Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Historical background and implementation status

Background

Chemicals have the potential for adverse effects to people or the environment

To protect people and the environment, countries and organizations developed laws or regulations that require information to be prepared and transmitted to those using chemicals, through labels or Safety Data Sheets (SDS)

While these existing laws or regulations were similar in many respects, their differences were significant enough to result in different labels or SDS for the same product

Moreover, due to:

- the extensive global trade in chemicals; and
- the need to develop national systems to ensure the safe use, transport and disposal of hazardous chemicals,

it was recognized that an internationally harmonized approach to classification and labelling would provide the foundation for such systems

Background

In 1980-1990, the International Labor Organization (ILO) adopted:

Convention (C.170) concerning safety in the use of chemicals at work
Recommendation (R.177) concerning safety in the use of chemicals at work

on the harmonization of systems of classification and labelling for the use of hazardous chemicals at work

Adoption of these instruments requires a country to have a system for hazard classification and labelling/marking in accordance with national or international standards

Background

In 1992, the UN Conference on the Environment and Development (UNCED) established the following 6 programme areas to strengthen national and international efforts related to the environmentally sound management of chemicals:

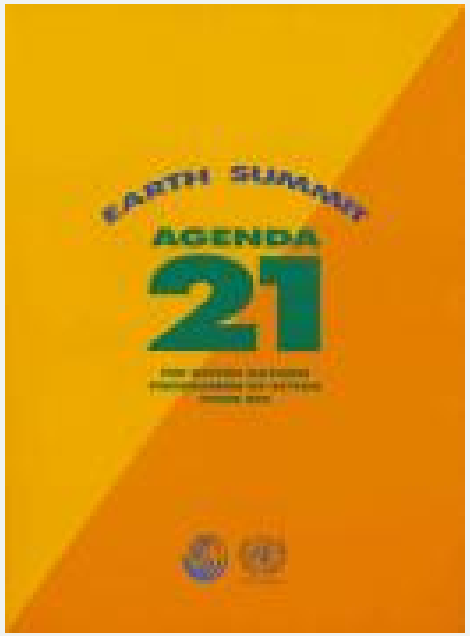
1. Expanding and accelerating international assessment of chemical risks
2. **Harmonization of classification and labelling of chemicals**
3. Information exchange on toxic chemicals and chemical risks
4. Establishment of risk reduction programmes
5. Strengthening of national capabilities and capacities for management of chemicals
6. Prevention of illegal international traffic in toxic and dangerous products

(Agenda 21, Chapter 19: Programme Areas)

International mandate

Agenda 21, Chapter 19, Programme Area B, paras. 26 and 27:

> *"26. Globally harmonized hazard classification and labelling systems are not yet available to promote the safe use of chemicals, inter alia, at the workplace or in the home. Classification of chemicals can be made for different purposes and is a particularly important tool in establishing labelling systems. There is a need to develop harmonized hazard classification and labelling systems, building on ongoing work;*
>
> *27. A globally harmonized hazard classification and compatible labelling system, including material safety data sheets and easily understandable symbols, should be available, if feasible, by the year 2000."*



Harmonization process (1)

The development of a harmonized system of classification and labelling of chemicals started with the examination of existing systems, recommendations and/or legislation in countries and in international/intergovernmental organizations, e.g:

- OECD Chemicals Programme;
- ILO Chemical Safety Tools;
- UN Recommendations for transport of dangerous goods;
- FAO Recommendation on Pesticides;
- European Union directives for classification and labelling of substances and preparations

...

Harmonization process (2)

The analysis showed that:

- Scope of countries/organizations was very broad
- Extensive expertise was needed

Therefore, need to decide:

- what systems would be considered “major” (used as the primary basis for the harmonization process); and
- how to divide the work to get the best expertise for different aspects

Harmonization process (3)

"Major" systems identified:

- USA requirements for workplace, consumers and pesticides;
- Canada requirements for the workplace; consumers and pesticides;
- European Union directives for classification and labelling of substances and preparations;
- United Nations Recommendations on the Transport of Dangerous Goods.

While not considered "major", requirements of other systems were also examined as appropriate, and taken into account as proposals were developed (e.g: a compromise cut-off on acute toxicity was found in the Japanese requirements)

Harmonization process (4)

Technical work was assigned to three focal points:

- UN Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG): For physical hazards
- OECD: For health and environmental hazards (*designated based on its work on testing guidelines and other chemical issues)*
- ILO: for hazard communication (label elements and Safety Data Sheets (SDS))

Harmonization process (5)

Compilation of the technical work into the new system (GHS) was assigned to the Coordinating Group for Harmonization of Chemical Classification Systems (CG/HCCS), under the umbrella of the Interorganization Programme for the Sound Management of Chemicals (IOMC)

Once completed in 2001, the work was transmitted by the IOMC to the new United Nations Economic and Social Council's Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (UNSCEGHS)

This Sub-Committee was established by the Council's resolution 1999/65 of 26 October 1999 as a subsidiary body of the former UNCETDG, which was reconfigured and renamed at the same occasion "Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals" (UNCETDG/GHS)

The GHS Sub-Committee : Functions

(a) Act as custodian of the GHS, managing and directing the harmonization process

(b) keep the GHS system up-to-date, ensure its continued relevance and practical utility, and determine the need for and timing of the updating of technical criteria, working with existing bodies as appropriate

(c) Promote its understanding and use and encourage feedback

(d) Make the GHS available for worldwide use and application

(e) Make guidance available on its application, interpretation and use of technical criteria to support consistency of application; and

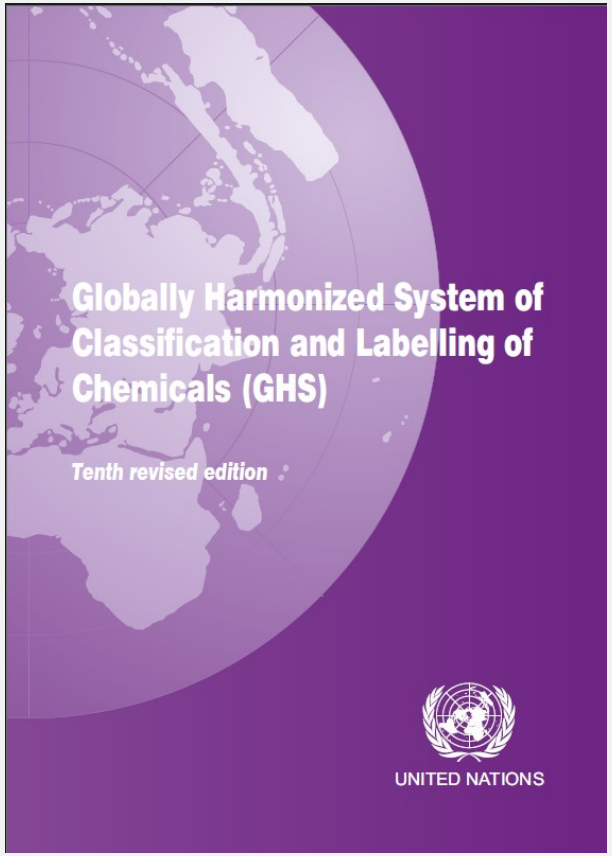
(f) Prepare work programmes and submit recommendations to the committee

The GHS document

The first edition of the GHS was adopted in December 2002 and published in 2003. Since then, it has been revised and updated every two years:

- GHS Rev.1: Adopted in December 2004 and published in 2005
- GHS Rev.2: Adopted in December 2006 and published in 2007
- GHS Rev.3: Adopted in December 2008 and published in 2009
- GHS Rev.4: Adopted in December 2010 and published in 2011
- GHS Rev.5: Adopted in December 2012 and published in 2013
- GHS Rev.6: Adopted in December 2014 and published in 2015
- GHS Rev.7: Adopted in December 2016 and published in 2017
- GHS Rev.8: Adopted in December 2018 and published in 2019
- GHS Rev.9: Adopted in December 2020 and published in 2021
- GHS Rev.10: Adopted in December 2022 and published in 2023

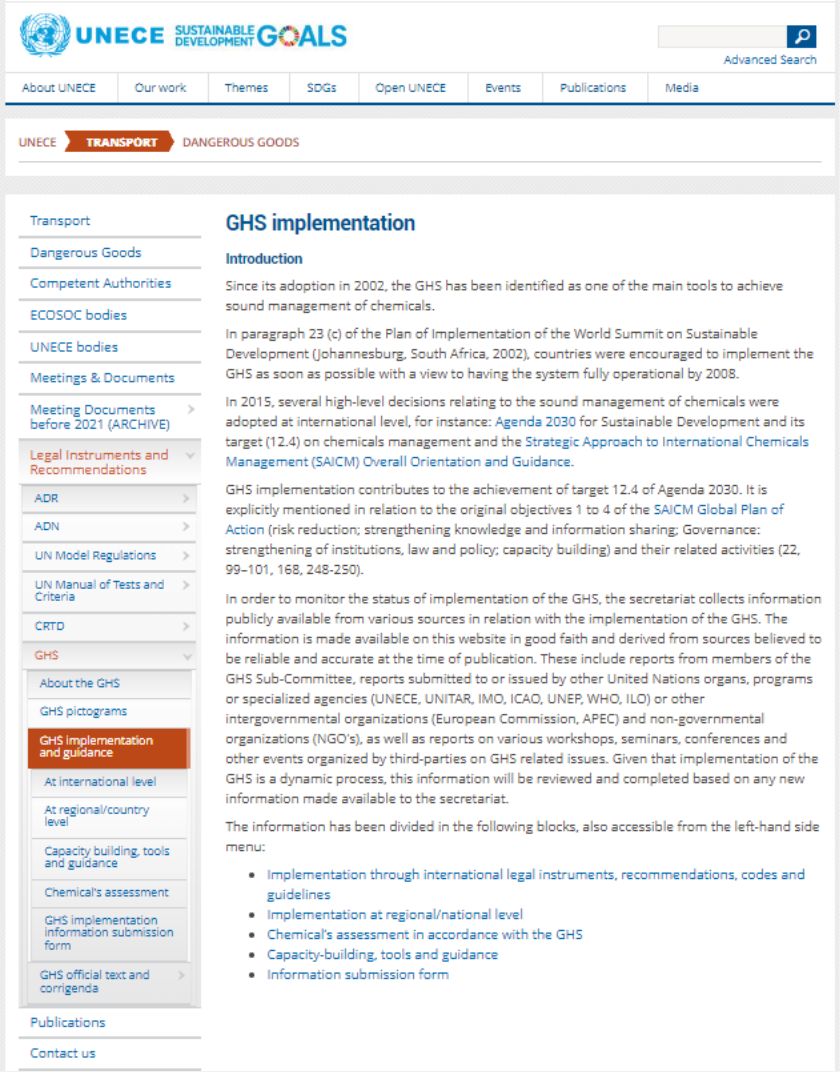
All editions are available at: https://unece.org/transport/dangerous-goods/ghs-rev10-2023



GHS implementation status and guidance

- Implementation through international legal instruments, recommendations, codes and guidelines
- Implementation at regional/national level
- Chemical's assessment in accordance with the GHS
- Capacity-building, tools and guidance
- Information submission form

All available at: https://unece.org/ghs-implementation-0



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End of historical background and implementation status