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**Economic and environmental questions: transport of dangerous goods**

## **Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals**

### **Report of the Secretary-General\***

#### *Summary*

In accordance with Economic and Social Council resolution [645 G \(XXIII\)](#), the Secretary-General reports biennially to the Council on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals, and of its two subcommittees.

The present report concerns the work of the Committee of Experts during the biennium 2021–2022 and the implementation of Economic and Social Council resolution [2021/13](#).

In accordance with that resolution, the secretariat has published the twenty-second revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, amendment 1 to the seventh revised edition of the *Manual of Tests and Criteria* and the ninth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals*.

All the main legal instruments and codes governing the international transport of dangerous goods by sea, air, road, rail or inland waterway have been amended accordingly, with effect from 1 January 2023, and many Governments have transposed the provisions of the *Model Regulations* into their own legislation for domestic traffic for application as from 2023.

Information on the contact details of competent authorities responsible for national regulations applicable to the transport of dangerous goods by modes of transport other than by sea or by air and of national authorities competent for authorizing the allocation of the “UN” approval mark on packagings and tanks that

\* The present report was submitted after the deadline so as to include the most recent information.



meet the specifications of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* continued to be collected by the secretariat.

Many Governments and international organizations have revised or taken steps to revise existing national and international legislation to implement the *Globally Harmonized System* as soon as possible.

The Committee adopted amendments to the *Model Regulations* and the *Manual of Tests and Criteria*, which consist mainly of new or revised provisions concerning:

(a) Listing and classification of some existing and new dangerous substances and articles, related packing and test methods, and the revision of some packing and tank requirements;

(b) Electric storage systems (including modification of the lithium ion battery provisions and new provisions for sodium-ion batteries as well as battery-powered vehicles);

(c) Harmonization with the Regulations for the Safe Transport of Radioactive Material of the International Atomic Energy Agency;

(d) Requirements for the use of recycled plastics material for packagings of dangerous goods;

(e) Exemptions for nitrocellulose membrane filters used in rapid test devices such as those for (coronavirus disease) COVID-19 infections or other infectious diseases.

The Committee also adopted amendments to the *Globally Harmonized System* concerning, among other matters, the use of non-animal testing methods for classification of health hazards (in particular, serious eye damage/eye irritation (chap. 3.3) and respiratory or skin sensitization (chap. 3.4)); further rationalization of precautionary statements to improve comprehensibility for users while taking into account usability for labelling practitioners; and review of guidance in annexes 9 and 10 addressing classification of metals and metal compounds to ensure alignment with the long-term aquatic classification in chapter 4.1.

The Committee adopted a programme of work for the 2023–2024 biennium. The sessions of the Subcommittee of Experts on the Transport of Dangerous Goods, the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals and the Committee have been planned for that period, in accordance with Council resolution 1999/65.

The Committee is recommending a draft resolution on its work for adoption by the Council.

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## I. Draft resolution for adoption by the Economic and Social Council

1. The Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals recommends to the Economic and Social Council the adoption of the following draft resolution:

### **Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals**

*The Economic and Social Council,*

*Recalling* its resolutions 1999/65 of 26 October 1999 and [2021/13](#) of 8 June 2021,

*Having considered* the report of the Secretary-General on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals during the biennium 2021–2022,<sup>1</sup>

#### **A**

#### **Work of the Committee regarding the transport of dangerous goods**

*Recognizing* the importance of the work of the Committee for the harmonization of codes and regulations relating to the transport of dangerous goods,

*Bearing in mind* the need to maintain safety standards at all times and to facilitate trade, as well as the importance of these issues to the various organizations responsible for modal regulations, while meeting the growing concern for the protection of life, property and the environment through the safe and secure transport of dangerous goods,

*Bearing in mind also* the commitment by Member States to work for the full implementation by 2030 of the Sustainable Development Goals and related targets as agreed by the General Assembly in its resolution [70/1](#) of 25 September 2015, entitled “Transforming our world: the 2030 Agenda for Sustainable Development”, in particular target 12.4 related to the achievement of the environmentally sound management of chemicals and wastes through their life cycle in accordance with agreed international frameworks,

*Noting* the ever-increasing volume of dangerous goods being introduced into worldwide commerce and the rapid expansion of technology and innovation,

*Recalling* that, while the major international instruments governing the transport of dangerous goods by the various modes of transport and many national regulations are now better harmonized with the *Model Regulations* annexed to the recommendations of the Committee on the transport of dangerous goods, further work on harmonizing these instruments is necessary to enhance safety and to facilitate trade, and recalling also that uneven progress in the updating of national inland transport legislation in some countries of the world continues to present serious challenges to international multimodal transport,

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<sup>1</sup> [E/2023/56](#).

1. *Expresses its appreciation* for the work of the Committee of Experts on the Transport of Dangerous Goods and on the *Globally Harmonized System of Classification and Labelling of Chemicals* with respect to matters relating to the transport of dangerous goods, including their security in transport;
2. *Requests* the Secretary-General:
  - (a) To circulate the new and amended recommendations on the transport of dangerous goods<sup>2</sup> to the Governments of Member States, the specialized agencies, the International Atomic Energy Agency and other international organizations concerned;
  - (b) To publish the twenty-third revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* and the eighth revised edition of the *Manual of Tests and Criteria* in all the official languages of the United Nations, in the most cost-effective manner, no later than the end of 2023;
  - (c) To make those publications available in book and electronic format and on the website of the Economic Commission for Europe, which provides secretariat services to the Committee;
3. *Invites* all Governments, the regional commissions, the specialized agencies, the International Atomic Energy Agency and the other international organizations concerned to transmit to the secretariat of the Committee their views on the work of the Committee, together with any comments that they may wish to make on the recommendations on the transport of dangerous goods;
4. *Invites* all interested Governments, the regional commissions, the specialized agencies and the international organizations concerned to take into account the recommendations of the Committee when developing or updating appropriate codes and regulations;
5. *Requests* the Committee to study, in consultation with the International Maritime Organization, the International Civil Aviation Organization, the regional commissions and the intergovernmental organizations concerned, the possibilities of improving the implementation of the *Model Regulations* on the transport of dangerous goods in all countries for the purposes of ensuring a high level of safety and eliminating technical barriers to international trade, including through the further harmonization of international agreements or conventions governing the international transport of dangerous goods;
6. *Invites* all Governments, as well as the regional commissions and organizations concerned, the International Maritime Organization and the International Civil Aviation Organization to provide feedback to the Committee regarding differences between the provisions of national, regional or international legal instruments and those of the *Model Regulations*, in order to enable the Committee to develop cooperative guidelines for enhancing consistency between these requirements and reducing unnecessary impediments; to identify existing substantive and international, regional and national differences, with the aim of reducing those differences in modal treatment to the greatest extent practical and ensuring that, where differences are necessary, they do not pose impediments to the safe and efficient transport of dangerous goods; and to undertake an editorial review of the *Model Regulations* and various modal instruments with the aim of improving clarity, user friendliness and ease of translation;

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<sup>2</sup> See [ST/SG/AC.10/50/Add.1](#) and [ST/SG/AC.10/50/Add.2](#).

## **B**

### **Work of the Committee regarding the Globally Harmonized System of Classification and Labelling of Chemicals**

*Bearing in mind* that in paragraph 23 (c) of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation),<sup>3</sup> countries were encouraged to implement the *Globally Harmonized System of Classification and Labelling of Chemicals* as soon as possible with a view to having the system fully operational by 2008,

*Bearing in mind also* that the General Assembly, in its resolution 57/253 of 20 December 2002, endorsed the Johannesburg Plan of Implementation and requested the Economic and Social Council to implement the provisions of the Plan relevant to its mandate and, in particular, to promote the implementation of Agenda 21<sup>4</sup> by strengthening system-wide coordination,

*Bearing in mind further* the commitment by Member States to work for the full implementation by 2030 of the Sustainable Development Goals and related targets as agreed by the General Assembly in its resolution 70/1 of 25 September 2015, entitled “Transforming our world: the 2030 Agenda for Sustainable Development”, in particular target 12.4 related to the achievement of the environmentally sound management of chemicals and wastes through their life cycle in accordance with agreed international frameworks,

*Noting with satisfaction:*

(a) That the Economic Commission for Europe and all United Nations programmes and specialized agencies concerned with chemical safety in the field of transport or of the environment, in particular the International Maritime Organization, the International Civil Aviation Organization and the United Nations Environment Programme, have already taken appropriate steps to amend or update their legal instruments in order to give effect to the *Globally Harmonized System*,

(b) That the International Labour Organization, the Food and Agriculture Organization of the United Nations and the World Health Organization have also taken appropriate steps to adapt their chemical safety recommendations, codes and guidelines to the *Globally Harmonized System*, in particular in the areas of occupational health and safety, prevention of major industrial accidents, pesticide management and prevention and treatment of poisoning,

(c) That many Member States have already issued national legislation or standards implementing the *Globally Harmonized System*, or allowing its application, in one or several sectors other than transport,

(d) That work on the development or revision of national legislation, standards or guidelines to implement the *Globally Harmonized System* continues in other countries, while in some others activities related to the development of sectoral implementation plans or national implementation strategies are being conducted or are expected to be initiated,

(e) That a number of United Nations programmes and specialized agencies and regional organizations, in particular the United Nations Institute for Training and Research, the International Labour Organization, the World Health Organization, the

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<sup>3</sup> *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

<sup>4</sup> *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992*, vol. I, *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.

Economic Commission for Europe, the Asia-Pacific Economic Cooperation forum, the Organisation for Economic Co-operation and Development and the European Union, Governments and non-governmental organizations representing the chemical industry, have organized or contributed to multiple workshops, seminars and other capacity-building activities at the international, regional, subregional and national levels to raise awareness in the administration, health and industrial sectors and to prepare for or support the implementation of the *Globally Harmonized System*,

*Aware* that effective implementation will require further cooperation between the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals and the international bodies concerned, continued efforts by the Governments of Member States, cooperation with the industry and other stakeholders and significant support for capacity-building activities in countries with economies in transition and developing countries,

*Recalling* the particular significance of the Global Partnership for Capacity-building to Implement the Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations Institute for Training and Research, the International Labour Organization and the Organisation for Economic Co-operation and Development for building capacities at all levels,

1. *Commends* the Secretary-General on the publication of the ninth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals*<sup>5</sup> in the six official languages of the United Nations, electronically and in book form, and its availability, together with related informational material, on the website of the Economic Commission for Europe, which provides secretariat services to the Committee;

2. *Expresses its deep appreciation* to the Committee, the Commission and the United Nations programmes, specialized agencies and other organizations concerned for their fruitful cooperation and their commitment to the implementation of the *Globally Harmonized System*;

3. *Requests* the Secretary-General:

(a) To circulate the amendments<sup>6</sup> to the ninth revised edition of the *Globally Harmonized System* to the Governments of Member States, the specialized agencies and other international organizations concerned;

(b) To publish the tenth revised edition of the *Globally Harmonized System* in all the official languages of the United Nations in the most cost-effective manner, no later than the end of 2023, and to make it available in book and electronic format and on the website of the Commission;

(c) To continue to make information on the implementation of the *Globally Harmonized System* available on the website of the Commission;<sup>7</sup>

4. *Invites* Governments that have not yet done so to take the steps necessary to implement the *Globally Harmonized System* as soon as possible through appropriate national procedures and/or legislation and to keep them updated to take account of the recommendations made by the Committee every two years;

5. *Reiterates its invitation* to the regional commissions, United Nations programmes, specialized agencies and other organizations concerned to promote the implementation of the *Globally Harmonized System* and, where relevant, to amend their respective international legal instruments addressing transport safety, workplace

<sup>5</sup> United Nations publication, 2021.

<sup>6</sup> ST/SG/AC.10/50/Add.3.

<sup>7</sup> <https://unece.org/ghs-implementation-0>.

safety, consumer protection or the protection of the environment so as to give effect to the *Globally Harmonized System* through such instruments;

6. *Invites* Governments, the regional commissions, United Nations programmes, specialized agencies and other organizations concerned to provide feedback<sup>8</sup> to the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals on the steps taken for the implementation of the *Globally Harmonized System* in all relevant sectors, through international, regional or national legal instruments, recommendations, codes and guidelines, including, when applicable, information about the transitional periods for its implementation;

7. *Encourages* Governments, the regional commissions, United Nations programmes, specialized agencies and other relevant international organizations and non-governmental organizations, in particular those representing industry, to strengthen their support for the implementation of the *Globally Harmonized System* by providing financial contributions and/or technical assistance for capacity-building activities in developing countries and countries with economies in transition;

## **C**

### **Scope and programme of work of the Committee**

*Taking note* of the programme of work of the Committee for the biennium 2023–2024 as contained in paragraphs 50 to 55 of the report of the Secretary-General,<sup>9</sup>

*Noting* the relatively poor level of participation of experts from developing countries and countries with economies in transition in the work of the Committee and the need to promote their wider participation in its work,

*Noting also* that, following the reconfiguration of the Committee and the establishment of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals in accordance with resolution 1999/65 of 26 October 1999, the scope of the work of the Committee was extended to cover not only transport of dangerous goods but also implementation and updating of the *Globally Harmonized System*,

1. *Decides* to approve the programme of work of the Committee;
2. *Stresses* the importance of the participation of experts from developing countries and countries with economies in transition in the work of the Committee, calls in that regard for voluntary contributions to facilitate their participation, including through support for travel and daily subsistence, and invites Member States and international organizations in a position to do so to contribute;
3. *Requests* the Secretary-General to submit to the Economic and Social Council, at its 2025 session, a report on the implementation of the present resolution, the recommendations on the transport of dangerous goods and the *Globally Harmonized System of Classification and Labelling of Chemicals*;
4. *Decides* to rename the existing agenda sub-item from “Transport of dangerous goods” to “Transport of dangerous goods and globally harmonized system of classification and labelling of chemicals”, and decides to include the sub-item in the agenda of its 2025 session.

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<sup>8</sup> See <https://unece.org/transportdangerous-goods/ghs-implementation-information-submission-form>.

<sup>9</sup> E/2023/56.



## II. Implementation of Economic and Social Council resolution 2021/13

### A. Publications

2. As requested by the Economic and Social Council in its resolution 2021/13, the Secretary-General published the twenty-second revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, amendment 1 to the seventh revised edition of the *Manual of Tests and Criteria* and the ninth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals*. These revised editions were issued as United Nations publications in the six official languages of the United Nations and offered for sale as applicable in printed and/or electronic format.

3. The *Model Regulations*, the *Manual of Tests and Criteria* and the *Globally Harmonized System* are available online in the six official languages of the United Nations on the website of the Economic Commission for Europe. Editable electronic versions were made available to Governments, implementing specialized agencies and intergovernmental organizations, upon request.

### B. Implementation of the Recommendations on the Transport of Dangerous Goods: Model Regulations

4. In its resolution 2021/13, the Economic and Social Council invited all interested Governments, the regional commissions, the specialized agencies and the international organizations concerned to take into account the recommendations of the Committee, when developing or updating appropriate codes and regulations.

5. The provisions of the twenty-second revised edition of the *Model Regulations* have been incorporated into the following international instruments:

(a) International Maritime Organization (IMO): International Maritime Dangerous Goods Code, amendment 41–22 (mandatory application for the 167 contracting parties to the International Convention for the Safety of Life at Sea from 1 January 2024, with the possibility of application on a voluntary basis from 1 January 2023);

(b) International Civil Aviation Organization (ICAO): 2023–2024 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (mandatory application for the 193 contracting parties to the Convention on International Civil Aviation from 1 January 2023);

(c) International Air Transport Association: Dangerous Goods Regulations 2023 (sixty-fourth edition) (applicable from 1 January 2023 as a recommended standard for some 300 member airlines of the Association);

(d) Economic Commission for Europe: Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2023) (applicable from 1 January 2023, 54 contracting parties with the accession of Armenia and Uganda in 2022);

(e) Economic Commission for Europe: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN 2023) (applicable from 1 January 2023, 18 contracting parties);

(f) Intergovernmental Organization for International Carriage by Rail: Regulations concerning the International Carriage of Dangerous Goods by Rail

(appendix C to the Convention concerning International Carriage by Rail) (RID 2023) (applicable from 1 January 2023, 46 contracting parties).

6. In the States members of the European Union, the provisions of the Agreement concerning the International Carriage of Dangerous Goods by Road, the Regulations concerning the International Carriage of Dangerous Goods by Rail and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, as amended, have to be made applicable to domestic traffic at the latest by 30 June 2023.<sup>10</sup>

7. On 22 August 2022, Argentina incorporated into its national laws the agreement implemented by the Southern Common Market (MERCOSUR) countries on 4 December 2019 to facilitate the inland transportation of dangerous goods (Acuerdo para la Facilitación del Transporte de Mercancías Peligrosas en el MERCOSUR) and which was based on the seventeenth revised edition of the *Model Regulations*, the Regulations concerning the International Carriage of Dangerous Goods by Rail and the Agreement concerning the International Carriage of Dangerous Goods by Road. The MERCOSUR agreement is expected to be revised every four years.

8. The Andean Community (Bolivia (Plurinational State of), Colombia, Ecuador and Peru) have developed draft regulations based on the thirteenth revised edition of the *Model Regulations*, the Agreement concerning the International Carriage of Dangerous Goods by Road (2005) and the Regulations concerning the International Carriage of Dangerous Goods by Rail (2005).

9. In 1997, the Economic and Social Commission for Asia and the Pacific published the *Guidelines for the Establishment of National and Regional Systems for Inland Transportation of Dangerous Goods*, recommending the implementation of the recommendations on the transport of dangerous goods. The transport ministers of the Association of Southeast Asian Nations (ASEAN) signed, on 20 September 2002, Protocol No. 9 to the ASEAN Framework Agreement on the Facilitation of Goods in Transit, which was ratified by the Governments of all countries concerned and entered into force on 13 September 2017. The Protocol provides for the simplification of procedures and requirements for the transport of dangerous goods in ASEAN countries, using the *Model Regulations* and a former version of the Agreement concerning the International Carriage of Dangerous Goods by Road. Annex 1 (Carriage of dangerous goods) to the Greater Mekong Subregion Cross-Border Transport Facilitation Agreement is in force and also requires the use of the *Model Regulations* and the Agreement concerning the International Carriage of Dangerous Goods by Road for cross-border transport.

10. In 1999, the Central African Economic and Monetary Community (Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea and Gabon) adopted regulations concerning the transport of dangerous goods by road which are partly based on former provisions of the Agreement concerning the International Carriage of Dangerous Goods by Road but which are not fully in line with the *Model Regulations*.

11. The examples below show different levels of implementation, from the seventeenth revised edition of the *Model Regulations* (published in 2011) to the twenty-second revised edition (published in 2021):

- European Union member States and Iceland, Liechtenstein, Norway and Switzerland, pursuant to European Union directives (see para. 6 above), are

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<sup>10</sup> Commission delegated Directive (EU) 2022/2407 of 20 September 2022 amending the annexes to Directive 2008/68/EC of the European Parliament and of the Council to take into account scientific and technical progress (*Official Journal of the European Union*, L 317/64, 9 December 2022).

bound to the application, before 30 June 2023, of the provisions of the 2023 editions of the Agreement concerning the International Carriage of Dangerous Goods by Road, the Regulations concerning the International Carriage of Dangerous Goods by Rail and, where relevant, the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, to domestic transport by road, rail and inland waterways respectively, implying implementation of the twenty-first revised edition of the *Model Regulations*.

- Russian Federation: the provisions of the 2023 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road are to be applied to domestic traffic pursuant to Ordinance No. 2200 of 21 December 2020 requiring the application of annexes A and B of the Agreement as amended on 30 November 2021 and 30 December 2022; for rail transport, regulations (Agreement on International Railway Freight Communications) are based on the twenty-first revised edition of the *Model Regulations* and are expected to be updated to take into account the twenty-second revised edition for application as from 1 July 2023.
- United States of America: Title 49 of the Code of Federal Regulations is normally updated on a yearly basis and has been updated to reflect the twenty-second revised edition of the *Model Regulations*, with very few exceptions.
- Canada: regulations reflect the twenty-first revised edition, and the proposed amendments for alignment with the provisions of the twenty-second revised edition of the *Model Regulations* are in the process of implementation.
- Australia: the Australian Code for the Transport of Dangerous Goods by Road and Rail (edition 7.8) is based on the twenty-second revised edition of the *Model Regulations*. It may be used instead of the previous edition (7.7) from 1 April 2023 and will become compulsory from 1 April 2024.
- Thailand: regulations for road transport are based on the 2017 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road (based on the nineteenth revised edition of the *Model Regulations*). These regulations currently focus on the implementation of training for drivers of vehicles carrying dangerous goods, and the application of approval certificates for vehicles carrying dangerous goods is planned for 2024.
- China: the two national standards, namely the list of dangerous goods (GB12268-2012) and classification and code of dangerous goods (GB6944-2012), which have been in force since 1 December 2012, refer to the sixteenth revised edition of the *Model Regulations* and the fifth revised edition of the *Manual of Tests and Criteria*. The two standards are in the process of revision, and the upcoming revised edition will align with the twenty-second revised edition of the *Model Regulations* and the seventh revised edition of the *Manual of Tests and Criteria*. The national regulations concerning road transportation of dangerous goods have been implemented as from 1 December 2018 and make reference to the eighteenth revised edition of the *Model Regulations*, the sixth revised edition of the *Manual of Tests and Criteria* and the 2015 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road.
- Colombia: pursuant to Decree No. 1079 of 2015, domestic transport of dangerous goods is based on the provisions of the nineteenth revised edition of the *Model Regulations*.
- Cambodia: national regulations are based on Protocol No. 9 to the ASEAN Framework Agreement on the Facilitation of Goods in Transit, based on the 2017 edition of the Agreement concerning the International Carriage of

Dangerous Goods by Road. Work is under way to update the regulations to include training of relevant personnel.

- Lao People’s Democratic Republic: the Government is in the process of issuing national legislation based on the provisions of the 2017 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road.
- Viet Nam: the Government issued in 2020 a new decree to update the list of dangerous goods and to further amend the provisions on the basis of the 2017 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road.
- Republic of Korea: the two national standards are the Dangerous Goods Safety Management Act for the transport of dangerous goods by road, which is based on the nineteenth revised edition of the *Model Regulations*, and the Ship Safety Act for the transport of dangerous goods by sea, which is based on the twentieth revised edition of the *Model Regulations*.
- Brazil: the Government has published a new revision of its national law regulating the transport of dangerous goods, which is based on the twenty-second revised edition of the *Model Regulations* and which will enter into force on 1 June 2023.
- Chile: on 21 July 2022, national legislation on the transport of dangerous goods was updated to incorporate by direct reference parts 3 and 5 of the *Model Regulations*.
- Zambia: national standards are based on the seventeenth revised edition of the *Model Regulations* and on the provisions of the 2005 edition of the Agreement concerning the International Carriage of Dangerous Goods by Road. An update of these standards is in progress.

12. Although the international transport of dangerous goods is facilitated by the harmonization of the major international conventions and agreements concerning the transport of dangerous goods with the *Model Regulations*, and their simultaneous updating, the fact that certain national regulations applicable to inland transport are not brought into line simultaneously, or completely, is still causing problems in international trade, in particular in the case of multimodal transport. For that reason, the Committee has maintained, in its draft programme of work, an item on the global harmonization of regulations on the transport of dangerous goods with the *Model Regulations*. Countries that are not contracting parties to the Regulations concerning the International Carriage of Dangerous Goods by Rail, the Agreement concerning the International Carriage of Dangerous Goods by Road and/or the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways have been invited to notify, on a voluntary basis, their national implementation status of the *Model Regulations* to the secretariat.

### **C. Mutual administrative support for monitoring compliance of “UN”-marked containment systems with the Recommendations on the Transport of Dangerous Goods: Model Regulations**

13. In its resolution [2015/7](#), the Council requested the Secretary-General:

- (a) To seek information from all States Members of the United Nations, and other States if appropriate, on the contact details of:

- (i) The competent authorities responsible for national regulations applicable to the transport of dangerous goods by modes of transport other than by air or by sea;
- (ii) The competent authorities, and their country identification codes, allowing, in the name of the State, the allocation of the “UN” mark on packagings, pressure receptacles, bulk containers and portable tanks;
- (b) To develop and maintain up to date the lists of contact details;
- (c) To make this information available on the website of the Economic Commission for Europe.

14. The information collected so far is available on the relevant web page of the Economic Commission for Europe.<sup>11</sup> The Council invited all Member States to provide the requested information. Member States that have not yet provided the information can do so through the link on the website.

#### **D. Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals**

15. In paragraph 23 (c) of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation), countries were encouraged to implement the Globally Harmonized System of Classification and Labelling of Chemicals as soon as possible with a view to having the system fully operational by 2008.

16. Since the *Globally Harmonized System* addresses several sectors (transport, consumers, occupational health and safety and the environment), its effective implementation requires significant efforts by Member States to amend many existing legal texts concerning chemical safety in each sector or to enact new legislation.

17. In the transport sector, the *Model Regulations* have already been updated to reflect the relevant provisions of the ninth revised edition of the *Globally Harmonized System*. All the major international instruments listed in paragraph 5 above have also been amended accordingly for effective application in 2023, as have all national regulations that are based on those instruments or that are regularly updated based on the *Model Regulations*.

18. In the other sectors, the situation is more complex, because implementation requires the amendment or revision of a considerable number of different legal texts and guidelines for application.

19. Since the adoption of the *Globally Harmonized System* in 2002, many countries have issued legal instruments or national standards implementing it (or allowing for its application) in one or several sectors. Those that have already implemented the *Globally Harmonized System* continue to update their implementing legal instruments or national standards periodically, in accordance with the provisions of the revised editions of the *Globally Harmonized System* published every two years, to take account of the recommendations of the Committee. Work on the revision and amendment of legal texts, standards and guidelines to implement the *Globally Harmonized System* continues in other countries.

20. During the biennium 2021–2022, several countries continued or announced the development of draft national standards or legislation aimed at aligning their provisions with those of the most recent versions of the *Globally Harmonized System*

<sup>11</sup> <https://unece.org/competent-authorities>.

or at implementing them for the first time. These include Argentina, Benin, Brazil, China, Ghana, Kenya, Kiribati, Rwanda, the United States of America and Zambia. The following is a summary of implementation actions at the national and regional levels completed during the biennium 2021–2022:

(a) At the national level:

(i) Australia: in January 2021, Safe Work Australia started a two-year transition period from the third to the seventh revised editions of the *Globally Harmonized System* that ended on 31 December 2022 for effective implementation as from 1 January 2023;

(ii) Brazil: work is ongoing to update the standards implementing the *Globally Harmonized System* to reflect the seventh revised edition;

(iii) Canada: amendments to the Hazardous Products Act and schedule 2 to the Hazardous Products Regulations for alignment with the provisions of the seventh and eighth revised editions (as applicable) of the *Globally Harmonized System* entered into force on 15 December 2022, with a three-year transitional period for implementation ending on 14 December 2025;

(iv) Chile: the Ministry of Health approved a regulation on the classification, labelling and notification of hazardous substances and mixtures, which was published in the Official Journal in February 2021. The regulation provides for the implementation of the provisions of the seventh revised edition of the *Globally Harmonized System*;

(v) Colombia: the Ministries of Labour and Health and Social Protection issued in April 2021 a resolution defining actions to be taken by employers to implement the *Globally Harmonized System* at the workplace in accordance with Decree No. 1496 of 2018;

(vi) Japan: the national standards aligning classification and hazard communication of hazardous chemicals with the provisions of the sixth revised edition of the *Globally Harmonized System* became applicable in 2022;

(vii) Malaysia: in 2022, the Department of Occupational Safety and Health issued for public consultation the draft amendments to the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013, for alignment with the eighth revised edition of the *Globally Harmonized System*;

(viii) New Zealand: the Hazardous Substances (Hazard Classification) Notice 2020, implementing the provisions of the seventh revised edition of the *Globally Harmonized System*, took effect on 30 April 2021 and replaced the hazard classification framework and related acts and regulations that were in force since 2001;

(ix) South Africa: on 29 March 2021 the South African Department of Employment and Labour promulgated into law the Regulations for Hazardous Chemical Agents under the Occupational Health and Safety Act 1993, for implementation as from 29 September 2022. These regulations make the provisions of the *Globally Harmonized System* mandatory for classification, labelling and safety data sheets for hazardous chemicals at the workplace;

(x) Thailand: a ministerial notification from the Ministry of Agriculture and Cooperatives (Department of Fisheries) was issued in November 2021, implementing the provisions of the *Globally Harmonized System* for chemicals regulated under the Hazardous Substance Act with a transitional period for

implementation of one year for substances (until December 2022) and five years for mixtures (until December 2026);

(xi) Ukraine: the law on chemical safety and management of chemical products, implementing the provisions of the *Globally Harmonized System*, entered into force in December 2022, with a transitional period for implementation ending on 29 June 2024;

(b) At the regional level:

(i) MERCOSUR: in 2021, an action plan for 2021–2024 on hazardous chemicals was agreed by MERCOSUR working subgroup 6 on the environment, with the aim of making progress towards regulatory convergence within MERCOSUR States and strengthening *Globally Harmonized System* implementation in the region;

(ii) Eurasian Economic Union (Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russian Federation): the Eurasian Economic Union is working towards the regional implementation of the provisions of the *Globally Harmonized System*, through implementation of the Eurasian Economic Commission technical regulation on the safety of chemical products (technical regulation TR EAEU 041/2017);

(iii) European Union: the European Union continued to revise Regulation (EC) No. 1272/2008 for the purpose of its adaptation to technical and scientific progress (including, when appropriate, its alignment with the provisions of the most recent revised editions of the *Globally Harmonized System*). The seventeenth and eighteenth adaptations to technical progress were published on 28 May 2021 and 3 May 2022, respectively. The European Union legislation is applied in the 27 States members of the Union, as well as those countries that are part of the European Economic Area Agreement (Iceland, Liechtenstein and Norway). Although not part of the European Economic Area Agreement, Switzerland also keeps its chemicals legislation harmonized with that of the European Union.

21. In addition to implementation at the country level, international organizations and United Nations programmes and specialized agencies continue to develop, amend or revise their international instruments, guidance and recommendations dealing with chemical safety (in particular those addressing pesticide management; occupational safety and health; characterization of wastes; and prevention of major industrial accidents) to give effect to the *Globally Harmonized System*, as follows:

(a) Pesticide management:

- Since 2009, the World Health Organization (WHO) recommended classification of pesticides by hazard and guidelines to classification incorporate the criteria for the *Globally Harmonized System* to determine pesticides' acute oral and dermal toxicity. The latest revision of the WHO recommended classification was conducted in 2019 and includes approximately 100 new pesticide entries, provides classification for about 600 active ingredients and is available in several languages.
- The International Code of Conduct on Pesticide Management: Guidance on Good Labelling Practice for Pesticides (second revision), prepared by the Food and Agriculture Organization of the United Nations (FAO) and WHO, was released in 2022. It provides guidance on defining or revising national pesticide labelling requirements and on reviewing the design and content of pesticide labels and further stresses the

importance of adopting the *Globally Harmonized System* and using it for pesticide labelling.

- FAO, WHO and the United Nations Environment Programme are working together in the context of the preparatory work for the Strategic Approach and the sound management of chemicals and waste beyond 2020 to address and reduce risks from highly hazardous pesticides. Three out of the eight criteria used by FAO and WHO to define highly hazardous pesticides relate directly to the *Globally Harmonized System*.

(b) Occupational safety and health:

- WHO and International Labour Organization (ILO) International Chemical Safety Cards continued to be developed and updated in accordance with the provisions of the *Globally Harmonized System*. Cards on about 1,700 chemicals are already freely available in 15 languages, and about 694 have been reviewed since 2006 to take into account the classification and labelling criteria of the *Globally Harmonized System*.
- ILO continues to actively promote the implementation of the *Globally Harmonized System* at the workplace worldwide. In 2021 it published a report entitled *The GHS in the World of Work: Mapping Synergies between ILO Instruments and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*. The report identifies synergies between the *Globally Harmonized System* and no less than 28 ILO instruments (e.g. conventions, recommendations, codes of practice) addressing hazard characterization and hazard communication of chemicals, safety in the use of chemicals at work, workers' rights, prevention of major industrial accidents, occupational safety and health (including exposure to specific chemicals), air pollution and chemical safety in agriculture, in construction and in mining. In 2022, ILO produced a brochure on the *Globally Harmonized System* and how it relates to occupational safety and health and international labour standards, to support awareness-raising and promotion efforts among its member States and global constituents. The brochure is available in Arabic, English, French, Russian and Spanish.

(c) Characterization of wastes:

- Work on the review of annex III to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal continued during 2021–2022 and is expected to continue beyond 2023. Annex III lists the hazard characteristics that need to be taken into account to determine whether a waste stream or a waste containing specific constituents constitutes a hazardous waste falling within the scope of the Convention. The currently ongoing review is considering, among other aspects, whether and to what extent the criteria defining the hazardous characteristics can be aligned with that of the *Globally Harmonized System*.

22. From a broader international perspective, implementation of the *Globally Harmonized System* has been identified as one of the indicators to be considered as part of the recommendations currently under discussion during the intersessional process for the development of a new overarching strategic approach towards the sound management of chemicals and waste beyond 2020 in support of the 2030 Agenda for Sustainable Development. Full or partial implementation of the *Globally Harmonized System* is included as one of the process indicators associated with



targets A1, B1, B2, B6 and D8 of the draft strategic approach under development.<sup>12</sup> The final recommendations are expected to be submitted for consideration and adoption at the fifth session of the International Conference on Chemicals Management, to be held in September 2023.

23. The information provided in paragraphs 20 and 21 above is not exhaustive. Additional details are available on the website of the Commission.<sup>13</sup> An online form through which updates can be submitted directly to the secretariat is also available.<sup>14</sup> All countries are invited to provide information on updates, as indicated in paragraph 6 of part B of the draft resolution contained in paragraph 1 above.

24. Regarding capacity-building and training, the Subcommittee was informed about several activities and projects related to the implementation of the *Globally Harmonized System* that were completed, initiated or continued during the period 2021–2022, with the logistical, technical or financial support of Member States, United Nations system organizations, institutes and programmes, intergovernmental organizations, government agencies and/or the private sector.

25. These activities and projects included training and technical support for the development of implementation road maps in Ecuador and El Salvador; development of legislation in Benin, Ghana and Kiribati; training of senior officials working in implementation of the *Globally Harmonized System* in Kenya, South Africa, Uganda, the United Republic of Tanzania and Zambia; and an inception workshop in Côte d'Ivoire, Ghana, Kenya and the United Republic of Tanzania to develop legislation to implement the *Globally Harmonized System*.

26. The Subcommittee, as well as the United Nations Institute for Training and Research (UNITAR) and ILO as the Subcommittee's focal points for training and capacity-building, continued to develop and update guidance, training and resource materials to promote and facilitate implementation of the *Globally Harmonized System*. During 2021–2022, these included:

(a) Amendments to the provisions of the *Globally Harmonized System* and guidance adopted by the Subcommittee to facilitate their understanding and implementation. Additional guidance developed by the Subcommittee is publicly available on the website of the Commission;<sup>15</sup>

(b) E-learning courses on classification and labelling of chemicals in accordance with the *Globally Harmonized System*, as well as technical training webinars focusing on the preparation of safety data sheets, labelling and information search to supplement the e-learning courses, developed and conducted by UNITAR in English and Spanish;

(c) Under the Global Partnership to Implement the Globally Harmonized System, led by ILO, the Organisation for Economic Co-operation and Development (OECD) and UNITAR,<sup>16</sup> publication of the following documents:

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<sup>12</sup> Available at <http://www.saicm.org/Beyond2020/IntersessionalProcess/FourthIntersessionalMeeting/tabid/8226/language/en-US/Default.aspx>.

<sup>13</sup> <https://unece.org/ghs-implementation-0>.

<sup>14</sup> See <https://unece.org/transportdangerous-goods/ghs-implementation-information-submission-form>.

<sup>15</sup> <https://unece.org/transportdangerous-goods/capacity-building-tools-and-guidance>.

<sup>16</sup> See <https://unitar.org/sustainable-development-goals/planet/our-portfolio/globally-harmonized-system-classification-and-labelling-chemicals/global-partnership-implement-ghs>.

- (i) “GHS implementation: experiences and lessons learned”, 2021;
- (ii) *Options for Legislation and Standard Setting to Implement the GHS: A Guidance Document to Support Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals*, October 2021 edition;
- (iii) *Developing a National GHS Implementation Strategy: A Guidance Document to Support Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*, 2022 edition.

27. The Subcommittee continued its cooperation with treaty bodies that administer certain international conventions dealing with specific aspects of chemical safety to facilitate the implementation of the *Globally Harmonized System* through such conventions (the Basel Convention; the Montreal Protocol on Substances that Deplete the Ozone Layer; the Stockholm Convention on Persistent Organic Pollutants; the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and the Convention on the Transboundary Effects of Industrial Accidents (Economic Commission for Europe)).

28. Information on available capacity-building resources on the *Globally Harmonized System*, tools and guidance, as well as on its implementation through the treaty bodies mentioned in paragraph 27 above is available on the website of the Commission.<sup>17</sup>

### **III. Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals during the biennium 2021–2022**

#### **A. Meetings**

29. Owing to the continued impact of the coronavirus disease (COVID-19) pandemic and the related containment measures implemented worldwide, such as travel restrictions and lockdowns, the session of the Committee of Experts and its two subcommittees during 2021 and 2022 continued to be held in a hybrid format, allowing for online or in-person participation. By the end of 2022, the secretariat had been informed that the United Nations Office at Geneva would be unable to continue assuming the additional costs related to the servicing of virtual meetings with interpretation as from 1 January 2023. Therefore, the sessions of the Committee and its subcommittees for 2023–2024 will be held in person.

30. The following official sessions with interpretation were held during the biennium 2021–2022:

(a) Subcommittee of Experts on the Transport of Dangerous Goods: fifty-eighth session, 28 June–2 July 2021 ([ST/SG/AC.10/C.3/116](#)); fifty-ninth session, 29 November–8 December 2021 ([ST/SG/AC.10/C.3/118](#) and [ST/SG/AC.10/C.3/118/Add.1](#)); sixtieth session, 27 June–6 July 2022 ([ST/SG/AC.10/C.3/120](#) and [ST/SG/AC.10/C.3/120/Add.1](#)); sixty-first session, 28 November–6 December 2022 ([ST/SG/AC.10/C.3/122](#) and [ST/SG/AC.10/C.3/122/Add.1](#));

(b) Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: fortieth session, 5–7 July 2021 ([ST/SG/AC.10/C.4/80](#)); forty-first session, 8–10 December 2021 ([ST/SG/AC.10/C.4/82](#));

<sup>17</sup> <https://unece.org/competent-authorities>.

forty-second session, 8–10 July 2022 (ST/SG/AC.10/C.4/84); forty-third session, 7–9 December 2022 (ST/SG/AC.10/C.4/86);

(c) Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals: eleventh session, 9 December 2022 (ST/SG/AC.10/50 and ST/SG/AC.10/50/Add.1–3).

31. The following 27 countries participated in the work of the Committee as full members of either or both of the subcommittees: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, Mexico,<sup>18</sup> Netherlands, New Zealand,<sup>19</sup> Norway, Poland, Republic of Korea, Russian Federation, Serbia,<sup>19</sup> South Africa, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America and Zambia.

32. The following countries did not participate: India and Morocco, full members of the Subcommittee of Experts on the Transport of Dangerous Goods; Denmark, Greece, Ireland, Nigeria, Qatar, Senegal and Ukraine, full members of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals; and Czechia, Iran (Islamic Republic of), Kenya and Portugal, full members of both subcommittees.

33. The Governments of Chile, Latvia, Hungary, Luxembourg,<sup>18</sup> Myanmar,<sup>19</sup> New Zealand,<sup>19</sup> the Philippines, the Republic of Moldova, Switzerland and Türkiye were represented by observers. The European Union, 7 specialized agencies and intergovernmental organizations and 43 non-governmental organizations also participated.

34. Liaison was maintained with the international bodies or organizations responsible for individual modes of transport, in particular the Economic Commission for Europe, ICAO, IMO and the Intergovernmental Organization for International Carriage by Rail.

35. The Committee paid special attention to the coordination of its own activities with those of other international organizations whose activities impinge on the field of transport of dangerous goods or of classification and labelling of chemicals, such as FAO, the International Atomic Energy Agency, the Universal Postal Union, ILO, WHO, UNITAR and OECD, to ensure that their work would complement, rather than duplicate or clash with, its own activities and recommendations.

36. Secretariat services were provided by the secretariat of the Economic Commission for Europe.

## **B. Work of the Subcommittee of Experts on the Transport of Dangerous Goods**

37. During the biennium 2021–2022, the Subcommittee discussed various questions related to its terms of reference, in accordance with the programme of work as set out in the previous report of the Secretary-General on the work of the Committee of Experts (E/2021/10, para. 46 (a)).

38. On the basis of that work, the Committee adopted a set of amendments to the *Model Regulations*, including:

<sup>18</sup> Subcommittee of Experts on the Transport of Dangerous Goods only.

<sup>19</sup> Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals only.

- (a) New or amended UN numbers in the dangerous goods list;
- (b) New or amended provisions, including:
  - (i) Changes to the provisions for the transport of battery-powered vehicles;
  - (ii) Provisions to allow for the transport of several compressed gases in accordance with the limited quantity provisions;
  - (iii) Specific concentration limits for ammonium nitrate hot concentrated solutions;
  - (iv) Exemptions for nitrocellulose membrane filters used in rapid test devices such as those used for pregnancy tests and COVID-19 or other infectious diseases;
  - (v) A clarification concerning pharmaceutical products (such as vaccines) that are packed in a form ready to be administered;
  - (vi) Multiple changes to clarify existing provisions;
- (c) New or amended definitions addressing recycled plastics materials, pyrotechnic substances, degree of filling, explosive or pyrotechnic effects and metal powders;
  - (d) Updates to the table of organic peroxides;
  - (e) Updates to references to standards;
  - (f) Multiple editorial amendments including a comprehensive editorial review of packing instructions.

39. The Committee also adopted amendments to the *Manual of Tests and Criteria*, consisting mainly of:

- (a) An exemption of the self-heating test for organic peroxides and polymerizing substances to avoid false positives;
- (b) A recommendation to use close-cup tests over open-cup tests for determining flash points;
- (c) New provisions for the testing of sodium-ion batteries;
- (d) Amendments to the classification of desensitized explosives according to the *Globally Harmonized System*;
- (e) Other clarifications and corrections.

40. The Subcommittee adopted an update of the guiding principles intended to provide an explanation of the rationale behind the provisions contained in the *Model Regulations* and to guide regulators when assigning transport requirements to specific dangerous goods.

41. On the issue of possible further measures to facilitate global harmonization of regulations on the transport of dangerous goods with the *Model Regulations*, already discussed in previous bienniums (see also para. 12 above), additional efforts should be made to improve harmonization at the global level. Governments and international organizations concerned are invited to provide feedback by drawing attention to requirements in their national, regional or international instruments that deviate from the *Model Regulations*.

42. Upon the invitation of the Council, the Subcommittee agreed to include on its agenda for 2023–2024 a new item on the 2030 Agenda. The work of the Subcommittee builds on best practices, science, data, evidence, technical expert analysis and the interlinkages across the Sustainable Development Goals. It supports the

implementation of the 2030 Agenda and is aligned with its Goals and targets, in particular Goals 3, 6, 8, 12, 13, 14 and 17.<sup>20</sup>

43. The action recommended by the Committee to be taken by the Economic and Social Council with respect to the work of the Subcommittee of Experts on the Transport of Dangerous Goods is reflected in part A, paragraphs 1 to 6, of the draft resolution contained in paragraph 1 of the present report.

### C. Work of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

44. During the biennium 2021–2022, the Subcommittee discussed various questions, in accordance with its programme of work as set out in the previous report of the Secretary-General on the work of the Committee of Experts (E/2021/10, para. 46 (b)).

45. On the basis of that work, the Committee adopted amendments to the ninth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals* intended to update, clarify or complement the *Globally Harmonized System* concerning, among other matters: the use of non-animal testing methods for classification of health hazards (in particular, serious eye damage/eye irritation (chap. 3.3) and respiratory or skin sensitization (chap. 3.4)); further rationalization of precautionary statements to improve comprehensibility for users while taking into account usability for labelling practitioners; and review of guidance in annexes 9 and 10 addressing classification of metals and metal compounds to ensure alignment with the long-term aquatic classification in chapter 4.1.

46. The Subcommittee kept under review progress made in the implementation of the *Globally Harmonized System* on the basis of reports submitted by its members and participating intergovernmental and non-governmental organizations. A summary is provided in paragraphs 20 and 21 above.

47. The Subcommittee continued to cooperate, when necessary, with treaty bodies established under international conventions concerning chemical safety to promote the implementation of the *Globally Harmonized System* through such conventions (see also para. 27 above).

48. Following the request from the Council to its subsidiary bodies, the Subcommittee conducted in 2021 an overview of its work and explored its linkages to the 2030 Agenda.<sup>21</sup> In addition, as a follow-up to the work of the Council on the review of the work of its subsidiary bodies, the Subcommittee agreed to include a standing item on its agenda for 2023–2024 on the implementation of the 2030 Agenda and the work of the Council. A summary of the outcome of the overview, as well as the Sustainable Development Goals identified as most relevant to the work of the Committee, is available on the website of the Commission.<sup>22</sup>

49. The action recommended by the Committee to be taken by the Economic and Social Council with respect to the work of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals is reflected in part B, paragraphs 1 to 7, of the draft resolution contained in paragraph 1 of the present report.

<sup>20</sup> More detailed information on contributions to the 2030 Agenda is available at [https://unece.org/transport/dangerous-goods/ecosoc-bodies-dealing-chemicals-safety#accordion\\_8](https://unece.org/transport/dangerous-goods/ecosoc-bodies-dealing-chemicals-safety#accordion_8).

<sup>21</sup> See <https://unece.org/sites/default/files/2021-11/UN-SCEGHS-41-INF05e.pdf>.

<sup>22</sup> [https://unece.org/transport/dangerous-goods/ecosoc-bodies-dealing-chemicals-safety#accordion\\_8](https://unece.org/transport/dangerous-goods/ecosoc-bodies-dealing-chemicals-safety#accordion_8).

#### IV. Programme of work and schedule of meetings for the biennium 2023–2024

50. The Committee agreed that the programme of work for the biennium 2023–2024 should be as follows:

- (a) Subcommittee of Experts on the Transport of Dangerous Goods:
  - (i) Explosives and related matters (including review of test series 6; improvement of test series 8; review of tests in parts I, II and III of the *Manual of Tests and Criteria*; United Nations standard detonator; energetic samples; review of packaging and transport requirements for ammonium nitrate emulsions; electrification and alternative fuels and how they will affect transport of explosives);
  - (ii) Listing, classification and packing (including amendments for an adequate classification of chlorophenols);
  - (iii) Electric storage systems (including testing of lithium batteries; hazard-based system for classification of lithium batteries; transport provisions; damaged or defective lithium batteries; and sodium-ion batteries);
  - (iv) Transport of gases (including global recognition of United Nations and non-United Nations pressure receptacles; limited quantities for division 2.2);
  - (v) Miscellaneous proposals of amendments to the *Model Regulations* (including marking and labelling; packagings, including the use of recycled plastics material; portable tanks);
  - (vi) Global harmonization of transport of dangerous goods regulations with the *Model Regulations*;
  - (vii) Cooperation with the International Atomic Energy Agency;
  - (viii) Guiding principles for the *Model Regulations*;
  - (ix) Issues relating to the *Globally Harmonized System* (including testing of oxidizing substances; simultaneous classification in physical hazards and possible combination of hazards);
  - (x) Unified interpretations of the *Model Regulations*;
  - (xi) Implementation of the *Model Regulations*;
  - (xii) Dangerous goods safety training and capacity-building;
  - (xiii) 2030 Agenda for Sustainable Development;
  - (xiv) Opportunities to enhance operational efficiency and inclusiveness;
- (b) Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals:
  - (i) Classification criteria and related hazard communication, including:
    - a. Tests for oxidizing liquids and oxidizing solids;
    - b. Use of non-animal testing methods for classification of health and environmental hazards;
    - c. Classification criteria for germ cell mutagenicity;
    - d. Practical classification issues;
    - e. Nanomaterials;

- f. Simultaneous classification in physical hazard classes and precedence of hazards;
  - g. Potential hazard issues and their presentation in the *Globally Harmonized System*;
- (ii) Other hazard communication issues, including:
- a. Practical labelling issues;
  - b. Improvement of annexes 1 to 3 and further rationalization of precautionary statements;
  - c. Hazard communication for gases addressed in the Montreal Protocol and other conventions;
- (iii) Implementation issues, including:
- a. Assessing the possible development of a list of chemicals classified according to the *Globally Harmonized System*;
  - b. Facilitating the coordinated implementation of the *Globally Harmonized System* in countries and monitoring its status of implementation;
  - c. Cooperating with other bodies or international organizations responsible for the administration of international agreements and conventions dealing with the management of chemicals so as to give effect to the *Globally Harmonized System* through such instruments;
- (iv) Guidance on the application of the criteria of the *Globally Harmonized System*, including the development of examples illustrating application of criteria and any related hazard communication issues, as needed;
- (v) Capacity-building, including:
- a. Reviewing reports on training and capacity-building activities;
  - b. Providing assistance to United Nations programmes and specialized agencies involved in training and capacity-building activities, such as UNITAR, ILO, FAO and WHO/International Programme on Chemical Safety, through the development of guidance materials, advice with respect to their training programmes and identification of available expertise and resources.

51. Bearing in mind that, in accordance with Council resolution 1999/65, the maximum number of meeting days allocated to the Committee and its subsidiary bodies is 38 (76 meetings), the Committee agreed that the schedule of meetings for the period 2023–2024 should be as set out below.

52. In 2023, the meetings will be held on the following dates:

- 3–7 July 2023: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-second session (10 meetings)
- 10–12 (morning) July 2023: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-fourth session (5 meetings)

- 27 November–6 December (morning)<sup>23</sup> 2023: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-third session (15 meetings)
  - 6 (afternoon)<sup>23</sup>–8 December 2023: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-fifth session (5 meetings)
53. There will be a total number of 35 meetings held in 2023, as follows:
- Subcommittee of Experts on the Transport of Dangerous Goods: 25 meetings
  - Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: 10 meetings
54. In 2024, the meetings will be held on the following dates:
- 24 June–3 July (morning),<sup>23</sup> 2024: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-fourth session (15 meetings)
  - 3 (afternoon)<sup>23</sup>–5 July 2024: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-sixth session (5 meetings)
  - 25 November–3 December 2024: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-fifth session (14 meetings)
  - 4–6 December (morning) 2024: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-seventh session (5 meetings)
  - 6 December (afternoon) 2024: Committee of Experts, twelfth session (1 meeting)
55. There will be a total of 40 meetings held in 2024, as follows:
- Subcommittee of Experts on the Transport of Dangerous Goods: 29 meetings
  - Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: 10 meetings
  - Committee of Experts: 1 meeting
56. Action recommended by the Committee of Experts to be taken by the Economic and Social Council with respect to its programme of work is reflected in part C, paragraphs 1 to 4, of the draft resolution contained in paragraph 1 of the present report.
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<sup>23</sup> With the possibility for both subcommittees to combine their meeting allotment and meet jointly for the entire day on 6 December 2023 and 3 July 2024.