

APEC CD GHS Implementation Convergence Questionnaire 2021 Progress Report

Contents

| | |
|--|----|
| Background | 2 |
| Introduction | 3 |
| Response summary | 4 |
| Session A: Basic information | 4 |
| Session B: GHS implementation..... | 4 |
| Scope of GHS implementation | 5 |
| Revision currently adopted and plan to adopt in the future | 5 |
| Process to assess/manage regulatory changes and obstacles | 6 |
| Acceptance for a different revision..... | 6 |
| Session C: Building Blocks, Safety Data Sheets, and Labels | 7 |
| Building blocks | 7 |
| SDS | 10 |
| Labelling | 11 |
| Session D: Capacity Building and Training | 11 |
| Conclusion..... | 13 |
| Economies adopt later revisions of GHS..... | 13 |
| Building blocks, the SDS, and labelling | 13 |
| Demands for GHS Capacity building | 13 |
| Recommendation..... | 14 |

Background

Since the 7th CD meeting in Peru in 2008 where the report of the Virtual Working Group on GHS (VWGGHS), “Developing Clarity and Consistency in the Implementation of the Globally Harmonised System for the Classification and Labelling of Chemicals (GHS)” was endorsed, the participating APEC Economies provided GHS implementation Reports detailing the progress of GHS implementation in their respective economies on an annual or biennial basis.

Over the past decade, these reports identified that foreshadowed trade benefits from GHS implementation were not fully realized due to divergent implementation of GHS across the regions. The divergences in GHS implementation include:

- Adoption of different revisions of GHS,
- Adoption of different building blocks,
- Adoption of different classification cut-offs for building blocks, and
- Imposition of specific local requirements.

At the 21st Chemical Dialogue (CD) meeting in Papua New Guinea in 2018, the CD agreed to a new reporting mechanism on GHS implementation, focused on identifying strategies to improve GHS convergence by Member Economies. The CD also supported trialing the new reporting form, the GHS Implementation Survey (the Survey), out of session, with a view to providing an annual executive summary to the Ministers Responsible for Trade (MRT).

The Survey, in the form of a Google Forms (<https://forms.gle/UQhmxqpxikPuBhs89>) was circulated at the 26th CD virtual meeting, hosted by New Zealand. The pdf file of the survey was also circulated at the same time and is provided with this report as Attachment 1. The CD encouraged delegates to respond to the Questionnaire by March 31, 2021 to facilitate development of the annual report by April.

This Report summarizes the CD delegates’ input into the Survey.

Introduction

The Questionnaire is focused on identifying any information that may assist in convergent implementation of GHS across the region.

The Survey is structured in four sections and aims to reflect the recommendations in the Executive Summary endorsed by Ministers regarding addressing GHS implementation divergence¹, and to gather feedback on training practices and capacity building needs to achieve the CD objectives on GHS implementation. The four sections are:

1. Basic Information
2. GHS implementation
3. Building Blocks, Safety Data Sheets, and Labels
4. Capacity Building

All responses to the Survey are attached to this report as Attachment 2. The contact details of the respondents (in section 1) have been redacted as they were only requested for follow up if and as required. Following information have not been redacted to ensure transparency of responses:

- Economy,
- Whether responding as Regulator, industry or “other”, and
- Name of Organization/Agency.

¹ To address divergences in GHS, the CD recommends that:

- Economies consider whether aligning GHS revision implementation timeframes is important to achieve convergence,
- Economies consider how GHS impacts on risk management controls in each economy and consider whether some lower hazard building blocks are necessary for best practice risk management,
- Economies consider allowing flexibility for classification for building blocks where subcategorization options exist in GHS,
- Economies consider the best use of resources by taking stock of work already occurring in other fora and identify areas of further work that may be useful in quantifiably achieving the two stated aims of implementing GHS – increased worker protection and ease of trade across borders.

Response summary

Session A: Basic information

Total non-repetitive responses received: 18

Total number of responding APEC Economies: 14

Respondent economies:

- Australia,
- Canada,
- Hong Kong, China,
- Indonesia,
- Malaysia,
- New Zealand,
- Peru,
- The Republic of Korea,
- The Republic of the Philippines,
- The Russian Federation,
- Singapore,
- Chinese Taipei,
- United States of America, and
- Viet Nam.

Responses from regulators: 10

Responses received from industry: 7²

Responses from others: 1³

Session B: GHS implementation

Economies were asked about their GHS adoption revisions, the GHS scope and plans. 12 out of 14 economies have implemented GHS.

² One response from Indonesia was identified as “Responsible Care/Industry Association”, and was counted as industry.

³ Chinese Taipei identified as neither regulator nor industry (identified as the GHS focal point) and was not counted as either regulator or industry.

Scope of GHS implementation

Among these economies, all of them reported that GHS scope covers industrial chemicals; 5 economies (Australia, Malaysia, the Russian Federation, New Zealand, and the Republic of Korea) responded that GHS also covers consumer chemicals and pesticides; three economies responded that, in addition to industrial chemicals, GHS also covers pesticides (Vietnam and Chinese Taipei) or consumer products (the Philippines).

Revision currently adopted and plan to adopt in the future

Figure 1 and Table 1 show the GHS revisions that are currently adopted or will be used in the future. The 4th revision of GHS was the most common GHS revision currently adopted by the reporting economies.

For future adoption plans:

- **10** economies will move to later revisions
- **7th** was the **most common** choice for the future.
- **8th** was the **second most common** choice.
- Australia and New Zealand (have adopted the 7th revision) reported they will continue to use the same revision in the next five years
- **10** economies plan to move to 7th or 8th revisions in the future, with 8 of them responding this would happen between 2021 to 2023.
- Of economies with plans to migrate to later revisions, 8 of 10 will have transition periods for implementation.

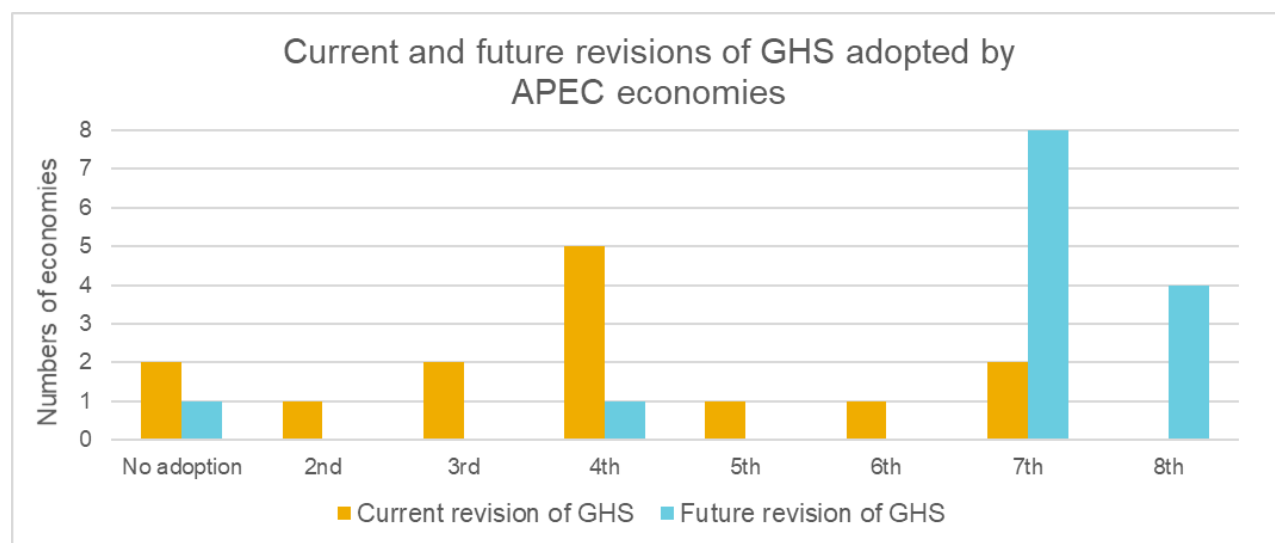


Figure 1. Current and future revisions of GHS adopted by APEC economies

* The Republic of Korea responded 7th or 8th revision will be adopted in the future, and it's counted to 8th in this figure.

Table 1. Current revisions and future plans of GHS adoption by APEC economies

| Economy | Revision currently used | Future plans | | |
|---------------------------------|-------------------------|--------------------------|---|-------------------------|
| | | Revision for future plan | Timeline | With transition period? |
| Australia | 7th | 7th | - | - |
| Canada | 5th | 7th | 2022 | Yes |
| Hong Kong, China | NA | Blank | Blank | Blank |
| Indonesia | 4th | 7th | 2022 | Yes |
| Malaysia | 3rd | 8th | 2023 | Yes |
| New Zealand | 7th | 7th | - | - |
| Peru | NA | 8th | 2022 | Yes |
| Republic of Korea | 6th | 7th or 8th | In consultation with the "Joint Government Committee on the GHS in Korea" | No |
| The Republic of the Philippines | 4th | 8th | No definite timeline | Yes |
| The Russian Federation | 4th | 7th | 2022 | No |
| Singapore | 4th | 7th | 2021 | Yes |
| Chinese Taipei | 4th | 4th | - | - |
| The United States of America | 3rd | 7th | 2021 | Yes |
| Vietnam | 2nd | 7th | 2021 | No |

Process to assess/manage regulatory changes and obstacles

For processes to assess/manage regulatory changes, all economies with current or future plans for GHS adoption have relevant processes. "Consultation" was the most common option (11 economies), followed by "Communication/promotion" (10 economies), and "Regulatory Impact analysis" (9 economies). Australia, Malaysia, and Russia further commented that stakeholder engagement is an essential step regarding regulatory changes.

For obstacles to implementing new revisions, "Capacity of awareness or training for new versions" was the most frequently reported challenge, followed by "Processes of revising regulations/standards", "Impact to the industry", and "Stakeholder communication". Some economies pointed out that time pressure, costs, as well as mutually exclusive stakeholder proposals submitted during the public discussion are also challenging.

Acceptance for a different revision

Four economies do not accept and are not planning to accept a revision of GHS that is not currently in force, 4 economies accept a different (later or earlier) revision, and another 2 economies reported that they do not accept a different revision but are planning for future acceptance.

Session C: Building Blocks, Safety Data Sheets, and Labels

In addition to the differences of revisions, rules of building blocks, the safety data sheets (SDS), and labels implementation vary from economy to economy. The purpose of this session is to investigate the requirements for these items, and to look for possibility to address the challenges of trade barrier come from different implementation rules.

Building blocks

The adoption of sub-categories/building blocks and acceptance of classifications without the lower categories or sub-categories (building blocks) that are currently in force varies greatly from economy to economy (shown in Table 2).

Three economies (Vietnam, Chinese Taipei, and Russia) reported acceptance of all building blocks. Acute toxicity, category 5, is the most common sub-category not adopted, followed by skin corrosion/irritation, category 3; aspiration hazard, category 2; and hazardous to the aquatic environment (acute), category 2 and 3. In addition to the listed choices, some economies also reported other categories/building blocks (hazardous to the ozone layer, and flammable gas category 2) were not adopted. Some economies gave different building block adoption for different scopes –for example, all building blocks were adopted for consumer products but only selected items were adopted for industrial chemicals, or flammable liquid 4 was not adopted with the exception of Diesel.

For those who have GHS in place currently, six (the United States, Canada, Australia, the Philippines, New Zealand, Republic of Korea) accept all categories (and/or building blocks) that are not currently enforced in their economy. New Zealand, the Philippines, Republic of Korea, and Vietnam accept classifications without the lower categories or sub-categories (building blocks) that are currently enforced.

For adoption of the building blocks that are not present in the GHS as published by the UN, several economies (the United States, Canada, Singapore, Russia, and New Zealand) responded they incorporate some additional building blocks, or incorporate this additional management into their regulations. Hazardous to terrestrial vertebrates or invertebrates was not reported by any respondent.

Table 2. Specific categories or sub-categories not adopted by the economy

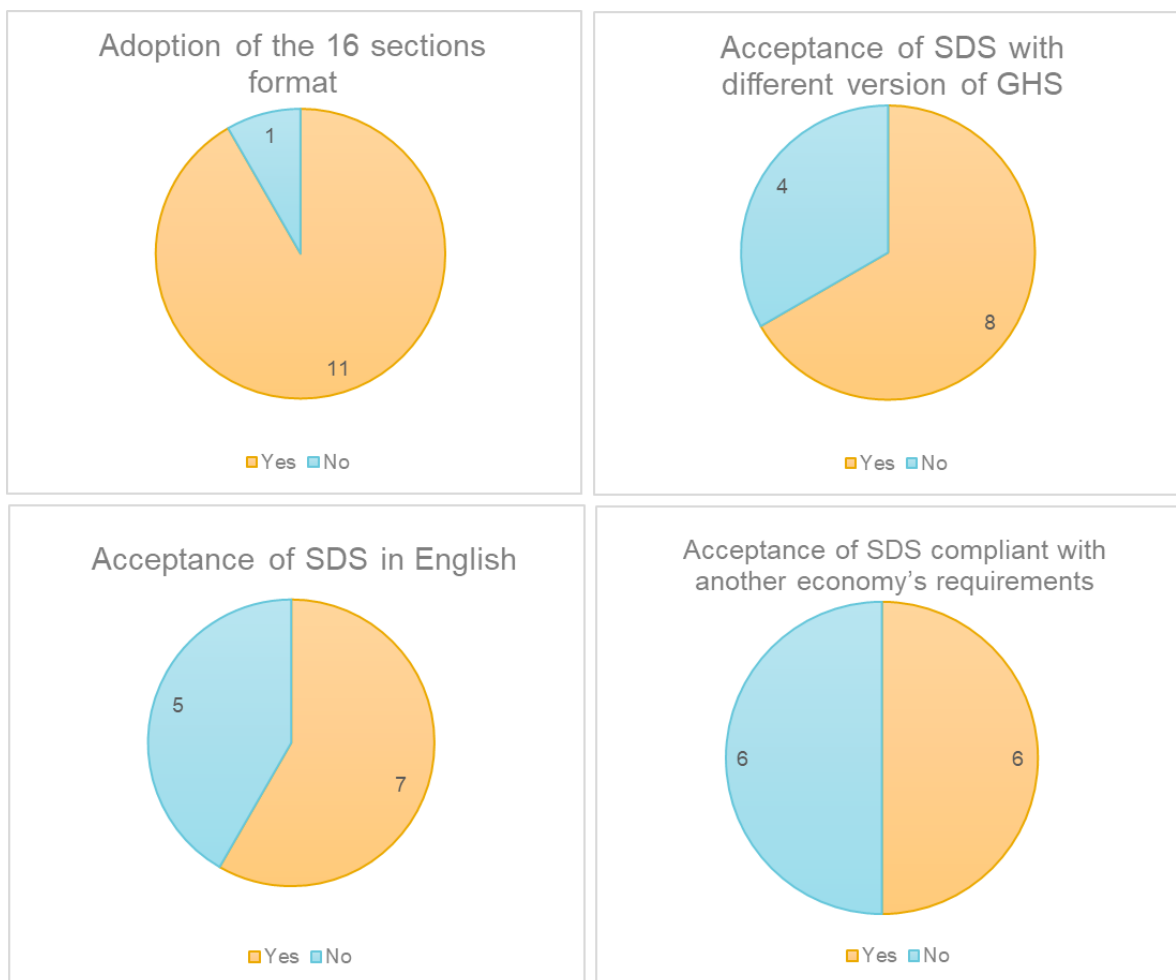
| Economy | Acute toxicity | Skin corrosion/irritation | Serious eye damage/eye irritation | Aspiration hazard | Flammable liquid | Hazardous to the aquatic environment | | Other building block coverage |
|---------------------------------|---|---------------------------|-----------------------------------|-------------------|------------------|--|--|--|
| | | | | | | Acute | Chronic | |
| Australia | Category 5 | Category 3 | | Category 2 | | Category 1 Category 2 Category 3 | Category 1 Category 2 Category 3 Category 4 | Hazardous to the ozone layer, flammable gas category 2 |
| Canada | Category 5 | Category 3 | | Category 2 | | Category 1 Category 2 Category 3 | Category 1 Category 2 Category 3 Category 4 | |
| Hong Kong, China | Not adopting GHS | | | | | | | |
| Indonesia | Category 5 | Category 3 | | Category 2 | Category 4 | Category 2 Category 3 | | |
| Malaysia | Category 5 | Category 3 | Category 2B | Category 2 | Category 4 | Category 2 Category 3 | | |
| New Zealand | Category 5 | Category 3 | | | | | | Hazardous to the ozone layer is not adopted. Eye irritation category 2 is adopted, which incorporates subcategories 2A and 2B. |
| Peru | Not adopting GHS | | | | | | | |
| Republic of Korea | Category 5 | Category 3 | | | | Category 2 Category 3 | | |
| The Republic of the Philippines | Category 5 | Category 3 | Category 2B | Category 2 | Category 4 | Category 2 Category 3 | Category 4 | For consumer products, adopt all; For industrial chemicals, refer to checked items |
| The Russian Federation | adopted all categories and sub-categories (building blocks) | | | | | | | |
| Singapore | Category 5 | Category 3 | | Category 2 | Category 4 | Category 2 Category 3 | Category 3 Category 4 | Flammable liquid 4 not adopted with the exception of Diesel only. |

| Economy | Acute toxicity | Skin corrosion/irritation | Serious eye damage/eye irritation | Aspiration hazard | Flammable liquid | Hazardous to the aquatic environment | | Other building block coverage |
|------------------------------|---|---------------------------|-----------------------------------|-------------------|------------------|--|--|-------------------------------|
| | | | | | | Acute | Chronic | |
| Chinese Taipei | adopted all categories and sub-categories (building blocks) | | | | | | | |
| The United States of America | Category 5 | Category 3 | | Category 2 | | Category 1 Category 2 Category 3 | Category 1 Category 2 Category 3 Category 4 | |
| Vietnam | adopted all categories and sub-categories (building blocks) | | | | | | | |

SDS

Format and acceptance of SDS

The adoption of 16 sections, and the acceptance of a different revision, language, or other economies' requirements for the SDS among 12 economies that have GHS implementation in place, are presented in Figure 2. Regarding the acceptance SDS compliant with other economies' requirements, the economies answered "Yes" generally noted that it is acceptable as long as the documents meet the requirements of the local relevant regulations.



Cut-offs

For some hazard classes (sensitizers, for example), the GHS offers the possibility to adopt different values. The survey asked if an economy requires an SDS (or disclosure of a substance in section 3) in specific cases. Requiring an SDS is reported by several economies for sensitizers for concentrations below their cut-off value/concentration limits or substances subject to occupational exposure limit values (OEL) if present above the specified threshold value. Some economies also reported specific references under the regulatory scheme for cut-off limits.

Unique requirements for the SDS

Among specific requirements for the SDS, an emergency phone number is most frequently reported by the respondents, followed by reference to specific exposure, such as OELs, for section 8. The issue of the confidential business claims was brought up by some economies: when claiming confidential business information, additional rules should be complied with, such as limiting the concentration ranges within the prescribed ranges provided by the regulations, making a claim for exemption, or making sure those directly handling the chemicals may request the confidential information from the manufacturer.

Labelling

Responses show if specific labelling requirements exist (presented in Table 2), while the definition of small containers varied. In the case of multiple hazards, where there are no precedence rules, most respondents indicated the same rules as mentioned in the GHS are used. Additional rules have been identified by the respondents, including exceptions for SMEs (Indonesia), and the hazard pictograms of ‘exploding bomb’ should precede ‘flame’ and ‘flame over circle’ except for exceptions (Malaysia).

| | Label Size | Language | Font | Font size | Pictogram | Specific requirements for small container labelling |
|---------------------------------|------------|----------|------|-----------|-----------|---|
| Australia | | | | | | V |
| Canada | | V | | | | V |
| Indonesia | V | V | | | V | V |
| Malaysia | V | V | | V | V | V |
| New Zealand | V | | | | | |
| Republic of Korea | V | | | | V | V |
| The Republic of the Philippines | | | | | | |
| The Russian Federation | V | | | | | V |
| Singapore | V | V | | | V | V |
| Chinese Taipei | | V | | | V | V |
| The United States of America | | V | | | V | V |
| Vietnam | | V | | V | | V |

Economies also have different requirements for the number of P-Statements to be included on the label. Some require all precautionary statements, if necessary and doable, to be put on the label, some have no specific requirement, and others indicate that no more than 6 precautionary statements shall appear on the label unless necessary to reflect the nature and severity of hazards.

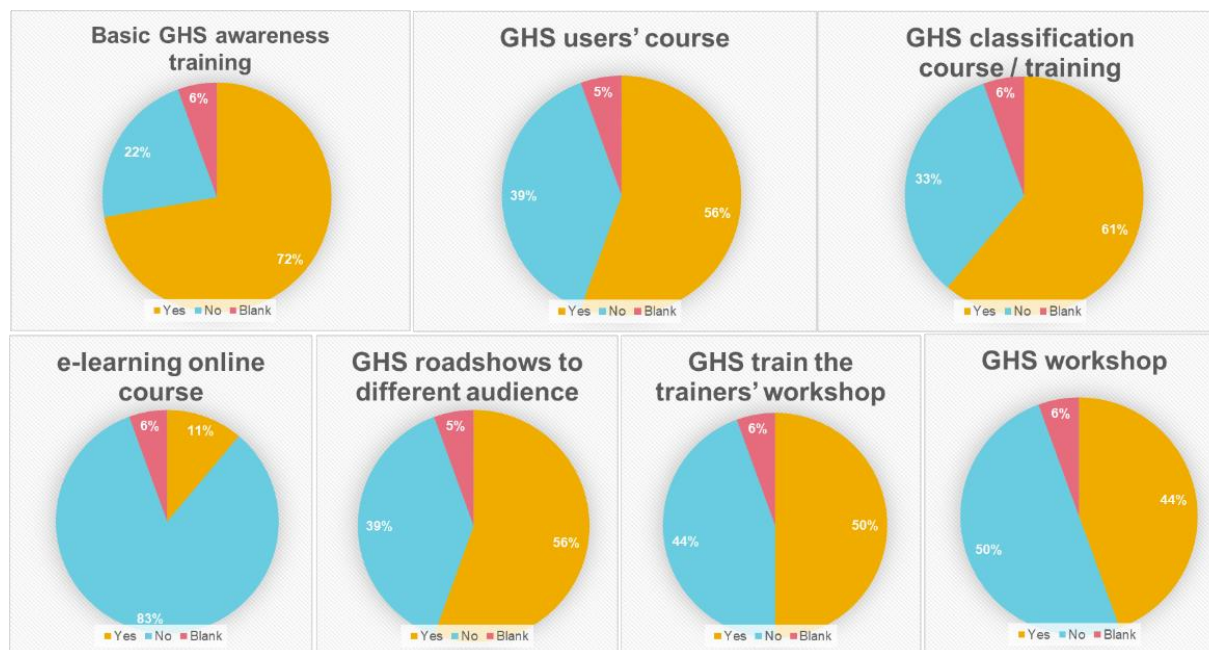
Session D: Capacity Building and Training

The goals of Session D were to investigate the needs and forms of training that may be helpful to improve GHS capacity. Half of responses reported that GHS training is mandatory. For those who responded with urgent needs for GHS training, the respondents mentioned following key words as their primary focuses:

- the SMEs’ capacity,

- preparing the SDS,
- workers (employees) awareness and knowledge of GHS and classification,
- and training for adopting later revisions.

Figure 3. Status of GHS training topics reported



Regarding the content of GHS training or approaches of delivery the survey asked about the existing status, target audience, and any support needed for: basic GHS awareness, users' courses, classification, e-learning, roadshow, train-the-trainer programs, and workshops. The frequency for delivering that training varied – some reported that such training only (or was more frequent) when the policy was implemented, some reported several times per year or as needed. The target audience who received the training include people from industry or government agencies, GHS implementers, people who work in labs, or in safety, production, logistics, or waste transportation departments. Some economies indicated that the relevant materials or information have been incorporated into their hazard communication standards or developed system, as the ways to support the dissemination of such knowledge. Those who welcome the support mentioned that technical or financial assistance, or best practice experiences with GHS training, would be helpful for improving the capacity of GHS.

A variety of tools that have been used to promote GHS implementation and GHS training – such as the guidance documents, websites, posters, labelling templates, or compliance aids – were commonly reported by the respondents. In addition, GHS comics were identified by an economy as the possible way to promote GHS capacity.

Conclusion

Based on the responses to the Survey, the APEC Economies are working towards some aspects of convergent implementation of GHS, primarily the basic elements of classifications, SDS formats, and labelling. However, collaboration across the APEC region is required to achieve better alignment.

Economies adopt later revisions of GHS

Besides economies that have adopted the 7th revision, all economies that are planning to adopt a later revision of GHS have identified the 7th or 8th revision as the revision to adopt. The economies also identify that the implementation timing of later revisions will be around 2021 to 2023, mostly with transition periods. With the plans to move to later revisions, harmonized implementation might be improved across the economies. In addition, current or planned acceptance of a GHS revision has been reported by several economies, which is expected to be helpful for alignment.

However, the one of the major obstacles for adopting later revisions of GHS - processes of revising regulations/standards – indicates it would be challenging for economies' regulations / standards to keep up with the bi-annual GHS revision update; also the capacity of awareness and understanding for newer revisions was often reported as a limitation.. To ensure continued convergent implementation of the GHS revisions, APEC Economies should consider addressing these obstacles to regularly update their adoption of GHS.

Building blocks, the SDS, and labelling

All the basic components of building blocks, SDS format, and labelling elements are commonly adopted. The adoption of sub-categories/building blocks, SDS requirements (along with cut-off values), and labelling requirements vary greatly from economy to economy. Also the acceptance of the requirements enforced in other economies is not currently taking place – the possible exceptions are only for the SDS or labelling that have complied with the local regulations and languages. While there are a lot of differences in building blocks, SDS and labelling across economies identified by the Survey, further exploration is needed to address possible solutions for reducing trade barriers.

Demands for GHS Capacity building

The Survey identified the main focuses of GHS capacity building: the SMEs' capacity, capacity for preparing the SDS, workers' (employees') awareness and knowledge of GHS and classification, and training for adopting later revisions. The responses echoed the obstacles identified by the respondents in Session B.

While some economies have training for the related topics in place, some respondents reported that they may benefit from getting resources to establish such courses. It was also identified that the target audiences, and the focuses they may need from GHS training, may be diverse. Future capacity building activities may be designed based on the characteristics and emphases of different groups.

Recommendation

Drawing from the observations and summaries of the Survey, the economies are recommended to:

- consider addressing the obstacles to adopting later revisions
- consider accepting later revisions, provided that the level of protection is the same or stronger with respect to a particular chemical
- consider accepting classifications based on building blocks that have not been adopted by the economy as long as all the adopted building blocks are included in the classification
- consider initiating conversations about best practice for GHS implementation for better mutual understanding of the rationales and improved addressing of differences.

Attachment 1 APEC CD 2021 survey on GHS implementation convergence

APEC CD: 2021 survey on GHS implementation convergence

1. A-1: Economy

2. A-2: Responding as:

Mark only one oval.

Regulator

Industry

Other: _____

3. A-3: Name of organisation/agency

4. A-4: Name of respondent

5. A-5: Phone number of the respondent

(for any follow up questions or clarifications)

6. A-6: Email address of the respondent

(for any follow up questions or clarifications)

Implementation

7. B-1: Has your economy adopted GHS?

Mark only one oval.

Yes

No *Skip to question 45*

Implementation

8. B-2: What is the scope of GHS in your economy?

Tick all that apply.

Industrial chemicals

Consumer products

Pesticides

9. B-2: Other, please specify:

For the purpose of this questionnaire please refer to the most stringent implementation of GHS in your economy

10. B-3: Which revision is currently used in your economy?

Mark only one oval.

- 2nd
- 3rd
- 4th
- 5th
- 6th
- 7th *Skip to question 12*
- 8th *Skip to question 12*

Implementation

11. B-4: Does your economy plan to adopt 7th revision and when?

Mark only one oval.

- Yes, in 2021 *Skip to question 14*
- Yes, in 2022 *Skip to question 14*
- Yes, in 2023 *Skip to question 14*
- Yes, in 2024 *Skip to question 14*
- Yes, in 2025 *Skip to question 14*
- No plan to revise in the next 5 years *Skip to question 16*
- Other revision

Implementation

12. B-5: Which revision does your economy plan to adopt next, if any?

Mark only one oval.

4th

5th

6th

7th

8th

9th

10th

No plan to revise in the next 5 years *Skip to question 16*

Implementation

13. B-6: When does your economy plan to adopt the revision?

Mark only one oval.

2021

2022

2023

2024

2025

Other: _____

Implementation

14. B-7: Is there any transition period for the adoption mentioned in previous question?

Mark only one oval.

Yes

No

15. B-7: If yes, please provide details on the duration of the transition period:

Implementation

16. B-8: Is there any process to assess/manage regulatory changes?

(Select all that applies)

Tick all that apply.

Regulatory impact assessment

Consultation

Communication/promotion

No

17. B-8: Other, please specify:

18. B-9: Is there any obstacle to implementing new versions?

(Select all that applies)

Tick all that apply.

- Processes of revising regulations/standards
- Impact to the industry
- Capacity of awareness or training for new versions
- Stakeholder communication

19. B-9: Other, please specify:

20. B-10: Does your Economy accept a revision of GHS that is not currently in force in your economy?

(i.e. either earlier revisions or later revisions)

Mark only one oval.

- Yes (all the later revisions)
- Yes (all the earlier revisions)
- Currently not, but is planning for future acceptance
- No

Building Blocks

In GHS, building blocks refer to each hazard class, hazard categories and sub-categories. Here is an example using the hazard class and categories for the skin corrosion/irritation hazard:

| <i>Hazard class</i> | <i>Hazard category</i> | <i>Sub-category</i> |
|--------------------------------------|------------------------|---------------------|
| Skin Corrosion/irritation | 1 | A |
| | | B |
| | | C |
| | 2 | |
| | 3 | |

Under GHS, economies "are free to determine which of the building blocks will be applied in different parts of their systems. [...] For a given hazard class, competent authorities have the possibility not to apply all categories" (or sub-categories).

21. C-1: Has your economy adopted all categories and sub-categories (building blocks)?

Mark only one oval.

Yes *Skip to question 25*

No

Building blocks

22. C-2: If not, which categories or sub-categories were not adopted by your economy?

(Select all that applies)

Tick all that apply.

- Acute toxicity, Category 5
- Skin corrosion/irritation, Category 3
- Serious eye damage/eye irritation, Category 2B
- Aspiration hazard, Category 2
- Flammable liquid, Category 4
- Hazardous to the aquatic environment (acute), category 1
- Hazardous to the aquatic environment (acute), category 2
- Hazardous to the aquatic environment (acute), category 3
- Hazardous to the aquatic environment (chronic), category 1
- Hazardous to the aquatic environment (chronic), category 2
- Hazardous to the aquatic environment (chronic), category 3
- Hazardous to the aquatic environment (chronic), category 4

23. C-2: Other, please specify:

24. C-3: Does your Economy accept all categories (building blocks) that are not currently in force in your economy?

Mark only one oval.

Yes

No

Building blocks

25. C-4: Has your economy adopted any of the following building blocks (hazard classes and categories) that are not present in the GHS as published by the UN?
(select all that applies)

Tick all that apply.

- Simple asphyxiant
- Combustible dust
- Hazardous to soil environment
- Hazardous to terrestrial vertebrates
- Hazardous to terrestrial invertebrates

26. C-4: Other, please specify:

27. C-5: Does your Economy accept classifications without the lower categories or sub-categories (building blocks) that are currently in force in your economy?

For example, if your economy adopted Acute Toxicity, Category 5, would classifications not reporting the category 5 be accepted?

Mark only one oval.

- Yes
- No

Safety data sheets

28. C-6: Has your economy adopted the 16 sections format for the SDS?

Mark only one oval.

Yes

No

SDS are required for any substance or mixture classified under GHS and for all mixtures which contains ingredients in concentrations exceeding the cut-off values for SDS.

Under GHS, as published by the UN, cut-off values and concentration limits refer to the same notion. Table 1.5.1 lists cut-off values/concentration limits for each health and environmental hazard.

An SDS is therefore required for mixture containing ingredients present above these values:

Table 1.5.1: Cut-off values/concentration limits for each health and environmental hazard class

| Hazard class | Cut-off value/concentration limit |
|--|--|
| Acute toxicity | ≥ 1.0% |
| Skin corrosion/Irritation | ≥ 1.0% |
| Serious eye damage/eye irritation | ≥ 1.0% |
| Respiratory/Skin sensitization | ≥ 0.1% |
| Germ cell mutagenicity (Category 1) | ≥ 0.1% |
| Germ cell mutagenicity (Category 2) | ≥ 1.0% |
| Carcinogenicity | ≥ 0.1% |
| Reproductive toxicity | ≥ 0.1% |
| Specific target organ toxicity (single exposure) | ≥ 1.0% |
| Specific target organ toxicity (repeated exposure) | ≥ 1.0% |
| Aspiration hazard (Category 1) | ≥ 1.0% |
| Aspiration hazard (Category 2) | ≥ 1.0% |
| Hazardous to the aquatic environment | ≥ 1.0% |

These values are also those mainly used to determine relevant ingredients that need to be taken into consideration when classifying mixtures.

For the classification of mixture under health hazards, GHS introduces different cut-off values concentration limits used as thresholds triggering the classification of a mixture is an ingredient's concentration (or the sum of relevant ingredients' concentrations when additivity applies) is exceeding this value.

Table 3.2.3: Concentration of ingredients of a mixture classified as skin Category 1, 2 or 3 that would trigger classification of the mixture as hazardous to skin (Category 1, 2 or 3)

| Sum of ingredients classified as: | Concentration triggering classification of a mixture as: | | |
|---|--|---------------|----------------|
| | Skin corrosive | Skin irritant | |
| | Category 1 (see note below) | Category 2 | Category 3 |
| Skin Category 1 | ≥ 5% | ≥ 1% but < 5% | |
| Skin Category 2 | | ≥ 10% | ≥ 1% but < 10% |
| Skin Category 3 | | | ≥ 10% |
| (10 × Skin Category 1) + Skin Category 2 | | ≥ 10% | ≥ 1% but < 10% |
| (10 × Skin Category 1) + Skin Category 2 + Skin Category 3 | | | ≥ 10% |

For some hazard classes (sensitizers for example), the GHS offers the possibility to adopt different values:

| Ingredient classified as: | Cut-off values/concentration limits triggering classification of a mixture as: | | |
|--|--|-------------------|----------------------------|
| | Respiratory sensitizer Category 1 | | Skin sensitizer Category 1 |
| | Solid/Liquid | Gas | All physical states |
| Respiratory sensitizer Category 1 | ≥ 0.1% (see note) | ≥ 0.1% (see note) | -- |
| | ≥ 1.0% | ≥ 0.2% | |
| | ≥ 0.1% | ≥ 0.1% | |
| Respiratory sensitizer Sub-category 1A | ≥ 0.1% | ≥ 0.1% | -- |
| Respiratory sensitizer Sub-category 1B | ≥ 1.0% | ≥ 0.2% | -- |
| Skin sensitizer Category 1 | -- | -- | ≥ 0.1% (see note) |
| | -- | -- | ≥ 1.0% |
| Skin sensitizer Sub-category 1A | -- | -- | ≥ 0.1% |
| Skin sensitizer Sub-category 1B | -- | -- | ≥ 1.0% |

Authorities can decide to adopt the lower (values highlighted in yellow) or higher values. Some economies choose to adopt the higher value as threshold for the classification of mixtures while keeping the lower value as cut-off value for the SDS requirement (as originally stated in table 1.5.1).

29. C-7: Does your economy require an SDS (or disclosure of a substance in section 3) in the following cases?

(Select all that applies)

Tick all that apply.

- Sensitizers for concentrations below their cut-off value/concentration limit
- Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value

30. C-7: Other, please specify:

31. C-8: Does your economy have any unique requirements for the SDS?

Tick all that apply.

- Specific requirement for the emergency phone number (i.e. local number, 24/7 number)
- Specific concentration ranges for ingredients in section 3
- Disclosure of ingredients classification in section 3
- Reference to specific exposure standard (i.e. occupational exposure limits) for section 8
- Specific transport regulation for section 14
- Specific regulations to be reported in section 15
- NTP and IARC listing
- None of the above

32. C-8: Other, please specify:

33. C-9: Does your economy accept SDS made under a different version of GHS?

Mark only one oval.

Yes

No

34. C-10: Does your economy accept SDS in English?

Mark only one oval.

Yes

No

35. C-11: Does your economy accept SDS compliant with another economy's requirements?

(i.e. with slightly different section names, or information)

Mark only one oval.

Yes

No

36. C-11: If yes, please specify if there is any condition for acceptance:

Labels

37. C-12: Please detail down any specific labelling requirements adopted by your economy

(Select all that applies)

Tick all that apply.

- Label Size
- Language
- Font
- Font size
- Pictogram
- None of the above

38. C-12: Other, please specify:

39. C-13: Has your economy adopted specific limited requirements for small container labelling?

Mark only one oval.

Yes

No

40. C-13: If yes, please provide details on conditions (what is defined as small container?) and requirements (what are the limitations allowed?):

Under GHS, in case of multiple hazards, some precedence rules have been defined to prioritize the hazard communication elements to include on a label and to avoid redundancy of the information.

There are rules defined in GHS for symbols, signal word and hazard statements.

For symbols:

- If the skull and crossbones applies, the exclamation mark should not appear.
- If the corrosive symbol applies, the exclamation mark should not appear where it is used for skin or eye irritation.
- If the health hazard symbol appears for respiratory sensitization, the exclamation mark should not appear where it is used for skin sensitization or for skin or eye irritation.

For signal word:

- If the signal word "Danger" applies, the signal word "Warning" should not appear.

For hazard statements:

- If the statement H410 "very toxic to aquatic life with long lasting effects" is assigned, the statement H400 "very toxic to aquatic life" may be omitted.
- If the statement H411 "toxic to aquatic life with long lasting effects" is assigned, the statement H401 "toxic to aquatic life" may be omitted.
- If the statement H412 "harmful to aquatic life with long lasting effects" is assigned, the statement H402 "harmful to aquatic life" may be omitted.
- If the statement H314 "causes severe skin burns and eye damage" is assigned, the statement H418 "causes serious eye damage" may be omitted.

41. C-14: What are the precedence rules currently implemented in your economy?

Mark only one oval.

- Same rules as mentioned in the GHS
- Additional rules
- No rules

42. C-14: In case additional rules are implemented, please specify these rules:

For precautionary statements (P-statements), in order to avoid having too much information on a label several economies require to select only 6 P-statements to appear on the label. In some cases, other economies allow the use of more P-statements on a label.

43. C-15: Please indicate your economy's requirement on number of P-Statements to be included on the label:

44. C-16: Please indicate the acceptability of your economy in adopting other economies' label requirements, e.g. language, GHS version, etc. Please provide the details or example of the established mutual acceptance:

Capacity building and training

45. D-1: Is “training” a mandatory requirement in your economy?

Mark only one oval.

Yes

No

46. D-2: What is the urgent training need in your economy? Who needs to be trained and why?

Capacity building and training

D-3: For the following GHS topics, please indicate if you have conducted any capacity building / training in your economy:

47. D-3.1: Basic GHS awareness training

(i.e. what is UN GHS? What is the objective and scope of GHS? What is the regulatory requirement and timeline of the implementation?)

Mark only one oval.

Yes

No

48. D-3.1: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

49. D-3.1: If not, do you need any assistance or resource to develop this course?

50. D-3.2: GHS users' course

Training on the basic elements on GHS – GHS pictograms GHS hazard classes, labelling and SDS, regulatory requirement on SDS & labeling and implementation timeline

Mark only one oval.

Yes

No

51. D-3.2: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

52. D-3.2: If not, do you need any assistance or resource to develop this course?

53. D-3.3: GHS classification course / training

More advance course to train the people on how the classify the chemical substances and mixture using the GHS criteria and cut-off values based on the data available

Mark only one oval.

Yes

No

54. D-3.3: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

55. D-3.3: If not, do you need any assistance or resource to develop this course?

56. D-3.4: e-learning online course

More for worker level to teach on how to identify the hazard GHS pictograms and the use of SDS and labelling & appropriate PPE. A simple well structure on-line training with video / animation / examples then followed by Questions with Multiple choices questions

Mark only one oval.

Yes

No

57. D-3.4: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

58. D-3.4: If not, do you need any assistance or resource to develop this course?

59. D-3.5: GHS roadshows to different organizations (MNC, SME, Research Lab and testing lab, DHL etc.), industry associations (i.e. Chemical industry associations, Safety officer association, IH associations, Marine associations, Associations of Logistics and Transport, Hotel, Tourism and Labor Unions etc.) or Institutions (Universities, Tertiary or secondary schools, Polytech etc.)

Mark only one oval.

Yes

No

60. D-3.5: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

61. D-3.5: If not, do you need any assistance or resource to develop this course?

62. D-3.6: GHS train the trainers' workshop

Conduct training to those that may become the GHS trainers in the economy. This can be for both regulators and industry. These people will be the future resources in the economy.

Mark only one oval.

Yes

No

63. D-3.6: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?

64. D-3.6: If not, do you need any assistance or resource to develop this course?

65. D-3.7: GHS workshop

To share the latest GHS vision and trend and share good practice and possible solutions for the challenges and issues from the implementation

Mark only one oval.

Yes

No

66. D-3.7: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing schedule? Who do you invite for the sharing?

67. D-3.7: If not, do you want to conduct this workshop in the future?

Capacity building and training

68. D-4: Does your economy have any communication tools to promote GHS implementation and GHS training?

(Select all that applies)

Tick all that apply.

- GHS guidance document
- GHS promotion materials (e.g. posters)
- GHS training videos
- Compliance aid (e.g. GHS checklist)
- GHS labelling template (including H and P statements, pictograms)
- GHS website
- No

69. D-4: Other, please specify:

70. D-4: If not, does your economy need any communication tools to promote GHS implementation and GHS training?

This content is neither created nor endorsed by Google.

Google Forms

Attachment 2: Survey Responses

Table 1. Survey responses (from A to M)

| | | | | | | | | | |
|--|---|----------------------|-------------------------------|----------------------|----------------------------------|--|---|--|---|
| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
| A-2: Responding as: | Industry | Regulator | Regulator | Regulator | Industry | Industry | Other | Regulator | Industry |
| A-2: Other | | | | | | | Responsible Care/Industry Association | | |
| A-3: Name of organisation/a gency | Accord Australasia | Health Canada | Trade and Industry Department | Ministry of Industry | Responsible Care Indonesia (RCI) | Federasi Industri Kimia Indonesia (FIKI) | Responsible Care Indonesia | Department of Occupational Safety and Health(DOSH), Malaysia | Chemical Industries Council of Malaysia (CICM) |
| B-1: Has your economy adopted GHS? | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| B-2: What is the scope of GHS in your economy? | Industrial chemicals, Consumer products, Pesticides | Industrial chemicals | | Industrial chemicals | Industrial chemicals | Industrial chemicals | Industrial chemicals | Industrial chemicals, Consumer products, Pesticides | Industrial chemicals |
| B-2: Other, please specify: | GHS is applied very broadly in Australia, with specific exemptions set out, notably food and medicines. However, there are labelling exemptions for some types of products e.g. cosmetic products, consumer products in most circumstances. | | | none | None | | Pesticides will follow update international trend | Transport | If the consumer product is a chemical supplied for use at workplaces, it shall comply with the GHS regulation by DOSH (i.e. CLASS 2013 Regulations) |
| B-3: Which revision is | 7th | 5th | | 4th | 4th | 7th | 4th | 3rd | 3rd |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|---|------------------|---|---|-------------------|--|---|---|
| currently used in your economy? | | | | | | | | | |
| B-4: Does your economy plan to adopt 7th revision and when? | | Yes, in 2022 | | Yes, in 2022 | Yes, in 2022 | | Yes, in 2022 | Other revision | |
| B-5: Which revision does your economy plan to adopt next, if any? | No plan to revise in the next 5 years | | | | | 7th | | 8th | |
| B-6: When does your economy plan to adopt the revision? | | | | | | 2021 | | 2023 | |
| B-7: Is there any transition period for the adoption mentioned in previous question? | | Yes | | Yes | Yes | Yes | Yes | Yes | |
| B-7: Other, please specify: | | A two-year transition period is proposed | | 1-2 years | The transition period has not been determined yet, but it may take 1-3 years. | From 2019 to 2021 | Currently drafting Indonesia National Standard (SNI) for GHS implementation is in progress | There will be transition period between 12 to 18 months | |
| B-8: Is there any process to assess/manage regulatory changes? | Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | Consultation | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion |
| B-8: Other, please specify: | There is an initial phase of reaching agreement within Australian Governments (across all of | | | | | | Before drafting SNI GHS, we have Ministerial Regulation concerning GHS and now still valid until | Engagement with stakeholders | Ongoing dialogue / engagement by industry with regulators to seek updates on any regulatory |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|---|-------------------------------|------------------|---|---|---|--|---|---|
| | <p>Australian States and Territories that have responsibility over the implementation of GHS and the Commonwealth Government) before there can be consultation with other stakeholders such as industry. Once consultation comments are taken onboard any amendments made as required, then communication /promotion can begin. There is also usually a transition period to allow seamless transition to the updated requirements.</p> | | | | | | <p>the SNI GHS officially applied.</p> | | <p>changes to GHS implementation in the economy</p> |
| <p>B-9: Is there any obstacle to implementing new versions?</p> | <p>Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication</p> | <p>Impact to the industry</p> | | <p>Capacity of awareness or training for new versions</p> | <p>Capacity of awareness or training for new versions</p> | <p>Capacity of awareness or training for new versions</p> | <p>Processes of revising regulations/standards, Capacity of awareness or training for new versions</p> | <p>Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication</p> | <p>Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|--|------------------|--|--|-------------------------------|---|--|--|
| B-9: Other, please specify: | All of these are necessary steps/consideration for smooth transition. | | | | | | The time to meet the target for completing the Draft of DNI GJS | None | - |
| B-10: Does your Economy accept a revision of GHS that is not currently in force in your economy? | | No | | Currently not, but is planning for future acceptance | Currently not, but is planning for future acceptance | Yes (all the later revisions) | Currently not, but is planning for future acceptance | No | |
| C-1: Has your economy adopted all categories and sub-categories (building blocks)? | No | No | | No | No | Yes | No | No | No |
| C-2: If not, which categories or sub-categories were not adopted by your economy? | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Hazardous to the aquatic environment (acute), category 1, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3, Hazardous to the aquatic environment | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Hazardous to the aquatic environment (acute), category 1, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3, Hazardous to the aquatic environment | | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 | | Acute toxicity, Category 5 | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Serious eye damage/eye irritation, Category 2B, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Serious eye damage/eye irritation, Category 2B, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|---|---|------------------|-----------|-----------|-----------|--|----------|----------|
| | (chronic), category 1, Hazardous to the aquatic environment (chronic), category 2, Hazardous to the aquatic environment (chronic), category 3, Hazardous to the aquatic environment (chronic), category 4 | (chronic), category 1, Hazardous to the aquatic environment (chronic), category 2, Hazardous to the aquatic environment (chronic), category 3, Hazardous to the aquatic environment (chronic), category 4 | | | | | | | |
| C-2: Other, please specify: | Hazardous to the ozone layer, flammable gas category 2 | | | | None | | Mostly we will follow ASEAN Guidance for GHS Implementation. | None | - |
| C-3: Does your Economy accept all categories (building blocks) that are not currently in force in your economy? | Yes | Yes | | No | No | | No | No | No |
| C-4: Has your economy adopted any of the following building blocks (hazard classes and categories) that are not present in the GHS as published by the UN? | | Simple asphyxiant, Combustible dust | | | | | | | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|--|---|------------------|--|--|--|--|------------------------|----------|
| C-4: Other, please specify: | | Pyrophoric Gases Physical Hazards Not Otherwise Classified Health Hazards Not Otherwise Classified Biohazardous Infectious Materials | | Based on the current GHS regulation, none of the above classification was adopted. | Not applicable. Based on the current GHS regulation, none of the above classification was adopted. | Following UN recommendation | We will follow ASEAN Guidance for GHS Implementation | None | |
| C-5: Does your Economy accept classifications without the lower categories or sub-categories (building blocks) that are currently in force in your economy? | No | No | | No | No | No | No | No | No |
| C-6: Has your economy adopted the 16 sections format for the SDS? | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | Yes |
| C-7: Does your economy require an SDS (or disclosure of a substance in section 3) in the following cases? | Sensitizers for concentrations below their cut-off value/concentration limit, Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | | | | | Sensitizers for concentrations below their cut-off value/concentration limit, Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | | | |
| C-7: Other, please specify: | SDS is required for all | In Canada, for the Respiratory | | Consistent to current GHS | Indonesia adopts the | | Sorry I am not sure | SDS is only compulsory | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--------------|--|---|------------------|---|---|-----------|-----------|--|----------|
| | <p>hazardous chemicals. Disclosure of the ingredient is required on the SDS if it contributes to the hazard classification, or there is an OEL associated with the substance that may be of relevance.</p> | <p>or Skin Sensitization hazard class, we adopted the following cut-off values/concentration limits for the classification of mixtures: Respiratory sensitizer Category 1 – Solid/Liquid: $\geq 0.1\%$; Gas: $\geq 0.1\%$ Respiratory sensitizer Sub-category 1A - Solid/Liquid: $\geq 0.1\%$; Gas: $\geq 0.1\%$ Respiratory sensitizer Sub-category 1B - Solid/Liquid: $\geq 1.0\%$; Gas: $\geq 0.2\%$ Skin sensitizer Category 1: $\geq 0.1\%$ Skin sensitizer Sub-category 1A: $\geq 0.1\%$ Skin sensitizer Sub-category 1B: $\geq 1.0\%$ In Canada, mixtures that contain respiratory or skin sensitizers at concentrations equal to or greater than</p> | | <p>regulation, none of the above classification was adopted Indonesia adopts the higher value as threshold for the classification of mixtures and for the SDS requirement. Please refer to : 1. Regulation Minister of Industry No 23/M-IND/PER/4/2013 regarding Global Harmonize System Classification and Labeling of Chemical Substances 2. Regulation No 04/BIM/PER/1/2014 regarding Technical Guideline for GHS Implementation</p> | <p>higher value as threshold for the classification of mixtures and for the SDS requirement. Please refer to : 1. Regulation Minister of Industry No 23/M-IND/PER/4/2013 regarding Global Harmonize System Classification and Labeling of Chemical Substances 2. Regulation No 04/BIM/PER/1/2014 regarding Technical Guideline for GHS Implementation</p> | | | <p>when the concentration is above the cut-off value/concentration limit</p> | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|--|------------------|--|--|-------------------|---------------------|--|--|
| | | these cut-off values are required to have an SDS and the disclosure of the sensitizer is required under item 3 of the SDS. | | | | | | | |
| C-8: Does your economy have any unique requirements for the SDS? | Specific requirement for the emergency phone number (i.e. local number, 24/7 number), Specific concentration ranges for ingredients in section 3, Disclosure of ingredients classification in section 3, Reference to specific exposure standard (i.e. occupational exposure limits) for section 8, Specific transport regulation for section 14 | | | Specific requirement for the emergency phone number (i.e. local number, 24/7 number) | Specific requirement for the emergency phone number (i.e. local number, 24/7 number) | None of the above | | Specific concentration ranges for ingredients in section 3, Disclosure of ingredients classification in section 3, Reference to specific exposure standard (i.e. occupational exposure limits) for section 8 | Specific requirement for the emergency phone number (i.e. local number, 24/7 number), Specific concentration ranges for ingredients in section 3, Reference to specific exposure standard (i.e. occupational exposure limits) for section 8, Specific transport regulation for section 14, Specific regulations to be reported in section 15 |
| C-8: Other, please specify: | | For hazardous products, either the actual concentration (when the ingredient is always present at the same | | | | | Sorry I am not sure | Right of information - regulatory, or occupational health doctor, or person directly handling the chemicals may | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--------------|-----------|---|------------------|-----------|-----------|-----------|-----------|---|----------|
| | | <p>concentration) or the actual concentration range (when the ingredient is not always present at the same concentration) of the hazardous ingredients must be disclosed in section 3 of the SDS. There are prescribed concentration ranges provided in our Hazardous Products Regulations that can be used in accordance with the regulations, to protect confidential business information (CBI). In a situation where the actual concentration or actual concentration range of a hazardous ingredient is CBI, and the prescribed concentration ranges cannot be used or the supplier does</p> | | | | | | <p>request the confidential information from the manufacturer</p> | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|-----------|--|------------------|-----------|--|-----------|---|---|----------|
| | | not want to use them, a claim for exemption must be filed with Health Canada under the provisions of the Hazardous Materials Information Review Act. | | | | | | | |
| C-9: Does your economy accept SDS made under a different version of GHS? | No | Yes | | No | No | No | | Yes | |
| C-10: Does your economy accept SDS in English? | Yes | Yes | | No | No | Yes | | Yes | Yes |
| C-11: Does your economy accept SDS compliant with another economy's requirements? | No | Yes | | No | No | No | | No | No |
| C-11: Other, please specify: | | The SDS must be compliant with the requirements of the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).The section (heading) names must be exactly the same as those | | | For hazardous product : Indonesia GHS SDS is legally required For non-hazardous product : English GHS SDS is acceptable | | Sorry I have to check with Indonesia GHS Team | Not applicable. The 16 headings must be the same as in CLASS Regulation 2013 but extra information is acceptable. | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|---|------------------|---------------------------------|---------------------------------|--|--|--|--|
| | | <p>set out in Schedule 1 of the HPR. Additional information (i.e., information that is not required under the HPR) is permitted to be included on the SDS, as long as the information is not false or misleading. The HPR requires for SDSs to be provided in both of Canada's official languages (English and French; either a single bilingual document or a document in two unilingual parts is acceptable).</p> | | | | | | | |
| C-12: Please detail down any specific labelling requirements adopted by your economy | | Language | | Label Size, Language, Pictogram | Label Size, Language, Pictogram | Label Size, Language, Font, Font size, Pictogram | Language, Pictogram | Label Size, Language, Font size, Pictogram | Label Size, Language, Font size, Pictogram |
| C-12: Other, please specify: | A hazardous chemical is correctly labelled if it is packed in a container that | With regard to language requirements, labels must be in both official languages of | | | | | Will be further discussion with The Drafting Team of SNI GHS | None | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--------------|---|--|------------------|-----------|-----------|-----------|-----------|----------|----------|
| | <p>has a label written in English that includes:</p> <ul style="list-style-type: none"> • The product identifier. • The name, Australian address and business telephone number of the manufacturer or importer. • The identity and proportion of each ingredient—as per Schedule 8 to the model WHS Regulations. • Any hazard pictogram consistent with the correct classification of the chemical. • Any hazard statement, signal word and precautionary statement consistent with the correct classification of the chemical. • Any information about the hazards, first aid and emergency procedures relevant to the chemical, | <p>Canada (English and French). Labels must be clearly and prominently displayed on a surface of the hazardous product (or the container in which it is packaged) that is visible under normal conditions of use, easily legible without the aid of any device other than corrective lenses, and contrasted with any other information on the hazardous product or the container. Labels must be durable (i.e., must remain legible throughout the lifetime of the hazardous product, and not fade, run, rub off, peel off or deteriorate upon exposure to light under normal conditions of use or transport).</p> | | | | | | | |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|---|--|------------------|---|---|-----------|-------------------------------------|---|--|
| | which are not included in the hazard statement or precautionary statement. • An expiry date, if applicable. | | | | | | | | |
| C-13: Has your economy adopted specific limited requirements for small container labelling? | Yes | Yes | | Yes | Yes | No | No | Yes | Yes |
| C-13: Other, please specify: | Where a hazardous chemical is packaged in a container that is too small to attach a label with all the information that is required of hazardous chemical labels, then the label must be written in English and include the following: • the product identifier • the name, Australian address and business telephone number of either the manufacturer or importer • a hazard | For hazardous products packaged in small capacity containers of 100 ml or less, hazard statements and precautionary statements may be omitted from the label. For hazardous products packaged in extremely small capacity containers (3 ml or less), where the label must be removed in order to allow the product to be used in the intended manner, hazard | | Label Element For small containers (<100ml): Product Identifier Hazard Pictograms Signal Words Hazard Statements | Label Element For small containers (<100ml): Product Identifier Hazard Pictograms Signal Words Hazard Statements | | Under discussion among team members | Small container is define as less than 125mL in size. The following information are to be provided in the label: product identifier, supplier identification, signal word, pictogram and statement 'read SDS before use'. | If the packaging of hazardous chemical is a container of 125 ml in size & below, the label shall be affixed in such manner deemed reasonable by the supplier |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|---|------------------|------------------------------------|------------------------------------|------------------------------------|--------------------|------------------------------------|--|
| | <p>pictogram or hazard statement that is consistent with the correct classification of the chemical, and</p> <ul style="list-style-type: none"> any other information required for hazardous chemicals labels in general that is reasonably practicable to include. <p>Priority should be given to the inclusion of those labelling elements relating to the most significant hazards of the hazardous chemical.</p> <p>There is no defined size for a small container.</p> | <p>statements and precautionary statements may be omitted from the label and the label is not required to remain attached to the hazardous product during normal conditions of use (the label could be made removable to enable product use).</p> | | | | | | | |
| C-14: What are the precedence rules currently implemented in your economy? | Same rules as mentioned in the GHS | Additional rules | | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Additional rules | Same rules as mentioned in the GHS | Additional rules |
| C-14: Other, please specify: | | The following precedence rules have been adopted in the | | | | | Exception for SMEs | None | For physical hazards, if the hazard pictograms of 'exploding |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--------------|-----------|--|------------------|-----------|-----------|-----------|-----------|----------|---|
| | | <p>Canadian HPR: For symbols: • If the skull and crossbones applies, the exclamation mark should not appear where it is used for acute toxicity; • If the corrosive symbol applies, the exclamation mark should not appear where it is used for skin or eye irritation; • If the health hazard symbol appears for respiratory sensitization, the exclamation mark should not appear where it is used for skin sensitization or for skin or eye irritation.</p> <p>For signal word: • If the signal word "Danger" applies, the signal word "Warning" should not</p> | | | | | | | <p>bomb', 'flame' and 'flame over circle' are applicable, the hazard pictogram of 'exploding bomb' shall be used and the use of the hazards pictograms of 'flame' and 'flame over circle' shall be optional, except in the cases where the use of more than one of these hazard pictograms are compulsory. In cases where the 'exploding bomb' and 'flame' symbols apply, as for self-reactive chemical type B and organic peroxides type B, both hazard pictograms are compulsory.</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|---|--|------------------|----------------------|----------------------|---|-----------|---|---|
| | | <p>appear.</p> <p>For hazard statements: If the statement H314 "causes severe skin burns and eye damage" is assigned, the statement H418 "causes serious eye damage" may be omitted.</p> | | | | | | | |
| <p>C-15: Please indicate your economy's requirement on number of P-Statements to be included on the label:</p> | <p>We do not have any specific requirements for the number of P-Statements to be included on the label.</p> | <p>All precautionary statements that are assigned, based on the classification of the hazardous product, are required to be included on the label. However, if a precautionary statement does not apply in a particular case with regard to the normal conditions of use, handling and storage of the hazardous product, it may be omitted. For hazardous products packaged in small capacity containers</p> | | <p>not specified</p> | <p>not specified</p> | <p>Preventive, storage and handling statement</p> | | <p>Not more than 6 P-Statements, unless necessary to reflect the nature & severity of hazards</p> | <p>Not more than 6 precautionary statements shall appear on the label, unless necessary to reflect the nature and the severity of the hazards. Redundant information may be omitted. Where a hazard classification results in duplicate precautionary statements, the information shall appear once</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|--|---|------------------|--|--|--|-----------------------------------|--|--|
| | | (less than or equal to 100 ml), the hazard statements and precautionary statements may be omitted. | | | | | | | |
| C-16: Please indicate the acceptability of your economy in adopting other economies' label requirements, e.g. language, GHS version, etc. Please provide the details or example of the established mutual acceptance: | Australian labels must meet Australian requirements. | Canada accepts labels that include languages other than English and French. With regard to accepting labels prepared according to other economies' label requirements, as long as the label is compliant with the requirements of the HPA and the HPR, it would be considered acceptable. Additional information (i.e., information that is not required under the HPR) is permitted to be included on the label of a hazardous product, as | | Currently Indonesia does not have mutual acceptance with other economies' on GHS | Currently Indonesia does not have mutual acceptance with other economies' on GHS | Dual language : original economy and Local economy | Must use local/national language. | Label and SDS must be in National Malay language and English | Other economies' labeling requirements are not accepted unless they are aligned with the CLASS Regulations 2013. Labels must be in dual language |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|---|--|------------------|---|--|---|----------------------|--|--|
| | | long as the information is not false or misleading. | | | | | | | |
| D-1: Is "training" a mandatory requirement in your economy? | Yes | Yes | | No | No | Yes | Yes | Yes | No |
| D-2: What is the urgent training need in your economy? Who needs to be trained and why? | We do not currently have an urgent training need. There is a need to continue to provide training for SMEs and anyone that may be new to hazardous chemicals space. It is also recognised that 'expert judgement' requirement of GHS can be difficult for SMEs that may not have the breadth of scientific expertise required covered by their employees. | Under provincial, territorial, and federal occupational safety and health legislation in Canada, employers are required to ensure that workers receive education and training to ensure the safe storage, handling, disposal and use of hazardous products in the workplace. | | Training is not mandatory but highly recommended. Capacity and capability building for Small and Medium Companies to implement GHS, Capacity and capability building for GHS Version 7 for overall industries for the readiness on the upcoming revision on GHS regulation to adopt GHS Version 7 | Capacity and capability building for Small and Medium Companies to implement GHS Capacity and capability building for GHS Ver7 for overall industries for the readiness on the upcoming revision on GHS regulation to adopt GHS Ver7 | Training type : how to determine classification of mixture; how to create SDS correctly. Participants : industrial, University and related government or regulator. | | - training on classification according to GHS latest version - regulators and industry need the training - reason : to upgrade knowledge and implement according to GHS latest version | Training on classification of chemicals and preparing SDS. Personnels in company, particularly those from the SMEs should be trained, so that they are able to comply with local GHS regulations |
| D-3.1: Basic GHS awareness training | Yes | No | | Yes | Yes | Yes | Yes | Yes | Yes |
| D-3.1: If yes, please | The training is not conducted | | | No specific frequency, at | No specific frequency, at | 5 days | Basic level has been | Frequency: only one time. | CICM (industry) |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|---|--------|------------------|---|--|-----------|-----------------------------|---|---|
| <p>indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?</p> | <p>regularly. It was a block of training offered soon after GHS was first implemented in Australia.</p> | | | <p>least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS version 4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS</p> | <p>least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS ver4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS</p> | | <p>conducted since 2004</p> | <p>Audience: DOSH officer. Existing training package: No. Existing resource: No</p> | <p>previously conducted awareness & intermediate training sessions jointly with DOSH Malaysia when GHS was first introduced and implemented in Malaysia. Audiences were industry players, as well as relevant Government agencies. Training packages were available then for CICM and DOSH presenters / trainers to conduct the awareness training sessions.</p> <p>DOSH Malaysia presently provides recognition to organisations / training centres that could conduct the training (for awareness, intermediate & advanced levels) based on established</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|-----------|---|------------------|-----------|---|-----------|--|------------|--|
| | | | | | | | | | <p>criteria (e.g. qualification & knowledge of trainers, syllabus, etc.) Recognized organisations / training centres are listed in the DOSH website. Trainings will be conducted based on their training calendar or on need basis by companies.</p> |
| <p>D-3.1: If not, do you need any assistance or resource to develop this course?</p> | | <p>No. Training courses on the Workplace Hazardous Materials Information System (WHMIS), Canada's national hazard communication standard for workplace hazardous products, have been developed and are available. The GHS (5th revised edition) has been adopted in WHMIS, and work is currently underway to align with the</p> | | | <p>Indonesia still need a lot of supports on the resources and know how include its new hazard/ new info/ classification update on GHS ver7</p> | | <p>We welcome any support from other economy</p> | <p>Yes</p> | <p>-</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|------------------------|--|------------------|--|---|--|--|---|----------|
| | | 7th revised edition of the GHS. | | | | | | | |
| D-3.2: GHS users' course | Yes | No | | Yes | Yes | Yes | Yes | Yes | No |
| D-3.2: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | Response as per D-3.1. | | | No specific frequency, at least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS version 4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS | No specific frequency, at least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS ver4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS | Frequency : 2 days Audience : internal company Resource : global company | We need to get sponsor or support for that | Frequency: only one time. Audience: DOSH officer Existing training package: No Existing resource: No | - |
| D-3.2: If not, do you need any assistance or resource to develop this course? | | No. Training courses on the Workplace Hazardous Materials Information System, Canada's national hazard communication standard for workplace hazardous products, have been developed and are available. | | | Indonesia still need a lot of supports on the resources and know how especially the new hazard/ new info/ classification update under GHS ver7. Indonesia now is drafting GHS Indonesia National Standard adopting GHS Ver7 | We Need more assistance to explore more detail pertaining GHS | | Yes | Yes |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|-----------|--------|------------------|--|---|---|-----------|---|---|
| D-3.3: GHS classification course / training | Yes | No | | Yes | Yes | Yes | Yes | Yes | Yes |
| D-3.3: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | | | | No specific frequency, at least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS version 4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS | No specific frequency, at least once a year. The audience are mostly from industries (Local, MNC). We have the existing training packages for GHS ver4. We have Indonesia and Overseas trainers, we also have a collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS | Frequency of training : 3 days There is No existing training package | | Frequency: only one time. Audience: DOSH officer Existing training package: No Existing resource: No | CICM (industry) previously conducted such course with the support from AOTS Japan when GHS was going to be introduced and implemented in Malaysia. Audiences comprised both industry players, relevant Government agencies and the academia. DOSH Malaysia presently provides recognition to organisations / training centres that could conduct the training (for awareness, intermediate & advanced levels) based on established criteria (e.g. qualification & knowledge of trainers, |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|-----------|---|------------------|-----------|---|--|--|----------------|--|
| | | | | | | | | | syllabus, etc.) Recognized organisations / training centres are listed in the DOSH website. Trainings will be conducted based on their training calendar or on need basis by companies. |
| D-3.3: If not, do you need any assistance or resource to develop this course? | | No | | | Indonesia still need a lot of supports on the resources and know how especially the new hazard/ new info/ classification update under GHS ver7. Indonesia now is drafting GHS Indonesia National Standard adopting GHS Ver7 | | We have limited resource and need support to organize the Course | Yes | - |
| D-3.4: e-learning online course | No | Yes | | No | No | Yes | No | No | No |
| D-3.4: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training | | The target audience is workers. The existing training package (e-learning online course) is available through the available | | | | 2 days All stakeholders There is No training package | | Not applicable | - |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|-----------|--|------------------|--|---|-----------|--|----------|----------|
| package? Do you have existing resource? | | through the Canadian Centre for Occupational Health and Safety. With regard to the frequency of training, employers must refer to requirements set out in the legislation administered by the occupational safety and health regulatory agency in their provincial, territorial or federal jurisdiction. | | | | | | | |
| D-3.4: If not, do you need any assistance or resource to develop this course? | | | | Yes, we have no experience on conducting e-learning online course so we need assistance especially regarding to the best practice from other Economy | Government has no infrastructure set up for conducting e learning on line course. However some MNC has established online training set up. Expect to have a chance to leverage other economies' best practices. | | We want to conduct this event and need support | Yes | Yes |
| D-3.5: GHS roadshows to different organizations (MNC, SME, | Yes | No | | Yes | Yes | Yes | No | Yes | Yes |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|------------------------------|--------|------------------|---|--|---|-----------|--|--|
| <p>Research Lab and testing lab, DHL etc.), industry associations (i.e. Chemical industry associations, Safety officer association, IH associations, Marine associations, Associations of Logistics and Transport, Hotel, Tourism and Labor Unions etc.) or Institutions (Universities, Tertiary or secondary schools, Polytech etc.)</p> | | | | | | | | | |
| <p>D-3.5: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?</p> | <p>Response as per D-3.1</p> | | | <p>The audience are mostly from industries (Local, MNC), institution (University, researchers), and transporter</p> | <p>The audience mostly come from industries and universities</p> | <p>2-5 days All related stakeholders There is No existing package</p> | | <p>Frequency: only one time. Audience: DOSH officer Existing training package: No Existing resources: No</p> | <p>CICM (industry) conducted such roadshows previously, jointly with MITI at the beginning when GHS was introduced and implemented in Malaysia. Audiences were mainly industry players from the different chemical sub-sector groups</p> |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|-----------|--------|------------------|---|--|---|--|----------------|---|
| | | | | | | | | | and relevant Government agencies. Some other industry associations had also their own sessions with the regulators (DOSH) and organized on need basis |
| D-3.5: If not, do you need any assistance or resource to develop this course? | | No | | | Great if we have a chance to leverage other economies' best practices. | | Almost we never conducted, need support/sponsor | Yes | - |
| D-3.6: GHS train the trainers' workshop | No | No | | Yes | Yes | Yes | Yes | No | Yes |
| D-3.6: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | | | | Training collaboration of RCI/UNITAR/J CIA-AOTS | Collaboration trainings/ workshops/ seminars with RCI/UNITAR/J CIA-AOTS | Frequency : 5 days Participants : Industry, government, University | We have conducted but need to organize again for new generation / new trainers | Not applicable | CICM (industry) with the support by AOTS Japan conducted previously at the beginning when GHS was implemented in Malaysia. |
| D-3.6: If not, do you need any assistance or resource to develop this course? | | No | | | Indonesia still need a lot of supports on the resources and know how especially the new hazard/ new info/ classification | | | Yes | Yes. it is good to revisit and organise this type of course again, taking into consideration the revision of GHS versions |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|---|------------------|--|--|--|--|---|---|
| | | | | | update under GHS ver7. Indonesia now is drafting GHS Indonesia National Standard adopting GHS Ver7 | | | | over the years. It will also help create a bigger pool of trainers to support GHS implementation in the economy |
| D-3.7: GHS workshop | No | No | | Yes | Yes | Yes | Yes | No | Yes |
| D-3.7: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | | | | Training collaboration of RCI/UNITAR/J CIA-AOTS | At least once a year. The last face to face TOT workshop was done on Feb 2020 (before pandemic). | 2 days All related stakeholder | We have conducted but need to continue. | Not Applicable | CICM (industry) usually organises briefing sessions to members to update developments of the implementation of GHS regulations itself (i.e. CLASS Regulations 2013). Members will be given the opportunity to raise and share their issues and challenges in implementation |
| D-3.7: If not, do you need any assistance or resource to develop this course? | | Yes, if resources permit us to offer such a workshop. | | | | | | Yes | Yes |
| D-4: Does your economy have any communication tools to | GHS guidance document, GHS promotion materials (e.g. | GHS guidance document, GHS promotion materials (e.g. | | GHS guidance document, GHS promotion materials (e.g. | GHS guidance document, GHS promotion materials (e.g. | GHS guidance document, GHS promotion materials (e.g. | GHS guidance document, GHS promotion materials (e.g. | GHS promotion materials (e.g. posters), GHS labelling | GHS guidance document, GHS promotion materials (e.g. |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|--|--|---|------------------|---|---|--|--|--|---|
| promote GHS implementation and GHS training? | posters), GHS training videos, Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms), GHS website | posters), Compliance aid (e.g. GHS checklist), GHS website | | posters), GHS website | posters), GHS website | posters), GHS training videos, Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms), GHS website | posters), Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms) | template (including H and P statements, pictograms) | posters), Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms), GHS website |
| D-4: Other, please specify: | | With regard to our answer for D-4, the available guidance document is Health Canada's Technical Guidance on the Requirements of the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR) - WHMIS 2015 Supplier Requirements. WHMIS 2015 fact sheets are available at the website of the Canadian Centre for Occupational Health and Safety. An SDS compliance promotion tool | | GHS Comics. In addition, we are working on developing National Standard of GHS Implementation | GHS Comics National Standard Indonesia (SNI) on GHS is under development. | | Some we have done but we still need to promoting and coaching GHS Implementation for SMEs. | Promotion a bit of info on GHS through CLASS Regulation 2013 | The above are available and mainly related to the implementation of the local GHS regulation i.e. CLASS Regulations 2013 in DOSH Malaysia website |

| A-1: Economy | Australia | Canada | Hong Kong, China | Indonesia | Indonesia | Indonesia | Indonesia | Malaysia | Malaysia |
|---|-----------|---|------------------|-----------|-----------|-----------|-----------|----------|----------|
| | | is available on the whmis.org website at: http://whmis.org/sds/ | | | | | | | |
| D-4: If not, does your economy need any communication tools to promote GHS implementation and GHS training? | | | | | | | | Yes | - |

Table 2. Survey responses (from M to V)

| | | | | | | | | | |
|--|---|-------------------------|--|---|--|--|---|---|----------------------------------|
| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
| A-2: Responding as: | Regulator | Regulator | Regulator | Industry | Regulator | Industry | Other | Regulator | Regulator |
| A-2: Other | | | | | | | GHS Focal Point | | |
| A-3: Name of organisation/a gency | Environmental Protection Authority | Ministry of Environment | APEC CD Contact point : FTA TBT Division / Korean Agency for Technology and Standards(KATS) / Ministry of Trade, Industry & Energy(MOTIE) GHS Contact point: Fire Response & Investigation Division / National Fire Agency (Delegation of UN SCEGHS) | Chemical Industries Association of the Philippines (SPIK) | CIS Center on behalf of the Ministry of Industry and Trade of the Russian Federation | Singapore Chemical Industry Council (SCIC) | Safety and Health Technology Center (SAHTECH) | United States Department of Labor - Occupational Safety and Health Administration | Vietnam Chemicals Agency |
| B-1: Has your economy adopted GHS? | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| B-2: What is the scope of GHS in your economy? | Industrial chemicals, Consumer products, Pesticides | | Industrial chemicals, Consumer products, Pesticides | Industrial chemicals, Consumer products | Industrial chemicals, Consumer products, Pesticides | Industrial chemicals | Industrial chemicals, Pesticides | Industrial chemicals | Industrial chemicals, Pesticides |
| B-2: Other, please specify: | All hazardous substances (meeting classification | | | | | | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|---------------------------|--|---------------------------------|------------------------|--------------|---------------------------------------|------------------------------|--------------|
| | criteria of the GHS) are covered, including in addition to above, explosives, dangerous goods, cosmetics, veterinary medicines but excluding human medicines. GHS 7 will be implemented from 30 April 2021 - previously a pre-published version (2001) of the GHS was implemented. | | | | | | | | |
| B-3: Which revision is currently used in your economy? | 7th | | 6th | 4th | 4th | 4th | 4th | 3rd | 2nd |
| B-4: Does your economy plan to adopt 7th revision and when? | | Other revision | Other revision | Other revision | Yes, in 2022 | Yes, in 2021 | No plan to revise in the next 5 years | Yes, in 2021 | Yes, in 2021 |
| B-5: Which revision does your economy plan to adopt next, if any? | No plan to revise in the next 5 years | 8th | 7th, 8th | 8th | | | | | |
| B-6: When does your economy plan | | 2022, the approval of the | Other: In consultation with the "Joint | No definite timeline | | | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|---|---|---|--|---|---|---|---|---------|
| to adopt the revision? | | GHS regulation is subject to the approval of the Law of Integral Management of Chemical Substances that is being promoted | Government Committee on the GHS in Korea" | | | | | | |
| B-7: Is there any transition period for the adoption mentioned in previous question? | | Yes | No | Yes | No | Yes | | Yes | No |
| B-7: Other, please specify: | | 2-3 years | | For Industrial chemicals - no definite timeline yet whereas for Consumer products within 3 years | There is no official transition period envisaged however industry aware of the planned changes | Usually 6 months, but discussion with Competent authorities are ongoing due to major changes in the SDS requirements. | | Two years time. | |
| B-8: Is there any process to assess/manage regulatory changes? | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment | Consultation, Communication/promotion | Consultation | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | Regulatory impact assessment, Consultation, Communication/promotion | No |
| B-8: Other, please specify: | | | | | There is a public discussion of the first and later the final version of the draft standards when any stakeholders can submit their | | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|---|--|---|--|---|--|--|--|--|
| | | | | | comments and (or) a proposal through the technical committee | | | | |
| B-9: Is there any obstacle to implementing new versions? | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication | | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication | Processes of revising regulations/standards | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication | Processes of revising regulations/standards | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication | Processes of revising regulations/standards, Impact to the industry, Capacity of awareness or training for new versions, Stakeholder communication |
| B-9: Other, please specify: | There are matters to be considered with all of these and associated costs and time, both for industry and the regulator, but they are not insurmountable obstacles. | It is intended to adopt a specific version (8th revision) in order to give companies predictability, without prejudice to the fact that with due process some items can be updated based on new versions if applicable | | | Mutually exclusive stakeholder proposals submitted during the public discussion | | | | |
| B-10: Does your Economy accept a revision of GHS that is not currently in | Yes (all the earlier revisions) | No, our national regulation make mandatory the use of safety data sheets in | Yes (all the earlier revisions) | Yes (all the later revisions) | No | Yes (all the later revisions) | Currently not, but is planning for future acceptance | No | Yes (all the later revisions) |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|--|---|---|--|------------------------|---|----------------|--|---------|
| force in your economy? | | different activities. Nevertheless, since GHS is not currently in force in our economy, it is not possible to know which revision is being used | | | | | | | |
| C-1: Has your economy adopted all categories and sub-categories (building blocks)? | No | No | No | No | Yes | No | Yes | No | Yes |
| C-2: If not, which categories or sub-categories were not adopted by your economy? | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 | | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3 | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Serious eye irritation, Category 2B, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3, | | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Flammable liquid, Category 4, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3, Hazardous to the aquatic environment (chronic), | | Acute toxicity, Category 5, Skin corrosion/irritation, Category 3, Aspiration hazard, Category 2, Hazardous to the aquatic environment (acute), category 1, Hazardous to the aquatic environment (acute), category 2, Hazardous to the aquatic environment (acute), category 3, Hazardous to the aquatic | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|---|-------------------|--|------------------------|--|----------------|---|---------|
| | | | | Hazardous to the aquatic environment (chronic), category 3, Hazardous to the aquatic environment (chronic), category 4 | | category 3, Hazardous to the aquatic environment (chronic), category 4 | | environment (chronic), category 1, Hazardous to the aquatic environment (chronic), category 2, Hazardous to the aquatic environment (chronic), category 3, Hazardous to the aquatic environment (chronic), category 4 | |
| C-2: Other, please specify: | Hazardous to the ozone layer is not adopted. Eye irritation category 2 is adopted, which incorporates subcategories 2A and 2B. | | | For consumer products, adopt all; For industrial chemicals, refer to checked items | | Flammable liquid 4 not adopted with the exception of Diesel only. | | | |
| C-3: Does your Economy accept all categories (building blocks) that are not currently in force in your economy? | Yes | Yes, the GHS is not mandatory in our economy, so the use of any specific category or sub-category is not restricted | Yes | Yes | | No | | Yes | |
| C-4: Has your economy adopted any of the following building blocks | Hazardous to soil environment, Hazardous to terrestrial | | | | | Combustible dust | | Simple asphyxiant, Combustible dust | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|------|-------------------|---------------------------------|--|-----------|---|------------------------------|---------|
| (hazard classes and categories) that are not present in the GHS as published by the UN? | vertebrates, Hazardous to terrestrial invertebrates | | | | | | | | |
| C-4: Other, please specify: | Simple asphyxiants and combustible dusts are managed as workplace hazards under the workplace health and safety legislation but they do not form part of the hazardous substances classification and controls framework (labelling). Hazardous to the terrestrial environment (soil, vertebrates, invertebrates, biocidal action) does form part of the hazardous substances classification and control framework. | | NA | None | Note: Hazardous to soil environment is envisaged under the technical regulations of Eurasian economic union On the safety of chemical products (adopted but not entered into force) | | Not adopted any building blocks except for GHS. | | no |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|---|--|---------------------------------|--|--|--|--|--|
| C-5: Does your Economy accept classifications without the lower categories or sub-categories (building blocks) that are currently in force in your economy? | Yes | Yes, the GHS is not mandatory in our economy, so the use of any specific category or sub-category is not restricted | Yes | Yes | No | No | No | No | Yes |
| C-6: Has your economy adopted the 16 sections format for the SDS? | Yes | No | Yes | Yes | No | Yes | Yes | Yes | Yes |
| C-7: Does your economy require an SDS (or disclosure of a substance in section 3) in the following cases? | Sensitizers for concentrations below their cut-off value/concentration limit | | Sensitizers for concentrations below their cut-off value/concentration limit, Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | | Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | Sensitizers for concentrations below their cut-off value/concentration limit | Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | Sensitizers for concentrations below their cut-off value/concentration limit, Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value | Substances subject to an occupational exposure limit values (OEL) if present above the specified threshold value |
| C-7: Other, please specify: | Details can be found in the EPA's Safety Data Sheets Notice: https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/G | | | No | | | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|--|------|--|---------------------------------|---|--|-------------------|---|--|
| | HS2/Consolidated_Hazardous_Substances_Safety_Data_Sheets_Notice_2017.pdf | | | | | | | | |
| C-8: Does your economy have any unique requirements for the SDS? | Specific regulations to be reported in section 15 | | Specific requirement for the emergency phone number (i.e. local number, 24/7 number), Reference to specific exposure standard (i.e. occupational exposure limits) for section 8, Specific transport regulation for section 14, Specific regulations to be reported in section 15 | None of the above | Specific concentration ranges for ingredients in section 3, Specific transport regulation for section 14 | Specific requirement for the emergency phone number (i.e. local number, 24/7 number), Reference to specific exposure standard (i.e. occupational exposure limits) for section 8, Specific transport regulation for section 14, Specific regulations to be reported in section 15 | None of the above | Specific requirement for the emergency phone number (i.e. local number, 24/7 number), Reference to specific exposure standard (i.e. occupational exposure limits) for section 8, NTP and IARC listing | Specific requirement for the emergency phone number (i.e. local number, 24/7 number) |
| C-8: Other, please specify: | There are requirements in the EPA's Safety Data Sheet Notice for most of these, but they are not specific or unique to New Zealand. See link above for the SDS Notice. | | | | Links to data sources, additional hazard classification according to national standard (GOST 12.1.007-76) | Emergency phone number should be 24/7 or operating hours should be indicated if it is not. For Section 8: should list Singapore permissible exposure level or ACGIH Section 14: UN | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|-------------|---|-------------------|---------------------------------|------------------------|---|----------------|------------------------------|---------|
| | | | | | | <p>model regulations (UNRTDG), IMDG</p> <p>TO note for question C-9: SDS made under GHS rev 4 or higher only would be accepted.</p> | | | |
| C-9: Does your economy accept SDS made under a different version of GHS? | Yes | Yes, our national Regulation make mandatory the use of Safety Data Sheets in different activities. Nevertheless, since GHS is not currently in force in our economy, it is not possible to know which revision is being used. | Yes | Yes | No | Yes | No | Yes | Yes |
| C-10: Does your economy accept SDS in English? | Yes | Yes, since GHS is not currently in force in our economy, there is no limitation regarding the language of the entered SDS; however, due to the fact that national | No | Yes | No | Yes | No | Yes | No |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|--|-------------------|--|------------------------|---|----------------|--|---------|
| | | regulations make the use of the SDS mandatory, the translation of these is a task carried out by the companies that supply or use chemicals, in order to facilitate their use in the different activities they carry out, especially in the workplace. | | | | | | | |
| C-11: Does your economy accept SDS compliant with another economy's requirements? | Yes | Yes | Yes | Yes | No | Yes | No | Yes | No |
| C-11: Other, please specify: | GHS SDS are accepted if compliant with the relevant laws of Australia, European Union, USA, or Canada, as long as they meet the NZ requirements in section 1 (contact details for NZ importer/supplier), environmental | | | None, as long as the document meets the requirements | | Yes, as long as the Singapore requirements for SDS are met. additional information is ok but basic Singapore requirements are needed. | | As long as it does not contradict or cast doubt on the required information. | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|--|------|-----------------------|--------------------------------------|------------------------|---------------------------------|---------------------|---|---------------------|
| | hazard information for agrichemicals in section 2, and NZ specific regulatory information in section 15 (HSNO approval number etc., and any applicable exposure limits). | | | | | | | | |
| C-12: Please detail down any specific labelling requirements adopted by your economy | Language | | Label Size, Pictogram | | Language | Label Size, Language, Pictogram | Language, Pictogram | Language, Pictogram | Language, Font size |
| C-12: Other, please specify: | Labels must be in English, otherwise only general attributes are specified in line with the GHS. Details can be found in the EPA's Labelling Notice: https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/GHS2/Consolidated_Hazardous | | | For industrial chemicals, Label size | | | | Labels must be in English and pictograms must have a red boarder. | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|---|------|--|---------------------------------|--|---|--|---|--|
| | _Substances_Labelling_Notice_2017.pdf | | | | | | | | |
| C-13: Has your economy adopted specific limited requirements for small container labelling? | No | | Yes | No | Yes | Yes | Yes | Yes | Yes |
| C-13: Other, please specify: | See clause 9(4) of the EPA's Labelling Notice. | | Under 100 g or 100 mL container, Product information, pictogram, signal word, supplier information | | For a small container with insufficient space for labelling, only six precautionary statements may appear on the label, unless necessary to reflect the nature and the severity of the hazards. A fold-out label can also be used. | Small container: < 125 mL. requirements depend if product is supplied with package/container or if it is used in the same workplace | If the volume of the container is under 100ml, it may label only the names, hazard pictograms, and signal words. | If the manufacturer can show that it is not feasible to use pull out labels, fold back labels or tags, the small container at minimum must contain the product identifier, pictograms, manufacturer's name and phone number, signal word and a statement that the full label information is provided on the outside package. The outside package, at minimum, must contain all applicable label elements, | name of chemicals; origin; name and contact of responsible organizations or individual |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|---|--|--|--|--|--|--|---|---|
| | | | | | | | | has to be clearly visible and inform users that the small container must be stored in the outer container. | |
| C-14: What are the precedence rules currently implemented in your economy? | Same rules as mentioned in the GHS | No rules | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS | Same rules as mentioned in the GHS |
| C-14: Other, please specify: | | | | | | | | | |
| C-15: Please indicate your economy's requirement on number of P-Statements to be included on the label: | No specific requirement or limit. Clause 13(2) of the EPA's Labelling Notice allows minor differences in the wording of precautionary statements as long as they do not affect the obvious meaning, of the EPA's Labelling Notice | | If there are 7 or more P-statement, it is allowable that only 6 P-statement including strictest P-statement. | None | If the space for providing all P-statements is insufficient only six precautionary statements may appear on the label, unless necessary to reflect the nature and the severity of the hazards. | P-statements should be kept at a maximum of 6 | There is no requirement on number of P-Statements. | All appropriate precautionary statements are required on the label. However, they can be combined or consolidated to save label space or improve readability. | No |
| C-16: Please indicate the acceptability of your economy in adopting other economies' | Clause 31 of the EPA's Labelling Notice allows acceptance of labels, in respect of | Since the GHS is not mandatory in our economy, there are no restrictions regarding the | Containers of dangerous goods imported from foreign economies are deemed to comply with this | Language - English GHS Versions - later/ higher versions | Other economies' label requirements, e.g. language, GHS version are not | GHS labels will be accepted as long as they meet the basic labelling requirement | Not adopted other economies' label requirements. | Information from other economies may be provided on the label as supplemental | Vietnam accepts all the version of GHS from version 2 |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|--|--|---|--|---|---|---|--|---|
| label requirements, e.g. language, GHS version, etc. Please provide the details or example of the established mutual acceptance: | GHS and some other requirements, from Australia, European Union, USA and Canada. See EPA's Labelling Notice linked above. | use of GHS versions or regarding labelling. | standard if a warning label is attached in accordance with the classification and labeling method applied in the economy. | | acceptable. But it should be noted that until the technical regulation of the Eurasian Economic Union "On the safety of chemical products" (TR EAEU 041/2017) enters into force, the GHS in the Russian Federation is applied on a voluntary basis. | stated in SS586 Part 2 | | information as long as it does not contradict or cast doubt on the required information. | |
| D-1: Is "training" a mandatory requirement in your economy? | No | No | No | Yes | No | Yes | Yes | Yes | No |
| D-2: What is the urgent training need in your economy? Who needs to be trained and why? | Regulators staff need training on the update to GHS 7 as it is a big change from the previous pre-2001 version used. Industry needs training as we are moving from the early GHS-based system that used a unique | In the first instance, the development of capacities must be strengthened in the authorities that regulate and therefore supervise the application of the GHS, in the second instance it is necessary to | NA | For industry, GHS classification especially for consumer sectors which are impacted by the new regulations. Updates of GHS | Currently, there is no urgent training need. | Need for training for Small and Medium companies as well as for sectors that have not implemented GHS yet | In order to prevent workers from not having accurate information on hazardous chemicals that thereby would result in occupational accidents, the employer shall adopt the following measures: | Under the Hazard Communication Standard, which is aligned with the GHS, employees need to be trained on the hazardous chemicals in their work area at the time of their initial assignment | GHS for SME companies; using software for GHS |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|-------------------------------------|---|--|-------------------|---------------------------------|------------------------|-----------|--|--|---------|
| | NZ alphanumeric coding system for identifying hazard classification categories, and moving to a fully GHS based system for labelling and SDS. | train small and medium size companies in order to ensure the adequate application of the GHS. Large companies (many of them transnationals) have been applying the GHS for strict commercial issues. | | | | | 1.The employer shall provide educational training to workers on the manufacturing, handling, or utilization of hazardous chemicals. 2.After a vehicle carrying hazardous chemicals enters a workplace, the employer shall designate a personnel with related trainings to confirm that the chemicals are labeled and Safety Data Sheets (SDS) are available in accordance with these Regulations before loading and unloading, transporting, handling, or utilization of the chemicals. | and whenever a new chemical hazard is introduced into their work area. They also need to be trained on the location and availability of the written hazard communication program and safety data sheets. | |
| D-3.1: Basic GHS awareness training | Yes | No | No | Yes | Yes | Yes | Yes | No | Yes |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|------|-------------------|--|---|---|--|------------------------------|---|
| <p>D-3.1: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?</p> | <p>We will be holding webinars in April 2021 for industry to explain the move from the early GHS-based HSNO system to full implementation of GHS 7. We will be providing more in-depth training to EPA staff on classification of substances under GHS 7. Webinars will be run as demand dictates. We also run them for industry in Australia due the the importance of trans-Tasman trade. We do have existing training materials which we adapt depending on the audience.</p> | | - | <p>For Industry Yes, Awareness and GHS Classification Frequency: annually, and as per need basis, customized training for companies Audience: GHS Implementers, laboratory, safety, production, logistics, waste transporters Resources: SPIK has a pool of trainers</p> | <p>Round tables with industry representative s on TR EAEU 041/2017 implementing the GHS</p> | <p>The frequency was about 1 to 2 times in a year during the initial phase of GHS implementation to drive greater awareness of GHS for cross-industry sectors including users of chemicals. The resources were supported by the government regulators and industry practitioners in joint efforts. A company needs to provide the basic Hazard communication training to workers/ employee before handing the hazard chemicals. This is mandatory under the WSH general provision. This training can be done in-house. There is also a requirement to</p> | <p>There are about 5 advocacy activities held by OSHA each year for hazard communication . The participants include OSH personnel, supervisors and employers. All existing resource are in public on GHS website maintained by OSHA.</p> | | <p>Rarely, depending on financial availability.</p> |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|-------------|--|---|---------------------------------|------------------------|--|----------------|--|---------|
| | | | | | | provide refresher training every 3 years with proper records and training agenda. Of course, company also has to provide ad hoc training whenever there is any new, change or significant changes on the hazards of the chemicals. | | | |
| D-3.1: If not, do you need any assistance or resource to develop this course? | | Our economy considers that the training of trainers system is a mechanism that could be used to develop capacities and to be able to continue with their dissemination through virtual courses, among others. Likewise, the development of additional educational tools would be important during their dissemination. | No. It will be decided through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | | | | | We don't conduct training on the GHS, however, we provide our regulated community with guidance on the GHS and the Hazard Communication Standard, which is aligned with the GHS. | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|----------------------|--|---|---|--|--|--|------------------------------|---|
| D-3.2: GHS users' course | Yes | No | No | Yes | Yes | Yes | No | No | No |
| D-3.2: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | See answer to D-3.1. | | - | For Industry Frequency: annually, and as per need basis, customized training for companies Audience: GHS Implementers, laboratory, safety, production, logistics, waste transporters Resources: SPIK has a pool of trainers | around 10 training per year provided by several organizations (not a free training) for industry | The frequency was monthly and bi-monthly during the initial phase of GHS implementation . The current frequency is about 1 to 2 times in a year depending on the demand from the industry. | | | |
| D-3.2: If not, do you need any assistance or resource to develop this course? | | Our economy considers that the training of trainers system is a mechanism that could be used to develop capacities and to be able to continue with their dissemination through virtual courses, such as e-learning courses | No. It will be decided through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | | | | No, OSH personnel can use the materials provided by GHS website for the workers' GHS training. | No, thank you. | Yes, technical and financial support for organizing the training. |
| D-3.3: GHS classification | Yes | No | No | Yes | Yes | Yes | No | No | No |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|---|---|---|--|--|--|---|------------------------------|---|
| course / training | | | | | | | | | |
| D-3.3: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | See answer to D-3.1. This training is only provided (at present) to in-house regulator staff. | | - | For Industry Frequency: annually, and as per need basis, customized training for companies Audience: GHS Implementers, laboratory, safety, production, logistics, waste transporters Resources: SPIK has a pool of trainers | around 10 training per year provided by several organizations (not a free training) for industry | The Hazard communication training is mandatory, such as training must be provide before handling of the hazardous chemicals, for all workers under the WSH general provision. There was a 3 years refresher training stated in the guidebook earlier. And company should provide ad hoc training whenever there is any new or significant change on the hazardous of classifications of the chemical substances or mixtures. | | | |
| D-3.3: If not, do you need any assistance or resource to develop this course? | | Our economy considers that the training of trainers system is a mechanism that could be | No. It will be decided through consultation with the "Joint Government Committee on | | | | No, OSHA has established a expert system of mixture classification using the GHS criteria and | No, thank you. | Yes, technical and financial support for organizing the training. |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|-------------|---|---|---------------------------------|------------------------|-----------|---|------------------------------|--|
| | | used to develop capacities. | the GHS in the Republic of Korea" | | | | cut-off values. This can assist the users to proceed the mixture's hazard classification. | | |
| D-3.4: e-learning online course | No | No | No | No | No | No | No | No | No |
| D-3.4: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | | | - | | | | | | |
| D-3.4: If not, do you need any assistance or resource to develop this course? | | Our economy considers that the training of trainers system is a mechanism that could be used to develop capacities. | No. It will be decided through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | Yes | Maybe | | No, there is no plan to develop e-learning course now. | No, thank you. | Yes, technical and financial support to develop the e-learning online course in local language |
| D-3.5: GHS roadshows to different organizations (MNC, SME, Research Lab and testing lab, DHL etc.), | Yes | No | No | Yes | Yes | Yes | No | No | No |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|------|-------------------|----------------------------------|--|---|----------------|------------------------------|---------|
| <p>industry associations (i.e. Chemical industry associations, Safety officer association, IH associations, Marine associations, Associations of Logistics and Transport, Hotel, Tourism and Labor Unions etc.) or Institutions (Universities, Tertiary or secondary schools, Polytech etc.)</p> | | | | | | | | | |
| <p>D-3.5: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource?</p> | <p>These have been conducted in the past - early 2000's when the original GHS based HSNO system was implemented, and in 2015 when the EPA's Labelling and Safety Data Sheets Notices were first established, based on GHS 5. We do not</p> | | - | <p>Frequency: as per request</p> | <p>1-2 per year (not a free training) for industry</p> | <p>Singapore developed a standard pack for the capacity building and training for different audience. Currently there are limited existing resource and a need to recruit new people. Frequency: the training will be conducted on need basis</p> | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|--|---|---|---------------------------------|------------------------|--|---|------------------------------|---|
| | have roadshows planned at present for the implementation of GHS 7. | | | | | | | | |
| D-3.5: If not, do you need any assistance or resource to develop this course? | | Our economy considers that the training of trainers system is a mechanism that could be used to develop capacities. | No. It will be decided through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | | | | No, OSHA has developed and provided various kinds of training materials, posters and brochures and all the resources are in public. Stakeholders could use the resource based on their purpose. | No, thank you. | Yes, technical and financial support for organizing the training. |
| D-3.6: GHS train the trainers' workshop | Yes | No | No | Yes | No | Yes | Yes | No | No |
| D-3.6: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | In-house, as discussed under D-3.1. | | - | As per request Same as above | | The training is conducted on need basis (no specific frequency). | OSHA has trained 276 instructors responsible for GHS awareness-raising and implementation the initial stage of GHS implementation (in 2008). | | |
| D-3.6: If not, do you need | | We suggest holding initial | No. It will be decided | | Maybe | | | | Yes, technical and financial |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|---|---|--|---------------------------------|------------------------|---|----------------|------------------------------|--------------------------------------|
| any assistance or resource to develop this course? | | workshops in economies where GHS is not yet applied in order to develop initial capacities in those economies. | through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | | | | | | support for organizing the training. |
| D-3.7: GHS workshop | Yes | No | No | Yes | No | Yes | No | No | No |
| D-3.7: If yes, please indicate: What is the frequency of the training? Who are the audience? Do you have existing training package? Do you have existing resource? | See answers above. In the past we have been involved in GHS workshops in Australia and several ASEAN economies, but not recently or in relation to GHS 7. | In 2019, the Workshop "Towards a Integral Management of Chemical Substances" was held, organized by MINAM, with support from the German Cooperation Agency GIZ, which was directed to representative s of the national chemical industry. During the Workshop, topics on the level of application of the GHS in Peru and the positions or approaches that should be adopted for its | - | As per request Same as above | | No specific frequency. Audience includes the cross-industry, regulators, schools. | | | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|---|--|---|---|---|---|--|---|---|---|
| | | proper implementation | | | | | | | |
| D-3.7: If not, do you need any assistance or resource to develop this course? | | Yes, we would like to have a workshop of this type in order to initiate coordination, for the development of a regulation for the GHS, with the various stakeholders in Peru. | No. It will be decided through consultation with the "Joint Government Committee on the GHS in the Republic of Korea" | | Yes | | No, OSHA has completed capacity building for GHS implementation and communicate with industries and other stakeholders through advocacy activities, GHS website and consultation services. | No, thank you. | Yes, technical and financial support for organizing the training. |
| D-4: Does your economy have any communication tools to promote GHS implementation and GHS training? | GHS guidance document, GHS labelling template (including H and P statements, pictograms) | No | | GHS guidance document, GHS promotion materials (e.g. posters) | No | GHS guidance document, GHS promotion materials (e.g. posters), Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms), GHS website | GHS guidance document, GHS promotion materials (e.g. posters), GHS training videos, Compliance aid (e.g. GHS checklist), GHS labelling template (including H and P statements, pictograms), GHS website | GHS website | GHS guidance document |
| D-4: Other, please specify: | We do not have GHS specific materials at present as the previous regulatory | | | | Guidances for application of hazard classification criteria and SDS development | | | Although we don't conduct training, we provide information on GHS training courses by | |

| A-1: Economy | New Zealand | Peru | Republic of Korea | The Republic of the Philippines | The Russian Federation | Singapore | Chinese Taipei | The United States of America | Vietnam |
|--|---|---|-------------------|--|--------------------------------------|-----------|----------------|--|--|
| | <p>system was GHS-based rather than 'pure' GHS. However, we will be updating our guidance document on classification to reflect GHS 7 shortly and also a guidance document on labelling showing the GHS label elements.</p> | | | | <p>within the national standards</p> | | | <p>UNITAR to our stakeholders via email.</p> | |
| <p>D-4: If not, does your economy need any communication tools to promote GHS implementation and GHS training?</p> | | <p>Yes, it is imperative to have communication tools according to the target audience in order to disseminate the GHS in the economy (brochures, videos, manuals, among others)</p> | | <p>We still need help on e-learning course or promotional videos</p> | | | | <p>No, thank you.</p> | <p>Yes, e-learning and GHS software for mixture.</p> |