 4, paragraph 6?

- ☐ Yes
- ☒ No

If no, has there been an assessment of the risks and benefits of the product that demonstrates environmental or health benefits? Has the party provided to the secretariat, as appropriate, information on any such product?

☐ Yes

☒ No

Part E – Additional comments on the article in free text if the party chooses to do so

on question 4.4: not applicable for Luxembourg since there is no manufacturing that may be using mercury-added products listed in annex A.

on question 4.5: not applicable for Luxembourg since there is no manufacture and distribution in commerce of mercury-added products not covered by any known use in accordance with article 4, paragraph 6.

▼ ART. 5: MANUFACTURING PROCESSES IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED

5.1. Are there facilities within the territory of the party that use mercury or mercury compounds for the processes listed in Annex B of the Minamata Convention in accordance with paragraph 5 of article 5 of the Convention?

☐ Yes

☒ No

☐ I do not know

5.2. Are measures in place to not allow the use of mercury or mercury compounds in manufacturing processes listed in Part I of Annex B after the phase-out date specified in that Annex for the individual process?

CHLOR-ALKALI PRODUCTION

☐ Yes

☐ No

☒ Not applicable (do not have these facilities)

ACETALDEHYDE PRODUCTION IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED AS A CATALYST

☐ Yes

☐ No

☒ Not applicable (do not have these facilities)

5.3. Are measures in place to restrict the use of mercury or mercury compounds in the processes listed in Part II of Annex B in accordance with the provisions set out therein?

VINYL CHLORIDE MONOMER PRODUCTION

☐ Yes

- ☐ No
- ☒ Not applicable (do not have these facilities)

SODIUM OR POTASSIUM METHYLATE OR ETHYLATE

- ☐ Yes
- ☐ No
- ☒ Not applicable (do not have these facilities)

PRODUCTION OF POLYURETHANE USING MERCURY-CONTAINING CATALYSTS

- ☐ Yes
- ☐ No
- ☒ Not applicable (do not have these facilities)

5.4. Is there any use of mercury or mercury compounds in a facility using the manufacturing processes listed in Annex B that did not exist prior to the date of entry into force of the Convention for the party?

- ☐ Yes
- ☒ No

5.5. Is there any facility that has been developed using any other manufacturing process in which mercury or mercury compounds are intentionally used that did not exist prior to the date of entry into force of the Convention?

- ☐ Yes
- ☒ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 7: ARTISANAL AND SMALL-SCALE GOLD MINING

7.1. Have steps been taken to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, artisanal and small-scale gold mining and processing subject to article 7 within your territory?

- ☐ Yes
- ☐ No

- ☒ There is no artisanal and small-scale gold mining and processing subject to article 7 in which mercury amalgamation is used in the territory

7.2. Has the party determined and notified the secretariat that artisanal and small-scale gold mining and processing within its territory is more than insignificant?

- ☐ Yes
- ☒ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 8: EMISSIONS

8.1. Identify any Annex D source categories for which there are new sources of emissions of mercury or mercury compounds as defined in paragraph 2 (c) of article 8.

For each of those source categories describe the measures in place, including the effectiveness of such measures, to implement the requirements of paragraph 4 of article 8.

- ☐ Coal-fired power plants
- ☐ Coal-fired industrial boilers
- ☐ Smelting and roasting processes used in the production of non-ferrous metals
- ☐ Waste incineration facilities
- ☐ Cement clinker production facilities

Has the party required the use of best available techniques or best environmental practices (BAT/BEP) to control and where feasible reduce emissions for new sources no later than 5 years after the date of entry into force of the Convention for the party?

- ☐ Yes
- ☒ No

Please explain

Luxembourg has not identified in its territory new sources in any of the source categories listed in annex D.

Attach relevant documentation

{Empty}

8.2. Identify any Annex D source categories for which there are existing sources of emissions of mercury or mercury compounds as defined in paragraph 2 (e) of article 8.

For each of those source categories, select and provide details on the measures implemented under paragraph 5 of article 8 and explain the progress that these applied measures have achieved in reducing emissions over time in your territory:

▼ COAL-FIRED POWER PLANTS

- ☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Use of BAT/BEP to control emissions from relevant sources
- ☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- ☐ Alternative measures to reduce emissions from relevant sources

Measures

{Empty}

Progress

{Empty}

▼ COAL-FIRED INDUSTRIAL BOILERS

- ☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Use of BAT/BEP to control emissions from relevant sources
- ☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- ☐ Alternative measures to reduce emissions from relevant sources

Measures

{Empty}

Progress

{Empty}

▼ SMELTING AND ROASTING PROCESSES USED IN THE PRODUCTION OF NON-FERROUS METALS

- ☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Use of BAT/BEP to control emissions from relevant sources
- ☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- ☐ Alternative measures to reduce emissions from relevant sources

Measures

{Empty}

Progress

{Empty}

▼ WASTE INCINERATION FACILITIES

- ☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- ☒ Use of BAT/BEP to control emissions from relevant sources
- ☒ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- ☐ Alternative measures to reduce emissions from relevant sources

Measures

{Empty}

Progress

{Empty}

▼ CEMENT CLINKER PRODUCTION FACILITIES

- ☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- ☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- ☒ Use of BAT/BEP to control emissions from relevant sources
- ☒ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- ☐ Alternative measures to reduce emissions from relevant sources

Measures

{Empty}

Progress

{Empty}

Have the measures for existing sources under paragraph 5 of article 8 been implemented no later than 10 years after the date of entry into force of the Convention for the party?

☒ Yes

☐ No

8.3. Has the party prepared an inventory of emissions from relevant sources within 5 years of entry into force of the Convention for it?

☒ Yes

- ☐ No
- ☐ Have not been a party for 5 years

If yes, when was the inventory last updated?

Wed, 06/16/2021 – 00:00

Please indicate where this inventory is available

Under UNECE's Convention on Long-Range Transboundary Air Pollution (CLRTAP), inventories of mercury emissions from relevant sources are regularly reported.

The inventories can be found under:

http://cdr.eionet.europa.eu/lu/eu/nec_revised/

or

<https://www.ceip.at/status-of-reporting-and-review-results/2021-submission>

Attach

{Empty}

8.4. Has the party chosen to establish criteria to identify relevant sources covered within a source category?

- ☐ Yes
- ☒ No

8.5. Has the party chosen to prepare a national plan setting out the measures to be taken to control emissions from relevant sources and its expected targets, goals and outcomes?

- ☐ Yes
- ☒ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 9: RELEASES

9.1. Are there, within the party's territory, relevant sources of releases as defined in paragraph 2 (b) of article 9?

- ☐ Yes
- ☒ No
- ☐ I do not know

9.2. Has the party established an inventory of releases from relevant sources within 5 years of entry into force of the convention for it?

- ☐ Yes
- ☒ Relevant sources do not exist in the territory
- ☐ Have not been a party for 5 years
- ☐ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 10: ENVIRONMENTALLY SOUND INTERIM STORAGE OF MERCURY, OTHER THAN WASTE MERCURY

10.1. Has the party taken measures to ensure that the interim storage of non-waste mercury and mercury compounds intended for a use allowed to a party under the Convention is undertaken in an environmentally sound manner?

- ☐ Yes
- ☒ No
- ☐ I do not know

Part E – Additional comments on the article in free text if the party chooses to do so

Not applicable since there is no interim storage of non-waste mercury and mercury compounds intended for a use allowed to a party under the Convention.

▼ ART. 11: MERCURY WASTES

11.1. Have measures outlined in article 11, paragraph 3, been implemented for the party's mercury waste?

- ☒ Yes
- ☐ No

Please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.

Mercury waste in general is treated and collected by an approved establishment for the disposal of mercury waste or a waste management establishment.

With regard to mercury waste from dental amalgams, a series of rules of good practice have to be observed in dental offices:

- Obligation to keep a register of amalgam purchases
- Obligation to equip one's practice with an amalgam separator and to ensure its maintenance according to European standard EN ISO 11143:2008
- Dental offices should be equipped with amalgam separators to retain and collect amalgam particles, including those contained in wastewater. Amalgam separators must ensure a retention rate at least 95% of the amalgam particles.
- Dental professionals must ensure that amalgam residues, including particles, fillings, teeth or parts of teeth contaminated by dental amalgam are treated and collected by an approved establishment for the disposal of amalgam or a waste management establishment.

11.2. Are there facilities for final disposal of waste consisting of mercury or mercury compounds in the party's territory?

- ☐ Yes

- ☒ No
- ☐ I do not know

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 12: CONTAMINATED SITES

12.1. Has the party endeavoured to develop strategies for identifying and assessing sites contaminated by mercury or mercury compounds in its territory?

- ☒ Yes
- ☐ No

Please elaborate

Potentially polluted sites are systematically assessed upon cessation of activities under classified installation law. The Minister with the Environment in its attributions has deposited a law project in Parliament in January 2018. Whenever historical sites are assessed in the scope of development projects, mercury is analyzed. There is no knowledge of mercury-polluted sites in the country since there has never been any major industry or mining activity involving the risk of mercury pollution.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 13: FINANCIAL RESOURCES AND MECHANISM

13.1. Has the party undertaken to provide, within its capabilities, resources in respect of those national activities that are intended to implement the Convention in accordance with its national policies, priorities, plans and programmes?

- ☐ Yes
- ☒ No

Please specify

No specific resources were provided for national activities that are intended to implement the Convention. The implementation of such activities is already covered by the resources allocated to the implementation of environmental policies and activities in general.

Please provide comments, if any.

{Empty}

13.2. Supplemental: Has the party, within its capabilities, contributed to the mechanism referred to in paragraph 5 of article 13?

- ☒ Yes

☐ No

Please specify

Luxembourg has made “core” contributions on a yearly basis to the GEF which are nationally taken into account as “ODA” aid .With regard to the current reporting period, Luxembourg has contributed the following amounts to the GEF (in EUR) : 2017 – 904.500 ; 2018 – 862.350 ; 2019 – 1.164.500 ; 2020 – 1.195.450 ; 2021 – 1.192.550.

Please provide comments, if any.

{Empty}

13.3. Supplemental: Has the party provided financial resources to assist developing-country parties and/or parties with economies in transition in the implementation of the Convention through other bilateral, regional and multilateral sources or channels?

☐ Yes

☒ No

Please specify

We have not yet considered an intention to provide financial resources to assist developing-country parties and/or parties with economies in transition in the implementation of the Convention.

Please provide comments, if any.

{Empty}

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 14: CAPACITY-BUILDING, TECHNICAL ASSISTANCE AND TECHNOLOGY TRANSFER

14.1. Has the party cooperated to provide capacity-building or technical assistance, pursuant to article 14, to another party to the Convention?

☐ Yes

☒ No

Please specify

We do not have the necessary/sufficient technical and personal resources to provide capacity-building or technical assistance.

14.2. Supplemental: Has the party received capacity-building or technical assistance pursuant to article 14?

☐ Yes

☒ No

Please specify

We have not identified the need to receive capacity-building or technical assistance.

Please provide comments, if any.

{Empty}

14.3. Has the party promoted and facilitated the development, transfer and diffusion of and access to, up-to-date environmentally sound alternative technologies?

- ☐ Yes
- ☒ No
- ☐ Other

Please specify

We do not have the necessary technical and human resources to promote and facilitate the development, transfer and diffusion of, and access to, up-to-date environmentally sound alternative technologies.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 16: HEALTH ASPECTS

16.1. Have measures been taken to provide information to the public on exposure to mercury in accordance with paragraph 1 of article 16?

- ☒ Yes
- ☐ No

Supplemental: If yes, describe the measures that have been taken.

Several measures have been or are currently being undertaken to provide information to the public on exposure to mercury in accordance with paragraph 1 of article 16.

*The Ministry of Health is currently elaborating a national health and environment plan which will take into account the risks facing the population's exposure to environmental factors. Among these risks factors heavy metals such as mercury, lead and cadmium will also be looked at and the degree of exposure of certain groups of the population will be assessed.

Within this plan, a first action will consist of analyzing the indoor air quality in elementary and nursery schools in Luxembourg. In this study, the presence of heavy metals (eg. mercury) will also be tested in the dust samples. This study will also make it possible to assess the degree of exposure to mercury, for example from old paints that may still be present in schools.

*The "Emweltambulanz" (roughly translated to "environment ambulance") is a service offered by the Environment Health Service (Ministry/Directorate of Health), which is aimed at individuals suffering from symptoms that may be related to environmental factors in their home.

After delivery of a medical prescription, preferably issued by a general practitioner specializing in environmental medicine, biological (mold), chemical (presence of harmful chemical substances in air or dust samples) or physical (electromagnetic radiation) analyzes can be undertaken in the patient's home. Heavy metals, including mercury, are also on the list of substances tested. These environmental analyzes intend to detect risk factors linked to indoor pollutants can help the attending physician in his diagnosis, allowing him possibly to determine the causes of the symptoms.

*A national service of environmental medicine, currently in a conceptual phase, has been granted to one of Luxembourg's hospital centers. Together with the patient, the environmental medicine specialist tries to determine the real cause of the disease using environmental analysis and human biomarkers. The future national service of environmental medicine will make it possible to take care

of patients suffering from symptoms linked to environmental factors, of which heavy metals can also be part.

16.2. Have any other measures been taken to protect human health in accordance with article 16?

☒ Yes

☐ No

Supplemental: If yes, describe the measures that have been taken.

The Ministry of Health is implementing several measures in relation to the implementation of the national amalgam plan to protect human health, in line with the national mercury law of 2019. Such measures include for instance an ban on the use of dental amalgam on milk teeth, in young people under 15 years old, in pregnant/breastfeeding women (unless the dental care practitioner does not deem it strictly necessary because of the patient's medical needs). Further, the use of mercury in bulk form is prohibited. Dental amalgam should only be used as a pre-dosed capsule.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 17: INFORMATION EXCHANGE

17.1. Has the party facilitated the exchange of information referred to in article 17, paragraph 1?

☒ Yes

☐ No

Please provide more information, if any

The exchange of information with other Parties to the Convention is performed at EU level in the context of implementation of EU Regulation 852/2017 on mercury.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

18.1. Have measures been taken to promote and facilitate the provision to the public of the kinds of information listed in article 18, paragraph 1?

☒ Yes

☐ No

If yes, please indicate the measures that have been taken and the effectiveness of those measures

The homepage of the Ministry of the Environment, Climate and Sustainable Development provides information on the legislative framework and obligations under EU Regulation 2017/852 on mercury

which lays down provisions for the use, storage and placing on the market of mercury, mercury compounds and mercury-based mixtures.

https://environnement.public.lu/fr/chemesch-substanzen/Substances_chimiques/Mercure.html

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ ART. 19: RESEARCH, DEVELOPMENT AND MONITORING

19.1. Has the party undertaken any research, development and monitoring in accordance with paragraph 1 of article 19?

☐ Yes

☒ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ COMMENTS

Part C: Comments regarding possible challenges in meeting the objectives of the Convention (Art. 21, para. 1)

{Empty}

▼ SUPPLEMENTAL – ADDITIONAL COMMENTS

Supplemental: Part D: Comments regarding the reporting format and possible improvements, if any

{Empty}