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Agenda item 19 (l)

**Economic and environmental questions: transport  
of dangerous goods and the Globally Harmonized  
System of Classification and Labelling of Chemicals**

## **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 2023–2024 and the implementation of Economic and Social Council resolution [2023/5](#).

In accordance with that resolution, the secretariat has published the twenty-third revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, the eighth revised edition of the *Manual of Tests and Criteria* and the tenth 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 2025, and many Governments have transposed the provisions of the Model Regulations into their own legislation for domestic traffic for application as from 2025.

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



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) Lithium cells or batteries or sodium ion cells or batteries, and hybrid batteries, including a detailed definition of the rupture of batteries and provisions for the temperature measurement of the external case of cells and batteries;
- (b) Salvage pressure receptacles, including a definition for the maximum pressure volume product (pV-product);
- (c) Classification of energetic samples;
- (d) Infectious substances of categories A and B;
- (e) Special provisions and packing provisions;
- (f) A recommendation to obtain accurate dynamic burst pressure test results for a more detailed Koenen tube qualification test procedure;
- (g) New test provisions for the fire resistance of the service equipment of fibre reinforced plastics portable tanks;
- (h) Amendments to the classification of desensitized explosives according to the *Globally Harmonized System*.

The Committee also adopted amendments to the Globally Harmonized System concerning, among other matters, new or revised provisions further clarifying the classification criteria for aerosols and chemicals under pressure (chapter 2.3); new guidance for classification for skin sensitization using non-animal methods (chapter 3.4); classification for substances and mixtures that are hazardous by contributing to global warming (chapter 4.2); further rationalization of precautionary statements to improve users' comprehensibility while taking into account usability for labelling practitioners; and a new section in annex 11 with guidance addressing the identification of simple asphyxiant hazards.

The Committee adopted a programme of work for the 2025–2026 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.

## Contents

	<i>Page</i>
I. Draft resolution for adoption by the Economic and Social Council .....	4
II. Implementation of Economic and Social Council resolution <a href="#">2023/5</a> .....	9
A. Publications .....	9
B. Implementation of the Recommendations on the Transport of Dangerous Goods: Model Regulations .....	9
C. Mutual administrative support for monitoring compliance of “UN”-marked containment systems with the Recommendations on the Transport of Dangerous Goods: Model Regulations .....	13
D. Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals .....	14
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 2023–2024 .....	19
A. Meetings .....	19
B. Work of the Subcommittee of Experts on the Transport of Dangerous Goods. ....	20
C. Work of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals .....	22
IV. Programme of work and schedule of meetings for the biennium 2025–2026. ....	23

## **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 [2023/5](#) of 7 June 2023,

*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 2023–2024,<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,

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

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<sup>1</sup> [E/2025/72](#).

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-fourth revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* and amendment 1 to 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 2025;

(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.10/52/Add.1](#) and [ST/SG/AC.10/52/Add.2](#).

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

*Recalling* 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,

*Recalling 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* 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,

*Bearing in mind also* the adoption in September 2023 of the Global Framework on Chemicals – For a Planet Free of Harm of Chemicals and Waste at the fifth session of the International Conference on Chemicals Management as a comprehensive plan to guide countries and stakeholders in jointly addressing the life cycle of chemicals, in particular target B6 calling for the implementation by 2030 of the Globally Harmonized System by all Governments in all relevant sectors as appropriate for their national circumstances,

*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,

<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.

(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 United Nations Environmental Programme, the International Labour Organization, the World Health Organization, the 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, continue to advocate for the implementation of the Globally Harmonized System through workshops, seminars and other capacity-building activities at the international, regional, subregional and national levels, as well as by implementing its provisions through the legal instruments, codes of practice, recommendations or guidance materials under their responsibility,

*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 tenth 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 tenth 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 eleventh 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 2025, and to make it available in book and electronic format and on the website of the Commission;

<sup>5</sup> United Nations publication, 2023.

<sup>6</sup> [ST/SG/AC.10/52/Add.3](#).

(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 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 2025–2026 as contained in paragraphs 51 to 56 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;

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

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

<sup>9</sup> E/2025/72.



3. *Requests* the Secretary-General to submit to the Economic and Social Council, at its 2027 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 keep the sub-item entitled “Transport of dangerous goods and Globally Harmonized System of Classification and Labelling of Chemicals” of the item entitled “Economic and environmental questions” as a standing item on its agenda.

## **II. Implementation of Economic and Social Council resolution 2023/5**

### **A. Publications**

2. As requested by the Economic and Social Council in its resolution 2023/5, the Secretary-General published the twenty-third revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, the eighth revised edition of the *Manual of Tests and Criteria* and the tenth 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 2023/5, 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-third 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 42–24 (mandatory application for the 167 Contracting Parties to the International Convention for the Safety of Life at Sea from 1 January 2026, with the possibility of application on a voluntary basis from 1 January 2025);

(b) International Civil Aviation Organization (ICAO): 2025–2026 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 2025);

(c) International Air Transport Association: Dangerous Goods Regulations 2025 (sixty-sixth edition) (applicable from 1 January 2025 as a recommended standard for some 340 member airlines of the Association);

(d) Economic Commission for Europe: Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2025) (applicable from 1 January 2025, 54 Contracting Parties);

(e) Economic Commission for Europe: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN 2025) (applicable from 1 January 2025, 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 2025) (applicable from 1 January 2025, 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 2025.<sup>10</sup>

7. On 15 October 2024, Paraguay published decree No. 2709, entering into force on 15 November 2024, transposing into national law the Southern Common Market (MERCOSUR) agreement for the facilitation of the transport of dangerous goods (*Acuerdo para la Facilitación del Transporte de Mercancías Peligrosas en el MERCOSUR*). The MERCOSUR agreement is therefore now applicable for domestic transport in Argentina, Paraguay and Uruguay, in addition to international transport among all its member countries. The Agreement is based on the seventeenth revised edition of the *Model Regulations*, and the 2013 editions of the *Regulations concerning the International Carriage of Dangerous Goods by Rail* and the *Agreement concerning the International Carriage of Dangerous Goods by Road*.

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.

<sup>10</sup> Commission delegated Directive (EU) 2025/149 of 15 November 2024 amending the annexes to Directive 2008/68/EC of the European Parliament and of the Council to take into account scientific and technical progress.

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-third revised edition (published in 2023):

- European Union member States and Iceland, Liechtenstein, Norway and Switzerland, pursuant to European Union directives (see para. 6 above), are bound to the application, before 30 June 2025, of the provisions of the 2025 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-third 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.
- United States of America: Title 49 of the Code of Federal Regulations was updated in 2024 to reflect the provisions of the twenty-second revised edition of the *Model Regulations*, with very few exceptions.
- Canada: regulations reflect the twenty-second revised edition, and the proposed amendments for alignment with the provisions of the twenty-third 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 7.9, 2024) is based on the twenty-third revised edition of the *Model Regulations* and became compulsory on 1 October 2025.
- Thailand: the 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 among other transport documents for vehicles carrying dangerous goods is in the process of being issued.
- 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-third revised edition of the *Model Regulations* and the eighth revised edition of the *Manual of Tests and Criteria*. The first amendment to the national regulations concerning road

transportation of dangerous goods was published and entered into force in 2024. This amendment refers to the twenty-third revised edition of the *Model Regulations*, but only those parts of the modifications that were considered to be most relevant to current road transport in China were taken into account. Those national regulations are undergoing a continued revision process, and the publication of a further revision is expected in the biennium 2025–2026 to align fully with the twenty-third revised edition of the *Model Regulations*, the eighth revised edition of the *Manual of Tests and Criteria* and the 2025 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. Cambodia will implement the provisions of the agreement by issuing new regulations soon.
- 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 made significant efforts to maintain harmonization with the Model Regulations. For air transport, national regulations have been updated and are in effect since 1 January 2025 on the basis of the latest edition of the ICAO Technical Instructions, which are aligned with the twenty-third revised edition of the *Model Regulations*. For maritime transport, the regulations have been automatically implemented on the basis of the latest edition of the International Maritime Dangerous Goods Code, which is also aligned with the twenty-third revised edition of the *Model Regulations*. For other modes, the twenty-second revised edition still prevails, and the update and alignment with the twenty-third edition have been included as a priority in the regulatory agenda for the biennium 2025–2026.
- 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.

13. In its resolutions [72/271](#) and [74/299](#) on road safety and the key role of the United Nations legal instruments on improving road safety, the General Assembly encouraged Member States that had not yet acceded to those instruments to consider becoming a Contracting Party and – beyond accession – applying, implementing and promoting their provisions or safety regulations. The availability of those legal instruments in all official languages of the United Nations has been identified by some Member States as a key factor to facilitate their application in all regions. Some Arabic-speaking countries that are Contracting Parties to the Agreement concerning the International Carriage of Dangerous Goods by Road, have indicated that the absence of a harmonized linguistic version of the Agreement in Arabic presents a significant obstacle to accession for some countries and implementation at the national and regional levels.

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

14. 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.

15. 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.

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

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

16. 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 as soon as possible with a view to having the system fully operational by 2008. Since the adoption of the Globally Harmonized System, its implementation has been widely recognized at the international level as one of the pillars for the sound management of chemicals.

17. In 2015, the General Assembly adopted the 2030 Agenda for Sustainable Development.<sup>12</sup> The 2030 Agenda established 17 Sustainable Development Goals and 169 related targets covering the economic, social and environmental dimensions of sustainable development. The environmentally sound management of chemicals and wastes is explicitly mentioned in targets 12.4 and 3.9 but it is also relevant for the achievement of targets addressing decent work and economic growth, industry innovation and infrastructure or climate action, to mention only a few.

18. More recently, at the fifth International Conference on Chemicals Management, held in September 2023, the Global Framework on Chemicals – For a Planet Free of Harm from Chemicals and Waste<sup>13</sup> was adopted as a comprehensive plan to guide countries and stakeholders in jointly addressing the life cycle of chemicals. Target B6 of the Global Framework specifically calls for implementation by 2030 of the Globally Harmonized System by all Governments in all relevant sectors as appropriate for their national circumstances.

19. 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.

20. In the transport sector, the Model Regulations have already been updated to reflect the relevant provisions of the tenth 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 2025, as have all national regulations that are based on those instruments or that are regularly updated based on the Model Regulations.

21. In 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.

22. 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.

23. During the biennium 2023–2024, several countries continued or announced the development of national standards or legislation aimed at aligning their provisions with those of the most recent versions of the Globally Harmonized System or at

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<sup>12</sup> General Assembly resolution 70/1.

<sup>13</sup> See [www.unep.org/global-framework-chemicals](http://www.unep.org/global-framework-chemicals).

implementing them for the first time. The following is a non-exhaustive summary of implementation actions at the national and regional levels during 2023–2024, based on information provided to or compiled by the secretariat:

(a) At the national level:

(i) Australia: Safe Work Australia completed the transition from the third to the seventh revised edition of the *Globally Harmonized System* on 1 January 2023. Since that date, only the provisions of the seventh revised edition can be used to classify, label and prepare safety data sheets for newly manufactured or imported hazardous chemicals.

(ii) Brazil: on 13 November 2024, Brazil issued law No. 15022 establishing the national inventory of chemical substances and the assessment and risk control of chemical substances used, produced or imported in the national territory, with the aim of minimizing adverse impacts on health and the environment. The inventory requires hazard classification in accordance with the Globally Harmonized System.

(iii) Canada: Health Canada completed the transition from the fifth to the seventh revised edition of the *Globally Harmonized System* with the publication of the amended Hazardous Products Regulations and schedule 2 to the Hazardous Products Act, on 4 January 2023, modifying the country's national hazard communication standard for the workplace (Workplace Hazardous Materials Information System). The update also incorporates some provisions from the eighth revised edition of the *Globally Harmonized System*. The regulatory amendments provide a three-year transition period for implementation ending on 14 December 2025. Supporting guidance to suppliers of hazardous products destined for Canadian workplaces, ("Guidance on the Workplace Hazardous Materials Information System supplier requirements") was released on 30 October 2023.

(iv) Japan: in 2024, the latest version of the Globally Harmonized System classification list recommended by Japan was released on the website of the National Institute of Technology and Evaluation. The classification results are not mandatory but are provided on a voluntary basis, as a classification reference for those responsible for the preparation of labels and safety data sheets.

(v) Kenya: in November 2024, the National Environment Management Authority issued legal notice 182/2024 on the "Environmental Management and Coordination (Management of Toxic and Hazardous Chemicals and Materials) Regulations, 2024". The regulations apply to the manufacture, export, import, transport, distribution, storage, handling and disposal of toxic and hazardous industrial chemicals and materials. The classification criteria for the chemicals listed in the first schedule of the regulations is based on the Globally Harmonized System.

(vi) Russian Federation: several national standards have been aligned with the provisions of the seventh revised edition of the *Globally Harmonized System*.

(vii) 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. The review of the regulations for alignment with the tenth revised edition of the *Globally Harmonized System* is ongoing.

(viii) Ukraine: the “Technical Regulation for the Classification of Hazards, Labelling and Packaging of Chemical Products” was adopted on May 2024. The regulation, which came into effect on November 2024, is consistent with the provisions of the European Union Classification, Labelling and Packaging regulation and the Globally Harmonized System.

(ix) United States of America: on 20 May 2024 the United States Department of Labor’s Occupational Safety and Health Administration issued the final rule updating the Hazard Communication Standard from the third to the seventh revised edition of the *Globally Harmonized System*. The updated rule took effect on July 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 nineteenth to twenty-second adaptations to technical progress were published on 11 July 2023, 5 January 2024 and 19 June 2024, respectively. A draft of the twenty-third adaptation was officially notified on 25 September 2024. 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.

24. 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:

(i) 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.

(ii) 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.

(iii) Following the adoption of the Global Framework on Chemicals (see para. 18 above), FAO, WHO, the United Nations Environment Programme, the United Nations Development Programme and the International Labour Organization (ILO), with additional support from the United Nations Institute for Training and Research (UNITAR), are working together to address highly hazardous pesticides through this framework, in particular with regard to target A7, addressing the risks from highly hazardous pesticides. This target was supported by United Nations Environment Assembly resolution V/11. 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:

(i) WHO and 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 16 languages, and about 739 have been reviewed since 2006 to take into account the classification and labelling criteria of the Globally Harmonized System.

(ii) 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 2023–2024 and is expected to continue beyond 2025. 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, the incorporation in annex III of relevant environmental, human health and delayed hazard characteristics of the Globally Harmonized System.

25. The information provided in paragraphs 23 and 24 above is not exhaustive. Additional details are available on the website of the Commission.<sup>14</sup> An online form through which updates can be submitted directly to the secretariat is also available.<sup>15</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.

26. Regarding capacity-building and training, the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals was informed about activities and projects related to the implementation of the Globally Harmonized System that were completed, initiated or continued during the biennium 2023–2024, 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. These activities and projects included:

(a) Capacity-building, training and technical support for the development of legislation or implementation national road maps, as applicable, that are planned or ongoing or have been completed, in Armenia, Benin, Côte d'Ivoire, Ghana, Kenya, Ecuador, El Salvador, Nigeria, North Macedonia, Pakistan, the Republic of Moldova, Ukraine and the United Republic of Tanzania;

(b) Training for inspectors at the South African Department of Forestry, Fisheries and Environment, focusing on enforcement and inspections of Globally Harmonized System compliance; and technical training for pesticide registrars from Kenya, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe, focusing on information on classification and labelling according to the Globally Harmonized System, submitted as part of a pesticide application;

(c) A project focused on the Caribbean region, in Antigua and Barbuda, The Bahamas, Barbados, Belize, Cuba, Dominica, the Dominican Republic, Guyana, Saint Kitts and Nevis, Saint Lucia, Suriname and Trinidad and Tobago.

27. The Subcommittee, as well as UNITAR, continued to conduct webinars and develop and update guidance, training and resource materials to promote and facilitate implementation of the Globally Harmonized System. During 2023–2024, these included:

(a) Amendments to the provisions of the Globally Harmonized System and guidance adopted by the Subcommittee to facilitate their understanding and implementation. The guidance developed by the Subcommittee is publicly available on the website of the Commission;<sup>16</sup>

(b) Several rounds of the UNITAR e-learning course on the classification and labelling of chemicals in accordance with the Globally Harmonized System, in English, French and Spanish;

(c) Webinars on the Globally Harmonized System.<sup>17</sup>

28. Under the Global Partnership for Capacity-building to Implement the Globally Harmonized System, led by ILO, the Organisation for Economic Co-operation and Development (OECD) and UNITAR,<sup>18</sup> publication of the guidance material listed in subparagraphs (a) to (c) below, as well as videos, presentations and brochures on

<sup>14</sup> <https://unece.org/ghs-implementation-0>.

<sup>15</sup> <https://unece.org/transportdangerous-goods/ghs-implementation-information-submission-form>.

<sup>16</sup> <https://unece.org/transportdangerous-goods/capacity-building-tools-and-guidance>.

<sup>17</sup> <https://unitar.org/sustainable-development-goals/planet/our-portfolio/globally-harmonized-system-classification-and-labelling-chemicals/ghs-webinars>.

<sup>18</sup> <https://unitar.org/sustainable-development-goals/planet/our-portfolio/globally-harmonized-system-classification-and-labelling-chemicals>.

topics related to the Globally Harmonized System, such as hazard classification, hazard communication and the links between the Globally Harmonized System and transport:

(a) The 2024 edition of the companion guide to the Globally Harmonized System (“Understanding the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – A companion guide to the GHS Purple Book”);<sup>19</sup>

(b) “United Nations Globally Harmonized System (GHS) links to agricultural pesticides – challenges and opportunities”;<sup>20</sup>

(c) “Relevance of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) to plastics and associated chemicals in the context of the negotiations towards a Global Plastics Treaty”.<sup>21</sup>

29. The Subcommittee continued its cooperation with other intergovernmental bodies responsible for international instruments dealing with chemical safety to facilitate the implementation of the Globally Harmonized System through such instruments (e.g. 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)).

30. Further information on available capacity-building resources on the Globally Harmonized System, tools and guidance, as well as on its implementation through the international instruments mentioned in paragraph 29 above, is available on the website of the Commission.<sup>22</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 2023–2024**

#### **A. Meetings**

31. The following official sessions with interpretation were held during the biennium 2023–2024:

(a) Subcommittee of Experts on the Transport of Dangerous Goods: sixty-second session, 3–7 July 2023 ([ST/SG/AC.10/C.3/124](#) and [ST/SG/AC.10/C.3/124/Add.1](#)); sixty-third session, 27 November–6 December 2023 ([ST/SG/AC.10/C.3/126](#) and [ST/SG/AC.10/C.3/126/Add.1](#)); sixty-fourth session, 24 June–3 July 2024 ([ST/SG/AC.10/C.3/128](#) and [ST/SG/AC.10/C.3/128/Add.1](#)); and sixty-fifth session, 25 November–3 December 2024 ([ST/SG/AC.10/C.3/130](#) and [ST/SG/AC.10/C.3/130/Add.1](#));

(b) Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: forty-fourth session, 10–12 July 2023 ([ST/SG/AC.10/C.4/88](#)); forty-fifth session, 6–8 December 2023 ([ST/SG/AC.10/C.4/90](#));

<sup>19</sup> <https://unitar.org/sites/default/files/media/file/GHS%20Companion%20Guide%20-%2012.7.2024%20FINAL.pdf>.

<sup>20</sup> <https://cwcourses.unitar.org/wp-content/uploads/2024/07/UNITAR-GHS-agrochemicals-report-4.4.2024-FINAL-formatting.pdf>.

<sup>21</sup> UNEP/PP/INC.5/INF/7, annex.

<sup>22</sup> <https://unece.org/competent-authorities>.

forty-sixth session, 3–5 July 2024 ([ST/SG/AC.10/C.4/92](#)); and forty-seventh session, 4–6 December 2024 ([ST/SG/AC.10/C.4/94](#));

(c) Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals: twelfth session, 6 December 2024 ([ST/SG/AC.10/52](#) and [ST/SG/AC.10/52/Add.1–3](#)).

32. The following 26 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, Denmark,<sup>23</sup> Finland, France, Germany, Italy, Japan, Netherlands (Kingdom of the), New Zealand,<sup>23</sup> Norway, Poland, Portugal,<sup>24</sup> Republic of Korea, Russian Federation, South Africa, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America.

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

34. The Governments of Luxembourg,<sup>24</sup> Slovakia,<sup>24</sup> Türkiye<sup>24</sup> and Zimbabwe<sup>24</sup> were represented by observers. The European Union, seven specialized agencies and intergovernmental organizations and 47 non-governmental organizations also participated.

35. 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.

36. 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.

37. 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**

38. During the biennium 2023–2024, 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/2023/56](#), para. 50 (a)).

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

- (a) New or amended UN numbers in the dangerous goods list;

<sup>23</sup> Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals only.

<sup>24</sup> Subcommittee of Experts on the Transport of Dangerous Goods only.

- (b) New or amended provisions, including:
  - (i) Provisions applicable to batteries, to take into account hybrid batteries;
  - (ii) Provisions for salvage pressure receptacles, including a definition for the maximum pressure volume product (pV-product);
  - (iii) Provisions on the classification of energetic samples;
  - (iv) Provisions for infectious substances of categories A and B;
  - (v) Multiple changes to clarify existing provisions;
- (c) New requirements for the design, construction, inspection and testing of service equipment for portable tanks made of fibre reinforced plastics materials;
- (d) Updates to the tables for chlorophenols;
- (e) Updates to references to standards;
- (f) Amendments including a comprehensive editorial review of packing instructions to take account of the stacking orientation of packages.

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

- (a) A more detailed definition of the rupture of batteries and provisions for the temperature measurement of the external case of cells and batteries;
- (b) A recommendation to obtain accurate dynamic burst pressure test results for a more detailed Koenen tube qualification test procedure;
- (c) New provisions for the testing of the fire resistance of service equipment for portable tanks made of fibre reinforced plastics;
- (d) Amendments to the classification of desensitized explosives according to the Globally Harmonized System;
- (e) Other clarifications and corrections.

41. 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.

42. 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.

43. The Subcommittee acknowledged that its work builds on best practices, science, data, evidence, technical expert analysis and the interlinkages across the Sustainable Development Goals, 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>25</sup> Thus, it decided to keep on its agenda for the 2025–2026 an item on the 2030 Agenda for Sustainable Development.

<sup>25</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).

44. 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**

45. During the biennium 2023–2024, 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/2023/56, para. 50 (b)).

46. On the basis of that work, the Committee adopted amendments to the tenth 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, new or revised provisions further clarifying the classification criteria for aerosols and chemicals under pressure (chapter 2.3); new guidance for classification for skin sensitization using non-animal methods (chapter 3.4); classification for substances and mixtures that are hazardous by contributing to global warming (chapter 4.2); further rationalization of precautionary statements to improve users' comprehensibility while taking into account usability for labelling practitioners; and a new section in annex 11 with guidance addressing identification of simple asphyxiant hazards.

47. 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 23 and 24 above.

48. 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. 28 above).

49. 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. In December 2024, the Subcommittee endorsed the summary prepared by the secretariat on the outcome of its work during the biennium 2023–2024 in relation to the implementation of Agenda 2030 and the Sustainable Development Goals and agreed to keep a standing item on its agenda for the biennium 2025–2026 on the implementation of the 2030 Agenda and the work of the Council.<sup>26</sup> 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 and its two subcommittees, is available on the website of the Commission.<sup>27</sup>

50. 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>26</sup> See informal document UN/SCEGHS/47/INF.10, available at <https://unece.org/sites/default/files/2024-11/UN-SCEGHS-47-INF10e.pdf>, and the report of the Subcommittee of Experts on its forty-seventh session (ST/SG/AC.10/C.4/94, paras. 60 and 61).

<sup>27</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 2025–2026

51. The Committee agreed that the programme of work for the biennium 2025–2026 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; 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; sodium-ion batteries; and batteries installed in cargo transport units);
  - (iv) Transport of gases (including global recognition of United Nations and non-United Nations pressure receptacles; limited quantities for division 2.2; and low flammability and non-flammable refrigerant gases);
  - (v) Miscellaneous proposals of amendments to the Model Regulations (including marking and labelling; packagings, including the use of recycled plastics material; portable tanks; and fire test procedures for UN 3164 in section 31 of the Manual of Tests and Criteria);
  - (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 precedence of hazards; and criteria for flammable liquids);
  - (x) Unified interpretations of the Model Regulations;
  - (xi) Implementation of the Model Regulations;
  - (xii) Evolution of transport systems;
  - (xiii) Dangerous goods safety training and capacity-building;
  - (xiv) 2030 Agenda for Sustainable Development;
  - (xv) 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 methods for classification of health and environmental hazards;
    - c. Classification criteria for germ cell mutagenicity;

- d. Practical classification issues;
- e. Simultaneous classification in physical hazard classes and precedence of hazards;
- f. 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. Hazardous to the atmospheric system;
- (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.

52. 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 2025–2026 should be as set out below.

53. In 2025, the meetings will be held on the following dates:

- 30 June–4 July 2025: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-sixth session (10 meetings)
- 7–9 (morning) July 2025: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-eighth session (5 meetings)



- 24 November–3 December (morning)<sup>28</sup> 2025: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-seventh session (15 meetings)
  - 3 (afternoon)<sup>28</sup>–5 December 2025: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, forty-ninth session (5 meetings)
54. There will be a total number of 35 meetings held in 2025, 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
55. In 2026, the meetings will be held on the following dates:
- 29 June–8 July (morning),<sup>28</sup> 2026: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-eighth session (15 meetings)
  - 8 (afternoon)<sup>28</sup>–10 July 2026: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, fiftieth session (5 meetings)
  - 23 November–1 December 2026: Subcommittee of Experts on the Transport of Dangerous Goods, sixty-ninth session (14 meetings)
  - 2–4 (morning) December 2026: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, fifty-first session (5 meetings)
  - 4 December (afternoon) 2026: Committee of Experts, thirteenth session (1 meeting)
56. There will be a total of 40 meetings held in 2026, 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
57. 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>28</sup> With the possibility for both subcommittees to combine their meeting allotment and meet jointly for the entire day on 3 December 2025 and 3 July 2026.