

For Official Use**English - Or. English****2 August 2023****COUNCIL****Council****REPORT ON THE IMPLEMENTATION OF THE OECD DECISION-
RECOMMENDATION ON THE CO-OPERATIVE INVESTIGATION AND
RISK REDUCTION OF CHEMICALS****(Note by the Secretary-General)****JT03523947**

1. This document presents, in its Annex, a Report by the Chemicals and Biotechnology Committee (CBC) on the implementation of the OECD Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Chemicals [[OECD/LEGAL/0441](#)] (hereafter, the “Decision-Recommendation”) including on the implementation of its substantive provisions, its dissemination and its continued relevance. The Report concludes that the Decision-Recommendation remains relevant and proposes actions to further support implementation and dissemination of the Decision-Recommendation.
2. The CBC approved the Report and its transmission to Council to be noted and declassified by written procedure on 8 June 2023 [[ENV/CBC/WRPR\(2023\)49](#)]. Once declassified it will be included on the [online Compendium of OECD legal instruments](#).

Background

3. The Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Chemicals [[OECD/LEGAL/0441](#)] was developed by the Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology (now Chemicals and Biotechnology Committee (CBC)), and was adopted on 25 May 2018 by the Council [[C\(2020\)60](#) and [C/M\(2020\)6](#), Item 62]. It revised and replaced the 1991 Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Existing Chemicals [[OECD/LEGAL/0259](#)] (hereafter the “1991 Decision-Recommendation”) as part of the CBC Standard-Setting Action Plan [[ENV/JM/WRPR\(2016\)83](#)].
4. Part A (“Co-operative Investigation”) of the 1991 Decision-Recommendation was primarily designed to initiate the High Production Volume (HPV) Chemicals Programme and facilitate Adherents working together to assess such chemicals. In 2018 a new emphasis on the development and application of novel methods for assessing the hazards of chemicals, the re-use of national assessments between Adherents and sharing the burden for data generation [[ENV/JM\(2018\)9](#)] were added while retaining the key element of ‘co-operative’ aspects of the investigation and risk reduction of chemicals.
5. Under Part B (“Risk Reduction”) of the 1991 Decision-Recommendation, Adherents agreed to establish or strengthen national programmes aimed at the reduction of risks from existing chemicals to the environment and/or the health of the general public or workers. Its update modernised and strengthened the Decision-Recommendation in order to address both risk prevention and reduction, and a decision was added to implement the Globally Harmonised System on Classification and Labelling of Chemicals (GHS), an internationally agreed system developed by the United Nations for hazard classification and hazard communication for chemicals, and share the results of classifications derived pursuant to the GHS with other Adherents [[ENV/JM\(2018\)9](#)].
6. As a result, the Council abrogated the 1991 Decision-Recommendation and adopted the Decision-Recommendation on 25 May 2018 [[C\(2018\)51](#)]. The Decision-Recommendation has a broader scope than the 1991 one – all references to “chemicals” cover bulk form and nanofoms of chemicals, including manufactured nanomaterials – compared to the 1991 Decision-Recommendation, which focused on “existing chemicals”.
7. The mandates and work of three subsidiary bodies of the CBC directly support the implementation of provisions of the Decision-Recommendation, notably by ensuring the ‘co-operative’ aspects and harmonisation of approaches across Adherents. This includes the Working Party on Hazard Assessment (WPHA), the Working Party on Exposure Assessment (WPEA), and the Working Party on Risk Management (WPRM).

8. There are currently 38 Adherents to the Decision-Recommendation, all of which are OECD Members, and no non-Members have adhered to date.

9. In the Decision-Recommendation, the Council instructs the CBC to monitor its implementation and to report to the Council five years from the date of its adoption and regularly thereafter. In line with this instruction, this Report provides an assessment of key activities undertaken to disseminate and implement the Decision-Recommendation, as well as conclusions regarding its continued relevance.

Methodology

10. A survey questionnaire on the implementation, dissemination and continued relevance of the Decision-Recommendation was developed and circulated to Adherents, as well as the European Union (EU) [[ENV/CBC\(2022\)10](#)].

11. Responses were collected between April and September 2022. 10 Adherents provided responses to the questionnaire: Australia, Belgium, Canada, Germany, Japan, Korea, New Zealand, Spain, Sweden and the United States, as well as the EU (whose activities represent those of 22 Adherents) (together referred to as “Respondents”). For the purpose of this Report, the responses provided by the EU describe the collective activities at the EU level related to implementation and are therefore reflective of activities of Adherents that are EU Member States. Several EU Member States also provided individual responses (Belgium, Germany, Spain, and Sweden).

12. Adherents were not asked to provide information via the questionnaire for a number of substantive provisions, as the relevant information was already available from other sources and was therefore compiled by the Secretariat. This was mainly for concerted actions to address a sub-set of provisions that have taken place in the context of OECD activities and the work of the WPHA, WPEA and WPRM whose mandates are directed at supporting implementation of provisions of the Decision-Recommendation.

Process

13. CBC delegates discussed a preliminary draft Report [[ENV/CBC\(2022\)14](#)] at the 3rd meeting of the CBC in November 2022 [[ENV/CBC/A\(2022\)2](#)] and also provided written comments to the Secretariat thereafter. Those inputs were taken into account and the Report was then submitted to the CBC for approval through written procedure by 8 June 2023 [[ENV/CBC/WRPR\(2023\)49](#)].

14. Following its approval, the Report is now transmitted to the OECD Council, via the Executive Committee, to be noted and declassified. On that occasion, the Council may invite the CBC to take further follow-up actions to support the dissemination and implementation of the Recommendation on the basis of the Report. The proposed actions set out below were presented to the CBC when it approved the Report [[ENV/CBC/WRPR\(2023\)49](#), para. 30].

15. After declassification by the OECD Council, a link to the Report will be included in the public webpage of the Decision-Recommendation on the [online Compendium of OECD Legal Instruments](#).

Summary

Implementation

16. The information gathered by the Secretariat, and the collected survey responses suggest that Adherents, domestically and in the context of collaborative work at the OECD, have made significant and ongoing efforts to implement the Decision-Recommendation, including progress on the development of novel hazard and exposure assessment methodologies, dissemination of information on hazards and exposure to chemicals including through the GHS (Globally Harmonised System of Classification and Labelling) and increased collaboration regarding risk management approaches. This Report focuses only on collaborative initiatives and does not highlight bilateral activities related to aspects of the Decision-Recommendation as their sheer number is beyond the scope of this Report.

17. The implementation of several provisions of the Decision-Recommendation occurs through activities of the WPHA, the WPEA and the WPRM, as overseen by the CBC, including:

- The convening of more than 65 meetings of OECD bodies, webinars and events related to the topics of the Decision-Recommendation;
- The publication of more than 95 reports (guidance, case studies, information) related to the provisions of the Decision-Recommendation;
- The development, or contribution to the development of, several publicly available electronic tools and portals related to the Decision-Recommendation including examples such as the eChemPortal, the OECD Per- and Polyfluoroalkyl Substances (PFAS) Portal, IUCLID (International Uniform Chemical Information Database), the QSAR (Quantitative structure-activity relationship) Toolbox, Substitution and Alternative Assessment (SAAT) Toolbox and the eAOP (Adverse Outcome Pathway) Portal.

18. While the Decision-Recommendation is overall well-implemented by Adherents, there are some challenges to its implementation, which mainly pertain to the evolving nature of the field. Given that scientific knowledge is continually advancing, hazard and exposure methodologies as well as risk management approaches are constantly evolving. Therefore, the sharing of best practices and development of novel methodologies will remain a constant goal to keep pace with developments. This means that implementation of many of the provisions of the Decision-Recommendation will always be a moving target for Adherents to work towards (i.e., decision II, recommendations IV, XII, XIV).

19. One of the constant criticisms in the field of chemical risk assessment and management is the lack of information on chemicals to inform decision-making. While this Report highlights advances in sharing of information on chemicals and risk management decisions, there is a continuing need to improve the implementation of related provisions in the Decision-Recommendation (i.e. decision V, recommendations VII, X, XII).

20. To continue to promote efficiencies and effectiveness in chemical assessment, it is recommended that Adherents build upon the practices to use the results of investigations of chemicals carried out by other Adherents in preparing assessments of the potential health and environmental impacts of chemicals (recommendation VI). This leverages the results of the development of harmonised approaches and application of best practices.

Dissemination

21. The following activities have been undertaken to support the dissemination of the Decision-Recommendation to Adherents and non-Adherents. Since provisions of this Decision-Recommendation are implemented through collaborative activities at the OECD, the dissemination of these implementation activities are also reflected in the context of ‘dissemination’.

- The Secretariat has presented elements of the work implemented under the Decision-Recommendation at over 45 events external to the OECD;
- Several Respondents indicated that they had disseminated the Decision-Recommendation within their own governments, at different levels, typically through correspondence and briefings, and half of Respondents have reported dissemination of the Decision-Recommendation to non-Adherents or non-governmental actors;
- The OECD co-operates closely with other international organisations, most notably eight United Nations (UN) agencies involved in chemical safety, through the Inter-organization Programme for the Sound Management of Chemicals (IOMC)¹ towards the implementation of the Strategic Approach to International Chemicals Management (SAICM)² to strengthen international co-operation in the field of chemicals as the Decision-Recommendation invites Adherents and the Secretary-General to do.

22. While these actions have already contributed to a wide dissemination of the Decision-Recommendation to both Adherents and non-Adherents, possible opportunities to further enhance dissemination could include:

- Further dissemination of the activities and outputs (reports, electronic tools etc.) in relation to the implementation of the Decision-Recommendation to non-Adherents;
- Further dissemination of harmonised approaches beyond delegates to the individual Working Parties and the CBC involved in the implementation of the Decision-Recommendation.

Continued relevance

23. The aggregated questionnaire responses indicate that the Decision-Recommendation remains effective, up-to-date and relevant to Adherents. The Decision-Recommendation does not, therefore, require any revision in the short-to-medium term.

24. The WPHA, WPEA and WPRM will continue to facilitate information exchange, provide forums for implementation of some of the provisions, and to monitor the implementation of the Decision-Recommendation by Adherents.

25. Accordingly, the CBC will continue to support Adherents to implement the Decision-Recommendation and it is proposed to report back to the Council on the implementation, dissemination and continued relevance of the Decision-Recommendation in 10 years. The rationale for a longer reporting period is that efforts to implement the Decision-Recommendation mainly occur through collaborative work, which is embedded in the mandates of the three above-mentioned Working Parties of the CBC that are

¹ www.iomc.info

² www.saicm.org

reviewed every five years as well as in the biennial Programme of Work and Budget. An earlier reporting would be prepared if changes in the area would warrant it.

Proposed Action

26. In light of the above, the Secretary-General invites the Council to adopt the following draft conclusions:

THE COUNCIL

- a) noted document [C\(2023\)108](#), in particular the Report set out in its Annex, and agreed to its declassification;
- b) encouraged Adherents to the Decision-Recommendation to:
 - (i) continue disseminating and implementing all aspects of the Decision-Recommendation; and
 - (ii) address the challenges identified in the Summary and Conclusions of the Report including by:
 - developing novel hazard and exposure assessment methodologies;
 - sharing of risk management approaches and best practices;
 - further improving the dissemination of risk assessment outcomes and associated risk management activities including the dissemination of information regarding chemical substances;
 - leveraging the investigations of chemicals of other Adherents in their assessment activities;
- c) invited the Chemicals and Biotechnology Committee (CBC), through the Working Party on Hazard Assessment (WPHA), the Working Party on Exposure Assessment (WPEA) and the Working Party on Risk Management (WPRM) to:
 - (i) continue supporting the implementation of this Decision-Recommendation, notably through:
 - ensuring collaborative work towards implementation of provisions of the Decision-Recommendation in the relevant Working Parties of the CBC;
 - strengthening its efforts to ensure co-operation with other international organisations, in particular with the other Participating Organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC);
 - (ii) continue promoting international awareness of this Decision-Recommendation, with a view to informing, advising and encouraging non-Adherents to participate in the OECD's work in the field of cooperative investigation and risk reduction of chemicals;
 - (iii) report back to Council on the implementation, dissemination and continued relevance of the Decision-Recommendation in 10 years or earlier if developments in the field warrant it.

Annex. Report on the Implementation of the OECD Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Chemicals

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Acronyms

AOP	Adverse Outcome Pathway
CLP	Classification, Labelling and Packaging
ECHA	European Chemicals Agency
EPA	Environmental Protection Agency
ESD	Emission Scenario Document
FAO	Food and Agriculture Organization
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HCS	Hazard Communication Standard
HPV	High Production Volume
IATA	Integrated Approaches to Testing and Assessment
ILO	International Labour Organisation
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
IUCLID	International Uniform Chemical Information Database
OECD	Organisation for Economic Co-operation and Development
OSHA	US Occupational Safety and Health Administration
(Q)SAR	(Quantitative) Structure-Activity Relationship
PFAS	Per- and polyfluoroalkyl substances
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SAICM	Strategic Approach to International Chemicals Management
SDG	Sustainable Development Goals
SDS	Safety Data Sheet
UN	United Nations
UNECE	United Nations Economic Commission for Europe
WHO	World Health Organization

1. Background

1. The OECD Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Chemicals [[OECD/LEGAL/0441](#)] (hereafter the “Decision-Recommendation”) was developed by the Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology (now the Chemicals and Biotechnology Committee, hereafter the “CBC”), and was adopted on 25 May 2018 by the OECD Council [[C\(2018\)51](#)]. It revised and replaced the Decision-Recommendation on the Co-operative Investigation and Risk Reduction of Existing Chemicals [[OECD/LEGAL/0259](#)] (hereafter the “1991 Decision-Recommendation”).

1.1. The 1991 Decision-Recommendation

2. Part A (“Co-operative Investigation”) of the 1991 Decision-Recommendation was primarily designed to initiate the High Production Volume (HPV) Chemicals Programme and facilitate Adherents working together to assess such chemicals. More precisely, Adherents agreed to co-operatively investigate HPV chemicals in order to identify those which are potentially hazardous to the environment and/or to the health of the general public or workers. This includes co-operatively selecting the HPV chemicals for investigation, acquiring the agreed-upon basic data set needed to assess the chemicals, and co-operatively making an initial assessment. From 1993 to 2013, the Programme produced agreed assessments on the hazards of more than 1300 chemicals [[ENV/JM\(2018\)9](#)].

3. Under Part B (“Risk Reduction”) of the 1991 Decision-Recommendation, Adherents agreed to establish or strengthen national programmes aimed at the reduction of risks from existing chemicals to the environment and/or the health of the general public or workers. The implementation of Part B, which focused on risk reduction of existing chemicals, was supported by three informal groups which reported to the Joint Meeting: The Issue Team on Sustainable Chemistry, the OECD/UNEP Global PFC Group and the Ad Hoc Group on Substitution of Harmful Chemicals (hereafter, “the Risk Reduction Groups”). Activities of the Risk Reduction Groups fed into the development of the Declaration on Risk Reduction for Lead [[OECD/LEGAL/0285](#)] adopted on the occasion of the Ministerial Meeting of the Environment Policy Committee in 1996, the [Voluntary Industry Commitment by OECD Manufacturers of Brominated Flame Retardants to Take Risk Management Action](#), information sharing supporting a shift to safer alternatives for long-chain per- and polyfluoroalkyl substances (PFASs), the development of 37 documents in the [Series on Risk Management](#), along with the development of online information databases such as the [OECD Substitution and Alternatives Assessment Toolbox](#) [[ENV/JM\(2018\)9](#)].

1.2. The revision of the 1991 Decision-Recommendation

4. In 2016, in its Standard-Setting Action Plan, the CBC agreed to explore revising the 1991 Decision-Recommendation by better reflect current practices and facilitating greater harmonisation of policies across countries [[ENV/JM/WRPR\(2016\)83](#)].

5. The main focus of Part A of the 1991 Decision-Recommendation no longer reflected the priorities or scope of cooperative work on chemicals at the OECD and needed to be updated to capture the current emphasis on the development and application of novel methods for assessing the hazards of chemicals. It was also important to remove outdated language concerning the review of HPV chemicals. The update of Part A was also aimed at better aligning with the work and mandate of the Working Party on Hazard Assessment (WPHA) and continuing to promote the importance of collaboration between Adherents

towards improving the hazard assessment of chemicals. It was also deemed to be of practical importance for the evaluation of the accession candidate countries.

6. The elements in Part B continued to be relevant (i.e. a mandate that all Adherents establish or strengthen national programmes aimed at the reduction of risks from existing chemicals to the environment and/or the health of the general public or workers). However, as the other parts of the 1991 Decision-Recommendation were updated, this section was modernised and strengthened. In addition, more clarity could support continued engagement in collaborative activities related to risk reduction and provide better guidance to Adherents establishing or strengthening their industrial chemicals management programmes.

7. The revision was guided by the Joint Meeting and benefitted from input from the Working Party on Hazard Assessment (WPHA) [[ENV/JM\(2018\)9](#)]. On 25 May 2018, on a proposal of the CBC, the Council abrogated the 1991 Decision-Recommendation and adopted the new Decision Recommendation [[C\(2018\)51](#)].

8. The Decision-Recommendation also comprises two parts: ‘Co-operative Investigation and Assessment’ and ‘Risk Prevention or Reduction’:

- The first part on “Co-operative Investigation and Assessment” focuses on the development of harmonised hazard and exposure assessment methodologies for chemicals, collaborative development and dissemination of hazard, exposure or risk assessments, information dissemination and sharing the burden of information generation.
- The second part on “Risk Prevention or Reduction” concentrates on the establishment and strengthening of national risk reduction programmes, the implementation of the Globally Harmonised System of Classification and Labelling (GHS), the undertaking of concerted activities to prevent or reduce the risks of chemicals taking into account a life-cycle perspective and the sharing of best practices regarding risk management approaches including socioeconomic assessments.

9. For the purposes of the Decision-Recommendation, all references to “chemicals” cover bulk form and nanoforms of chemicals, including manufactured nanomaterials. This presents a broadening of scope compared to the 1991 Decision-Recommendation, which focused on ‘existing chemicals’.

10. The Decision-Recommendation contains 13 substantive provisions, including both decisions and recommendations, which are presented in Table 1.

Table 1: The 13 decisions and recommendations set out in the Decision-Recommendation

Co-operative Investigation and Assessment	
II.	Decision: Co-operatively develop harmonised hazard and exposure assessment methodologies for chemicals in order to align approaches for identifying those chemicals which may pose a hazard or risk to the environment or human health. This will also include methodologies to prioritise chemicals for regulatory consideration.
III.	Decision: Co-operatively elaborate and disseminate agreed hazard, exposure or risk assessments on chemicals of mutual interests and, if relevant, classification and labelling designations for these chemicals.
IV.	Recommendation: When developing harmonised hazard and exposure methodologies, consider: <ul style="list-style-type: none"> i. the risks arising from the combined exposure to multiple chemicals; ii. the elaboration of integrated approaches to testing and assessment including harmonized testing strategies; and iii. the regulatory applicability of the methods and identify areas of uncertainty which need to be accounted for in their use, especially when assessing hazards of potentially higher concern such as carcinogenicity, mutagenicity or toxicity for reproduction or the combination of persistence, bioaccumulation and toxicity.
V.	Decision: Make information on hazards and exposure to chemicals obtained from their investigations publicly available, respecting the protection of confidential data and proprietary rights.
VI.	Recommendation: In order to promote efficiencies and effectiveness in chemical assessment, use the results of investigations of chemicals carried out by other Adherents in preparing assessments of the potential health and environmental impacts of chemicals.
VII.	Recommendation: Co-operate to share the burden for data generation and improve access to information on chemicals throughout their life-cycle, respecting data ownership rights.
Risk Prevention or Reduction	
VIII.	Decision: Establish or strengthen national programmes aimed at the prevention or reduction of risks from chemicals to the environment and the health of the general public or workers.
IX.	Decision: Implement the GHS in order to further hazard communication in the supply chain. Such implementation can be done by Adherents applying those elements of the GHS that are appropriate to them and may vary by product category and stage in the lifecycle.
X.	Recommendation: Communicate and share classifications derived pursuant to the GHS with other Adherents
XI.	Recommendation: Where appropriate, identify and undertake concerted activities to prevent or reduce the risks of identified chemicals taking into account the entire life-cycle of the chemicals. These activities could encompass both regulatory and non-regulatory measures including: the promotion of new business models such as chemical leasing; the use of cleaner products and technologies; emissions inventories, product labelling; limitations on production or use; economic incentives; substitution with safer alternatives including no-chemical alternatives, and the phase-out or banning of chemicals
XII.	Recommendation: Communicate and share the outcomes of risk assessments, particularly when chemicals are identified as requiring risk management.
XIII.	Recommendation: Communicate and share best practices regarding risk management approaches in general and approaches developed for specific chemicals of mutual concern.
XIV.	Recommendation: Communicate and share best practices for the socioeconomic assessment of chemicals management.

Source: Adapted from OECD (2018).

11. In the Decision-Recommendation, the Council instructs the CBC to monitor the implementation of the Decision-Recommendation and to report to the Council five years from the date of its adoption and regularly thereafter.

12. In line with this instruction, this Report provides an assessment of key activities undertaken to disseminate and implement the Decision-Recommendation, as well as conclusions regarding its continued relevance.

2. Methodology and process

13. In order to collect information on the implementation, dissemination and continued relevance of the Decision-Recommendation, a survey questionnaire was developed by the Secretariat and circulated to the Adherents to the Recommendation as well as the European Union (EU) considering that the management framework for chemicals is coordinated and enacted at a European level [[ENV/CBC\(2022\)10](#)].

14. Responses were collected between April and September 2022. 10 Adherents provided responses to the questionnaire: Australia, Belgium, Canada, Germany, Japan, Korea, New Zealand, Spain, Sweden and the United States as well as the EU (whose activities represent those of 22 Adherents) (together referred to as “Respondents”). For the purpose of this Report, the responses provided by the EU describe the collective activities at the EU level related to implementation and are therefore reflective of activities of Adherents that are EU Member States. Several EU Member States also provided individual responses (Belgium, Germany, Spain, and Sweden).

15. The questions for implementation were not subjective, requiring a ‘yes’ or ‘no’ response, followed by additional prompts that allowed Respondents to provide further information.

16. In addition, for a number of substantive provisions, Adherents were not asked to provide information via the questionnaire, as the information would be compiled by the Secretariat, as the relevant information was already available from other sources. This was mainly for concerted actions to address a sub-set of provisions that have taken place in the context of OECD activities and the work of the Working Party on Hazard Assessment (WPHA), Working Party on Exposure Assessment (WPEA) and Working Party on Risk Management (WPRM) whose mandates are directed at supporting implementation of provisions of the Decision-Recommendation.

17. CBC delegates discussed a preliminary draft Report [[ENV/CBC\(2022\)14](#)] at the 3rd meeting of the CBC in November 2022 [[ENV/CBC/A\(2022\)2](#)] and also provided written comments to the Secretariat thereafter. Those inputs were taken into account and the Report was then approved by the CBC through written procedure on 8 June 2023 [[ENV/CBC/WRPR\(2023\)49](#)].

18. Following its approval, the Report was transmitted to the OECD Council, via the Executive Committee, to be noted and declassified.

19. After declassification by the OECD Council, a link to the Report was included in the public webpage of the Decision-Recommendation on the [online Compendium of OECD Legal Instruments](#).

3. Implementation

20. Implementation of the provisions of the Decision-Recommendation is done both domestically by Adherents and also through collaborative work at the OECD, in particular through Working Parties of the CBC. The Decision-Recommendation INSTRUCTS the CBC to:

- i. Facilitate the implementation of this Decision-Recommendation, notably through:
 - conducting co-operative work to develop harmonised hazard and exposure assessment methodologies;
 - the development of procedures for the notification and exchange of information on Adherents' activities on assessment of chemicals and on preventing or reducing the risks posed by chemicals;
 - encouraging, where one or more Adherents identify that a chemical may pose a hazard or risk, or implement risk reduction measures in relation to a chemical, other Adherents to report on what similar activities they are engaged in in relation to that identified chemical and associated risk or hazard; and
 - conducting concerted activities to prevent or reduce the risk of specific chemicals or groups of chemicals.

21. The mandates of the WPHA, WPEA and WPRM are aligned with the Decision-Recommendation in order to support Adherents to implement it through collaborative activities³.

22. Since some of the provisions are implemented through the collaborative work at the OECD, the related activities are presented below as implementation by Adherents through a focus on collaborative work at the OECD and then implementation at a national level of a subset of provisions is also reported.

Implementation by Adherents through collaborative work at the OECD

3.1. Co-operative Investigation and Assessment

II. DECIDES that Adherents shall co-operatively develop harmonised hazard and exposure assessment methodologies for chemicals in order to align approaches for identifying those chemicals which may pose a hazard or risk to the environment or human health. This will also include methodologies to prioritise chemicals for regulatory consideration.

III. DECIDES that Adherents shall co-operatively elaborate and disseminate agreed hazard, exposure or risk assessments on chemicals of mutual interest and, if relevant, classification and labelling designations for these chemicals.

IV. RECOMMENDS that Adherents, when developing harmonised hazard and exposure assessment methodologies, consider:

- i) the risks arising from the combined exposure to multiple chemicals;
 - ii) the elaboration of integrated approaches to testing and assessment including harmonised testing strategies; and
-

³ [Link to OECD Bodies Guide](#)

iii) the regulatory applicability of the methods and identify areas of uncertainty which need to be accounted for in their use, especially when assessing hazards of potentially higher concern such as carcinogenicity, mutagenicity or toxicity for reproduction or the combination of persistence, bioaccumulation and toxicity.

23. The WPHA, and the WPEA, as overseen by the CBC, provide fora for collaborative work by Adherents to implement the first three provisions (II, III, IV) of the Decision-Recommendation. Provisions II and IV principally relate to the co-operative development of harmonised methodologies.

24. In the period since the adoption of the Decision-Recommendation, the third decision has not been implemented through collaborative work at the OECD. While past programmes of work under the CBC led to the elaboration of jointly agreed hazard assessments, this has not been a priority for Adherents in recent years in the context of the OECD work. Discussions prior to the revision of the Decision-Recommendation de-prioritised work on joint assessments, but recognised that there could be utility in elaborating joint assessments again in the future on an ad-hoc basis [[ENV/JM\(2013\)7](#), [ENV/JM\(2014\)3](#), [ENV/JM\(2014\)21](#)] . The provision aims to address joint assessment at the OECD level and would reduce regional or national differences in assessment outcomes. EU Member States co-operatively carry out assessments on chemicals and harmonise their classification and labelling.

3.1.1. Hazard Assessment

25. The WPHA facilitates and supports the work of the CBC on the hazard assessment of chemicals. Its mandate supports the implementation of the Decision-Recommendation through the harmonisation of hazard assessment methodologies and integrated approaches to testing and assessment (IATA), including the consideration of new assessment methodologies, the elaboration of agreed hazard assessments and improving sharing of and access to information on chemicals [[ENV/JM/WRPR\(2020\)47](#), Annex B]. Moreover, the WPHA supports the development of tools and approaches that have the potential to provide information on hazards of chemicals while reducing time, monetary cost and animal testing currently needed.

26. Table 2 lists meetings and events of the WPHA since the adoption of the Decision-Recommendation that provided Adherents and non-Adherents with a platform to implement the Decision-Recommendation and develop and harmonise hazard assessment methodology, exchange information, share best practices and discuss challenges. The WPHA also works towards the development of tools related to sharing of information on chemicals. In addition to Working Party meetings, the Secretariat also facilitates discussions and collaboration among Adherents through meetings of informal expert groups, as outlined in the Table 2 (e.g. QSAR Toolbox Management Group, IATA Case Studies Project Group, IUCLID User Group Expert Panel etc.).

Table 2. Meetings and events of the WPHA and its expert groups in relation to the dissemination and implementation of the Decision-Recommendation

Date	Meeting / Event Title	Meeting Type	Venue
26-27 June 2018	2 nd Meeting of the Working Party on Hazard Assessment	Working Party meeting	OECD Conference Centre
27 June 2018	Joint Session of WPHA and Extended Advisory Group on Molecular Screening and Toxicogenomics (EAGMST)	Working Party meeting	OECD Conference Centre
4-5 October 2018	Meeting of the IUCLID User Group Expert Panel	Expert Group meeting	OECD Conference Centre
27-28 November 2018	4 th Meeting of the IATA Case Studies Project	Expert Group meeting	OECD Boulogne
29-30 November 2018	15 th Meeting of the QSAR Toolbox Management Group	Expert Group meeting	OECD Boulogne
10-11 April 2019	Meeting of the eChem Portal Steering Group	Expert Group meeting	National Institute of Technology and Evaluation, Tokyo, Japan
30 April 2019	Webinar on Adverse Outcome Pathways (AOPs): Adverse Outcome Pathway framework	Webinar	Virtual
17-19 June 2019	3 rd Meeting of the Working Party on Hazard Assessment	Working Party meeting	OECD Boulogne
19 June 2019	Joint Session of WPHA and Extended Advisory Group on Molecular Screening and Toxicogenomics (EAGMST)	Working Party meeting	OECD Boulogne
25-26 September 2019	Meeting of the IUCLID User Group Expert Panel	Expert Group meeting	OECD Conference Centre
19-20 November 2019	5 th Meeting of the IATA Case Studies Project	Expert Group meeting	OECD Boulogne
21-22 November 2019	16 th Meeting of the QSAR Toolbox Management Group	Expert Group meeting	OECD Boulogne
15 January 2020	Webinar on Adverse Outcome Pathways (AOPs): Assembling and evaluating weight of evidence and quantitative understanding	Webinar	Virtual
30 January 2020	Webinar on Adverse Outcome Pathways (AOPs): AOP Knowledge base and AOP developing tips	Webinar	Virtual
21-23 April 2020	Meeting of the eChem Portal Steering Group	Expert Group meeting	Virtual
22-24 June 2020	4 th Meeting of the Working Party on Hazard Assessment	Working Party meeting	Virtual
16 September 2020	Green Talks LIVE - eChemPortal: the Global Portal to Information on Chemical Substances	Webinar	Virtual
30-2 October 2020	Meeting of the IUCLID User Group Expert Panel	Expert Group meeting	Virtual
17-18 November 2020	6 th Meeting of the IATA Case Studies Project	Expert Group meeting	Virtual
19-20 November 2020	17 th Meeting of the QSAR Toolbox Management Group	Expert Group meeting	Virtual
30 November 2020	Webinar on Adverse Outcome Pathways (AOPs): Training needs, resources, and opportunities for AOPs	Webinar	Virtual
20-21 April 2021	Meeting of the eChem Portal Steering Group	Expert Group meeting	Virtual
10 May 2021	Webinar on PBK Models: Gaining acceptance in next generation PBK modelling approaches for regulatory assessment	Webinar	Virtual
23 June 2021	WPHA and EAGMST Joint Session on 'omics	Working Party meeting	Virtual
24-25 June 2021	5 th Meeting of the Working Party on Hazard Assessment	Working Party meeting	Virtual
29-30 September 2021	Meeting of the IUCLID User Group Expert Panel	Expert Group meeting	Virtual
16-18 November 2021	7 th Meeting of the IATA Case Studies Project	Expert Group meeting	Virtual
18-19 November 2021	18 th Meeting of the QSAR Toolbox Management Group	Expert Group meeting	Virtual
25 January 2022	Webinar on Adverse Outcome Pathways (AOPs): Co-operative Activities between Scientific Journals and the OECD	Webinar	Virtual

5-6 April 2022	Meeting of the eChem Portal Steering Group	Expert Group meeting	Virtual
6 April 2022	Webinar on PBK Models: Gaining acceptance in next generation PBK modelling approaches for regulatory assessments: Case Studies	Webinar	Virtual
22-24 June 2022	6 th Meeting of the Working Party on Hazard Assessment	Working Party meeting	Hybrid (OECD Conference Centre / Virtual)
5-6 October 2022	Meeting of the IUCLID User Group Expert Panel	Expert Group meeting	Hybrid (OECD Conference Centre / Virtual)
15-16 November 2022	8 th Meeting of the IATA Case Studies Project	Expert Group meeting	Hybrid (OECD Conference Centre / Virtual)
17-18 November 2022	19 th Meeting of the QSAR Toolbox Management Group	Expert Group meeting	Hybrid (OECD Conference Centre / Virtual)
14 December 2022	Webinar on Recent Improvements and Future Challenges for the Adverse Outcome Pathway (AOP) framework and the AOP Wiki	Webinar	Virtual
16 December 2022	Webinar on Integrated Approaches to Testing and Assessment: Concepts and OECD Case Studies	Webinar	Virtual

Development and publication of technical guidance and tools in relation to hazard assessment and the Co-operative Investigation and Assessment portion of the Decision-Recommendation

27. The development of technical guidance is part of the implementation of the Decision-Recommendation (i.e. development of harmonised tools and approaches). Table 3 includes guidance and technical documents developed and published through work of the WPHA. It includes, for example, guidance on considerations for assessment of combined exposure to multiple chemicals (relating to recommendation IV i), Guiding Principles and Key Elements for Establishing a Weight of Evidence for Chemical Assessment (relating to decision II and recommendation IV iii) and a document on International Best Practices for Identification of Priorities within Chemicals Management Systems (relating to decision II).

28. One of the main focus topics of the OECD Hazard Assessment Programme is on the development and application of Integrated Approaches to Testing and Assessment (IATA) and the exchange of experience on new hazard assessment methodologies, as outlined in decision II and recommendation IV of the Decision-Recommendation. IATA are pragmatic, science-based approaches for chemical hazard characterisation that rely on an integrated analysis of existing information coupled with the generation of new information using targeted testing strategies.

29. IATA are an approach to chemical testing and risk assessment that aims to improve the efficiency and effectiveness of the process by using multiple sources of information, including in vitro and in silico methods, to reduce the reliance on animal testing. IATA follow an iterative approach to answer a defined question in a specific regulatory context, taking into account the acceptable level of uncertainty associated with the decision context. There is a range of IATA – from more flexible, non-formalised judgment-based approaches (e.g. grouping and read-across) to more structured rule-based approaches (e.g. Integrated Testing Strategy (ITS)).

30. In 2020, the document *Overview of Concepts and Available Guidance related to Integrated Approaches to Testing and Assessment (IATA)* [[ENV/JM/MONO\(2020\)25](#)] was published under the responsibility of the Joint Meeting to give an overview of existing guidance on IATA and their component parts with the aim of contributing to a common understanding of IATA, explaining key concepts and providing basic definitions, and supporting easier access to existing resources.

31. IATA Case Studies and related documents are listed in Table 3. Case studies on IATA can provide valuable insights and examples of how IATA can be applied in different contexts and for different types of chemicals, as well as help to validate and refine existing IATA methods by demonstrating their applicability to real-world situations and by highlighting areas where further development may be needed. Moreover, case studies can be used to evaluate effectiveness of IATA in reducing the use of animal testing and improving the efficiency of chemical testing and risk assessment.

32. In parallel, guidance documents can help to standardise IATA methods and provide a common framework for the development and implementation of IATA by Adherents. They also promote the harmonisation of IATA methods among Adherents and non-Adherents, helping to reduce duplication and improve efficiency. These documents thus are an important tool for the development of IATA and can help build confidence in IATA methods and encourage their adoption by regulatory agencies and other stakeholders.

Table 3. Hazard Assessment-related publications since the adoption of the Decision-Recommendation

Year	Publication Title	Reference
2018	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Estrogenicity of the Substituted Phenols	ENV/JM/MONO(2018)26
2018	Prioritisation of Chemicals Using the Integrated Approaches for Testing and Assessment (IATA)-Based Ecological Risk Classification	ENV/JM/MONO(2018)27
2018	Case Study on Grouping and Read-Across for Nanomaterials – Genotoxicity of Nano-Tio2	ENV/JM/MONO(2018)28
2018	Considerations for Assessing the Risks of Combined Exposure to Multiple Chemicals	ENV/JM/MONO(2018)37
2019	Report on Considerations from Case Studies on Integrated Approaches for Testing and Assessment (IATA). Fourth Review Cycle.	ENV/JM/MONO(2019)26
2019	Case Study on the Use of Integrated Approaches to Testing and Assessment (IATA) for Testicular Toxicity of Ethylene Glycol Methyl Ether (EGME)-Related Chemicals	ENV/JM/MONO(2019)27
2019	Case Study on the Use of an Integrated Approach to Testing and Assessment (IATA) for Estrogen Receptor Active Chemicals	ENV/JM/MONO(2019)28
2019	Guiding Principles and Key Elements for Establishing a Weight of Evidence for Chemical Assessment	ENV/JM/MONO(2019)31
2019	International Best Practices for Identification of Priorities within Chemicals Management Systems	ENV/JM/MONO(2019)34
2020	Case Study on the Use of an Integrated Approach to Testing and Assessment (IATA) and New Approach Methods to Inform a Theoretical Read-Across for Dermal Exposure to Propylparaben from Cosmetics	ENV/JM/MONO(2020)16
2020	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Systemic Toxicity Arising from Cosmetic Exposure to Caffeine	ENV/JM/MONO(2020)17
2020	Case Study on the Use Integrated Approaches for Testing and Assessment (IATA) for 90-Day Rat Oral Repeated-Dose Toxicity of Chlorobenzene-related Chemicals	ENV/JM/MONO(2020)18
2020	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) to Inform Read-Across of p-Alkylphenols: Repeated-Dose Toxicity	ENV/JM/MONO(2020)19
2020	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Prediction of a 90-Day Repeated-Dose Toxicity Study (OECD 408) for 2-Ethylbutyric Acid Using a Read-Across Approach from Other Branched Carboxylic Acids	ENV/JM/MONO(2020)20
2020	Case Study on the Use of Integrated Approaches to Testing and Assessment (IATA) for Read-Across Based Filling of Developmental Toxicity Data Gap for Methyl Hexanoic Acid	ENV/JM/MONO(2020)21
2020	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Identification and Characterisation of Parkinsonian Hazard Liability of Duegelin by an AOP-Based Testing and Read-Across Approach	ENV/JM/MONO(2020)22
2020	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Mitochondrial Complex-III-Mediated Neurotoxicity of Azoxystrobin – Read-Across to Other Strobilurins	ENV/JM/MONO(2020)23

2020	Report on Considerations from Case Studies on Integrated Approaches for Testing and Assessment (IATA). Fifth Review Cycle.	ENV/JM/MONO(2020)24
2020	Overview of Concepts and Available Guidance related to Integrated Approaches to Testing and Assessment (IATA)	ENV/JM/MONO(2020)25
2021	Guidance Document on the Characterisation, Validation and Reporting of PBK Models for Regulatory Purposes	ENV/CBC/MONO(2021)1
2021	Customisation Opportunities of IUCLID for the Management of Chemical Data – 2 nd Edition	ENV/JM/MONO(2019)6/REV1
2021	Guidance Document for the Scientific Review of Adverse Outcome Pathways	ENV/CBC/MONO(2021)22
2021	Case Study on the Use of an Integrated Approach for Testing and Assessment (IATA) for Systemic Toxicity of Phenoxyethanol when included at 1% in a body lotion	ENV/CBC/MONO(2021)35
2021	Report on Considerations from Case Study on Integrated Approaches for Testing and Assessment (IATA). Sixth Review Cycle.	ENV/CBC/MONO(2021)36
2022	Case Study for the Integration of In Vitro data in the Developmental Neurotoxicity Hazard Identification and Characterisation using Deltamethrin as a Prototype Chemical	ENV/CBC/MONO(2022)24
2022	Case Study for the Integration of In Vitro Data in the Developmental Neurotoxicity Hazard Identification and Characterisation using Flufenacet	ENV/CBC/MONO(2022)25
2022	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for DNT to Prioritize a Class of Organophosphorus Flame Retardants	ENV/CBC/MONO(2022)26
2022	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Developmental Neurotoxicity Hazard Characterisation of Acetamiprid	ENV/CBC/MONO(2022)27
2022	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Developmental Neurotoxicity Hazard Characterisation of Imidacloprid and the Metabolite Desnitro-imidacloprid	ENV/CBC/MONO(2022)28
2022	Case Study on the Use of an Integrated Approach for Testing and Assessment (IATA) for New Approach Methodology (NAM) for Refining Inhalation Risk Assessment from Point of Contact Toxicity of the Pesticide, Chlorothalonil	ENV/CBC/MONO(2022)31
2022	Case Study on the Use of Integrated Approaches for Testing and Assessment (IATA) for Skin Sensitisation: Demonstrating the Next Generation Risk Assessment Framework Using Geraniol	ENV/CBC/MONO(2022)32
2022	Report on Considerations from Case Studies on Integrated Approaches for Testing and Assessment (IATA)	ENV/CBC/MONO(2022)36
2022	Case Study on the use of Integrated Approaches to Testing and Assessment for potential Systemic Toxicity and Estrogen Receptor Activation of a Group of Bisphenols and Select Alternatives	ENV/CBC/MONO(2022)43

33. In 2012, the OECD Adverse Outcome Pathways (AOP) Programme⁴ was launched to support OECD Members to make better use of increased knowledge of how chemicals induce adverse effects in humans and wildlife, through the so-called Adverse Outcome Pathways. AOPs are the central element of a toxicological knowledge framework being built to support chemical risk assessment based on mechanistic reasoning and can be applied as a framework to develop IATA (see paragraphs 28-32). While the AOP Programme was launched in 2012, it directly supports implementation of decision II and the harmonised development of novel hazard assessment methodologies.

34. The AOP Programme facilitates the development and use of AOPs, among others, through a process that supports the validation of AOPs through peer review and the publication of AOPs as OECD publications so that they can be used by the regulatory community to develop hazard assessment tools. Table 4 contains a list of AOPs developed since 2018.

35. To support the AOP initiative, the OECD's AOP Knowledge Base is a web-based platform that provides a focal point for AOP development and dissemination. The eAOP

⁴<https://www.oecd.org/chemicalsafety/testing/adverse-outcome-pathways-molecular-screening-and-toxicogenomics.htm>

Portal⁵ is the main entry point of the AOP Knowledge Base. The Portal enables search by key words in AOP titles and key events in the AOP Wiki. It houses the status of all AOPs in the OECD Work Plan and the official copy of OECD endorsed AOPs (see Figure 1).

36. The AOP Wiki⁶ represents a joint effort between the European Commission – DG Joint Research Centre (JRC) and United States Environmental Protection Agency (EPA) and constitutes the central repository for all AOPs developed as part of the OECD AOP Development Programme, providing a system that organises the available knowledge and published research into a verbal description of individual pathways, using a user-friendly Wiki interface (see Figure 2).

⁵ <https://aopkb.oecd.org/>

⁶ <https://aopwiki.org/>

Table 4. OECD Series on Adverse Outcome Pathways – AOPs Published Since 2018

Year	Publication Title	Reference
2018	Users' Handbook supplement to the Guidance Document for developing and assessing Adverse Outcome Pathways	Series on Adverse Outcome Pathways No. 1
2018	Adverse Outcome Pathway on Inhibition of the mitochondrial complex I of nigro-striatal neurons leading to parkinsonian motor deficits	Series on Adverse Outcome Pathways No. 7
2018	Adverse Outcome Pathway on chronic binding of antagonist to N-methyl-D-aspartate receptors during brain development leading to neurodegeneration with impairment in learning and memory in aging	Series on Adverse Outcome Pathways No. 8
2018	Adverse Outcome Pathway on Androgen receptor agonism leading to reproductive dysfunction (in repeat-spawning fish)	Series on Adverse Outcome Pathways No. 9
2019	Adverse Outcome Pathway on antagonist binding to PPAR α leading to body-weight loss	Series on Adverse Outcome Pathways No. 10
2019	Adverse Outcome Pathway on binding to the picrotoxin site of ionotropic GABA receptors leading to epileptic seizures in adult brain	Series on Adverse Outcome Pathways No. 11
2019	Adverse Outcome Pathway on aryl hydrocarbon receptor activation leading to early life stage mortality, via increased COX-2	Series on Adverse Outcome Pathways No. 12
2019	Adverse Outcome Pathway on inhibition of Thyroperoxidase and subsequent adverse neurodevelopmental outcomes in mammals	Series on Adverse Outcome Pathways No. 13
2019	Adverse Outcome Pathway on inhibition of Na ⁺ /I ⁻ symporter (NIS) leads to learning and memory impairment	Series on Adverse Outcome Pathways No. 14
2019	Adverse Outcome Pathway on Aryl hydrocarbon receptor activation leading to uroporphyrin	Series on Adverse Outcome Pathways No. 15
2019	Adverse Outcome Pathway on Aryl hydrocarbon receptor activation leading to early life stage mortality, via reduced VEGF	Series on Adverse Outcome Pathways No. 16
2021	Adverse Outcome Pathway on histone deacetylase inhibition leading to testicular atrophy	Series on Adverse Outcome Pathways No. 17
2021	Adverse Outcome Pathway on inhibition of calcineurin activity leading to impaired T-cell dependent antibody response	Series on Adverse Outcome Pathways No. 18
2021	Adverse Outcome Pathway on Cyp2E1 activation leading to liver cancer	Series on Adverse Outcome Pathways No. 19
2022	Binding of electrophilic chemicals to SH(thiol)-group of proteins and /or to seleno-proteins involved in protection against oxidative stress during brain development leading to impairment of learning and memory	Series on Adverse Outcome Pathways No. 20
2022	Inhibitor binding to topoisomerase II leading to infant leukaemia	Series on Adverse Outcome Pathways No. 21
2022	Deiodinase 2 inhibition leading to increased mortality via reduced posterior swim bladder inflation	Series on Adverse Outcome Pathways No. 22
2022	Deiodinase 2 inhibition leading to increased mortality via reduced anterior swim bladder inflation	Series on Adverse Outcome Pathways No. 23
2022	Deiodinase 1 inhibition leading to increased mortality via reduced posterior swim bladder inflation	Series on Adverse Outcome Pathways No. 24
2022	Deiodinase 1 inhibition leading to increased mortality via reduced anterior swim bladder inflation	Series on Adverse Outcome Pathways No. 25
2022	Thyroperoxidase inhibition leading to increased mortality via reduced anterior swim bladder inflation	Series on Adverse Outcome Pathways No. 26
2022	Chitin synthase 1 inhibition leading to mortality	Series on Adverse Outcome Pathways No. 27
2022	Uncoupling of oxidative phosphorylation leading to growth inhibition via decreased cell proliferation	Series on Adverse Outcome Pathways No. 28

Figure 1. Screenshot from the eAOP Portal

The screenshot shows the eAOP Portal interface. At the top, there is a search bar with the text "Enter query to retrieve matching AOP and KE titles, or leave blank to display all AOPs and KEs." Below the search bar, the results are displayed in a list format. The first result is titled "Inhibition of AChE and activation of CYP2E1 leading to sensory axonal peripheral neuropathy and mortality". The second result is titled "Inhibitor binding to topoisomerase II leading to infant leukaemia". The third result is titled "Oxygen-evolving complex damage leading to population decline via inhibition of photosynthesis". Each result includes a URL, a brief description, and metadata such as creation and update dates.

Source: eAOP Portal

Figure 2. Screenshot from the AOP Wiki

The screenshot shows the AOP Wiki homepage. At the top, there is a navigation menu with links to "AOP-Wiki", "AOPs", "Key Events", "KE Relationships", "Prototypical Stressors", and "Developers' Handbook". Below the navigation menu, there is a welcome message: "Welcome to the Collaborative Adverse Outcome Pathway Wiki (AOP-Wiki)". The page is divided into several sections: "View Content" with links to "AOPs", "Key Events", "KE Relationships", and "Prototypical Stressors"; "Download Content" with a "Download Options" link; "Get Information" with links to "Get started here...", "Who are we?", "Announcements", and "AOP Training"; and "Community" with links to "AOP Help", "AOP Forum", and "Third Party Tools".

Source: AOP Wiki

37. The WPHA is also working on the development of tools and approaches such as chemical categories and (Quantitative) Structure-Activity Relationships [(Q)SARs], which are methods for estimating the properties of a chemical from its molecular structure, and have the potential to provide information on hazards of chemicals, while reducing time, monetary costs and animal testing currently needed. The OECD (Q)SAR Project⁷ is developing guidance material and a toolbox for practical application of (Q)SARs by government entities and the chemical industry in specific regulatory contexts, in line with the provisions of the Decision-Recommendation, in particular implementation of decision II to co-operatively develop harmonised hazard assessment methodologies for chemicals.

38. The OECD QSAR Toolbox⁸ is a software application intended to the use of governments, chemical industry and other stakeholders in filling gaps in (eco)toxicity data needed for assessing the hazards of chemicals. It has been developed in close collaboration with the European Chemicals Agency (ECHA) and incorporates information and tools from various sources into a logical workflow (see Figure 3).

Figure 3: Screenshot from the QSAR Toolbox



Source: QSAR Toolbox

⁷ <https://www.oecd.org/env/ehs/testing/qsar-briefing-notes.pdf>

⁸ <https://qsartoolbox.org/>

3.1.2. Exposure Assessment

39. The WPEA facilitates and supports the OECD's work on the exposure assessment of chemicals and chemical products. Its mandate supports the implementation of the Decision-Recommendation through the sharing, developing, disseminating, comparing and, where possible, harmonising exposure assessment-related information (such as emission factors), methodologies and tools (such as databases, guidance documents, harmonised templates and exposure models) for assessing the impact of releases of chemicals during their life cycle on the environment and various populations [ENV/JM/WRPR(2020)47, Annex B].

40. The WPEA has organised a Working Party meeting annually and sub-group (expert) meetings to facilitate the discussion of the WPEA activities stated above (see Table 5). These meetings and workshops provide a platform for Adherents to exchange information, experiences and best practices on the development and implementation of exposure assessment methodologies, to discuss and develop guidance documents and other resources that support the implementation of exposure assessment methodologies and promote the development of new and innovative approaches to exposure assessment, in line with the provisions of the Decision-Recommendation, in particular decision II.

Table 5. Meetings and events of the WPEA and its expert groups in relation to the dissemination of the Decision-Recommendation

Date	Meeting / Event Title	Meeting Type	Venue
4-5 September 2018	2 nd Meeting of the Working Party on Exposure Assessment	Working Party meeting	Ottawa, Canada
13-14 June 2019	3 rd Meeting of the Working Party on Exposure Assessment	Working Party meeting	OECD Conference Centre
16-17 December 2019	Kick-off meeting of the Occupational Biomonitoring Project	Expert Group meeting	Finnish Institute of Occupational Health, Helsinki, Finland
29-30 June 2020	4 th Meeting of the Working Party on Exposure Assessment	Working Party meeting	Virtual
26-27 October 2020	2 nd Meeting of the Occupational Biomonitoring Project	Expert Group meeting	Virtual
28-29 June 2021	5 th Meeting of the Working Party on Exposure Assessment	Working Party meeting	Virtual
15-16 December 2021	3 rd Meeting of the Occupational Biomonitoring Project	Expert Group meeting	Virtual
27-28 June 2022	6 th Meeting of the Working Party on Exposure Assessment	Working Party meeting	Hybrid (OECD Conference Centre / Virtual)
21/24 October 2022	Workshop on Approaches for Establishing Occupational Exposure Limits (OELs)	Workshop	Virtual

Development and publication of technical guidance and tools in relation to exposure assessment and the Co-operative Investigation and Assessment portion of the Decision-Recommendation

41. The WPEA develops Emission Scenario Documents (ESDs) which describe the sources, production processes, pathways and use patterns of chemical releases and aim to quantify the emissions of a chemical into water, air, soil and/or solid waste. ESDs are used in risk assessments of chemicals to establish the conditions of use and releases of chemicals. These are the basis for estimating the concentration of chemicals in the environment. The WPEA develops ESDs in order to reflect conditions on production, use etc. that are similar between countries, and so helps avoid duplicative efforts by Adherents and the chemical industry (see Table 6).

Table 6. Exposure Assessment-related publications since Decision-Recommendation

Year	Publication Title	Reference
2018	Matrix Between Emission Scenario Documents (ESDs) and Specific Environmental Release Categories (SPERCS)	ENV/JM/MONO(2018)30
2018	Warehouse of Product Release and Exposure Data	ENV/JM/MONO(2018)32
2018	Considerations for Assessing the Risks of Combined Exposure to Multiple Chemicals	ENV/JM/MONO(2018)37
2019	Complementing Document to the Emission Scenario Document on Plastic Additives: Plastic Additives during the Use of End Products	ENV/JM/MONO(2019)10
2019	Estimating Mouthing Exposure in Children – Compilation of Case Studies	ENV/JM/MONO(2019)24
2019	Considerations when Assessing Children's Exposure to Chemicals from Products	ENV/JM/MONO(2019)29
2020	Emission Scenario Document on Chemical Additives Used in Automotive Lubricants	ENV/JM/MONO(2020)28
2021	Emission Scenario Document on the Use of Aqueous Film-Forming Foams in Firefighting	ENV/CBC/MONO(2021)5
2021	Emission Scenario Document on the Use of Vapour Degreasers	ENV/CBC/MONO(2021)40
2022	Establishing Occupational Exposure Limits	ENV/CBC/MONO(2022)6
2022	Emission Scenario Document for Emission of Metals During Primary and Secondary Smelting and Waste Incineration, Covering Recycling of Electrical and Electronic Waste	ENV/CBC/MONO(2022)34

42. A joint project team under the WPHA and WPEA developed a guidance document on *Considerations for Assessing the Risks of Combined Exposure to Multiple Chemicals* [[ENV/JM/MONO\(2018\)37](#)] to provide an overview of the technical aspects of the various approaches and methodologies available with respect to the assessment of risks from combined exposures to multiple chemicals to help identify where further alignment in scientific considerations can be made between Adherents, in line with the provisions of the Decision-Recommendation, in particular recommendation IV i).

43. Biomonitoring is of relevance for several Adherents as a measure of internal exposure or effect, and is especially efficient in assessing exposures from multiple routes, i.e. inhalation, oral and dermal exposure pathways. The Biomonitoring project is focused on improving methods for deriving health based human biomarker values, which can be used to interpret measured levels of biomarkers in a risk assessment context. This project aims to provide harmonised guidance for deriving health based human biomarker guidance or limit values and using biomonitoring in exposure assessment and risk management. The publication of the Occupational Biomonitoring Guidance Document was released in November 2022 [[ENV/CBC/MONO\(2022\)37](#)].

44. Another focus area of the WPEA has been children's health, as children are more vulnerable than adults to environmental hazards owing to their different physiologies, metabolic factors, and activity levels. In 2019, the WPEA published two documents on children's health: *Considerations when Assessing Children's Exposure to Chemicals from Products* [[ENV/JM/MONO\(2019\)29](#)], which guides risk assessors in determining the necessity of a separate assessment for children and presents a decision tree to facilitate such decisions; and *Estimating Mouthing Exposure in Children* [[ENV/JM/MONO\(2019\)24](#)], which presents a comprehensive analysis of methods for estimating children's exposure to chemicals through direct object mouthing. Both of these documents contribute to harmonised exposure assessment methodologies, in line with decision II of the Decision-Recommendation.

3.2. Risk Prevention or Reduction

45. Collaborative activities at the OECD have also supported implementation by Adherents of three recommendations (XI, XIII and XIV) related to risk prevention and reduction.

XI. RECOMMENDS that, where appropriate, Adherents identify and undertake concerted activities to prevent or reduce the risks of identified chemicals taking into account the entire life-cycle of the chemicals. These activities could encompass both regulatory and non-regulatory measures including: the promotion of new business models such as chemical leasing; the use of cleaner products and technologies; emissions inventories; product labelling; limitations on production or use; economic incentives; substitution with safer alternatives including non-chemical alternatives; and the phase-out or banning of chemicals.

XIII. RECOMMENDS that Adherents communicate and share best practices regarding risk management approaches in general and approaches developed for specific chemicals of mutual concern.

XIV. RECOMMENDS that Adherents communicate and share best practices for the socioeconomic assessment of chemicals management.

46. In 2020, the WPRM was created in order to formalise the work previously undertaken by various *ad hoc* and expert groups under the CBC [[ENV/JM/WRPR\(2020\)24/REV1](#) and [ENV/JM/WRPR\(2020\)47](#)]. The adoption of the Decision-Recommendation, in which the risk reduction aspects of the legal instrument were significantly strengthened, was an important consideration in the rationale for the establishment of the WPRM. The WPRM facilitates and supports the sharing of risk management approaches, collaboration to advance sustainable chemistry, the development and methodologies and approaches for alternatives and socio-economic assessment as well as to support substitution of harmful chemicals and collaboration on risk management approaches on specific chemicals [[ENV/JM/WRPR\(2020\)24/REV1](#)].

47. Table 7 is a listing of meetings and webinars of the WPRM and previous *ad hoc* and expert groups focused on risk management. These meetings provided important fora for the communication and sharing of best practices regarding risk management approaches in general and for specific chemicals of concern, as well as sharing experiences about and co-ordinating risk-reduction activities as specifically mentioned in recommendation XIII and XIV. In particular, the information sharing on PFAS chemicals helps to identify risk management actions that can be taken (as per recommendation XII and XIII).

Table 7: Meetings and Events related to risk reduction and prevention

Date	Meeting / Event Title	Meeting Type	Venue
2-3 May 2018	OECD Expert Workshop on Alternatives Assessment and Substitution	Workshop	Paris, France
29-31 May 2018	Global Forum on Environment – Plastics in a Circular Economy: Design of Sustainable Plastics from a Chemicals Perspective	Global Forum	Copenhagen, Denmark
7 June 2018	Launch Webinar on New Database of Per- and Polyfluoroalkyl Substances (PFAS)	Webinar	Virtual
12 September 2018	Webinar on Best Environmental Practices (BEP) for Textiles	Webinar	Virtual

30 October 2018	Webinar Toward Greener Water and Oil Repellents in the Textile Industry – Case Study	Webinar	Virtual
22-23 January 2019	Expert Group on Risk Management Discussions, Including Socio-Economic Analysis	Expert Group meeting	OECD Conference Centre
29 January 2019	Webinar on Best Environmental Practices for Class B Firefighting Foams	Webinar	Virtual
26 September 2019	Webinar on Finding Alternatives to PFAS of Concern: A Difficult and Continuing Challenge	Webinar	Virtual
25 February 2020	Webinar on the European Union's Actions to Regulate Per- and Polyfluoroalkyl Substances	Webinar	Virtual
30 March, 27 April, 7 May, 2020	Expert Group on Risk Management Discussions, Including Socio-Economic Analysis	Expert Group meeting	Virtual
11 June 2020	Webinar on Latest Developments in Analytical and Monitoring Methods for PFASs	Webinar	Virtual
9-10 March 2021	Workshop Towards General Considerations for Sustainable Design of Plastics from a Chemicals Perspective	Workshop	Virtual
16 September 2021	Webinar on Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance	Webinar	Virtual
28-29 September 2021	1 st Meeting of the Working Party on Risk Management	Working Party Meeting	Virtual
7 December 2021	Webinar on Publication Launch of A Chemicals Perspective on Designing with Sustainable Plastics. Goals, Considerations and Trade-offs	Webinar	Virtual
18 January 2022	Webinar on recent risk reduction initiatives for Per- and Polyfluoroalkyl Substances (PFAS)	Webinar	Virtual
12-13 May 2022	Workshop on Flexible Food Grade Packaging: Economic, Regulatory or Technical Barriers to Sustainable Design from a Chemicals Perspective – How Can Poly Makers Help?	Workshop	Hybrid (OECD Conference Centre / Virtual)
20-21 September 2022	Workshop on Government Approaches to Incentivise Substitution of Chemicals of Concern in Products, Articles and Processes	Workshop	Hybrid (OECD Conference Centre / Virtual)
22-23 September 2022	2 nd Meeting of the Working Party on Risk Management	Working Party Meeting	Hybrid (OECD Conference Centre / Virtual)
6 December 2022	Webinar on Advances in Understanding Per- and Polyfluoroalkyl Substances	Webinar	Virtual

Development and publication of technical guidance and tools in relation to the content of Part B of the Decision-Recommendation

48. Activities of the WPRM are part of implementation of recommendations XI, XIII and XIV related to communication and sharing of best practices and approaches for risk management of specific chemicals or risk management approaches more generally.

49. In 2022, the document Government Risk Management Approaches Used for Chemicals Management [\[ENV/CBC/MONO\(2022\)41\]](#) was published and provides a synthesis of the various risk management approaches and options that are used by OECD Member country government chemical regulatory programmes to manage the risk of chemicals. The synthesis can serve as a basis for future discussions of individual risk management approaches and facilitate international alignment. It can also promote the identification of areas where governments can additionally support better chemicals management and serve as a resource for countries developing their chemicals management programmes.

50. Regarding sustainable chemistry, as a risk management approach, a main focus area of the work of the WPRM is the design of sustainable plastics from a chemicals perspective, which aims to identify the key considerations that should be taken into account at the design

stage in regards to the influence on chemical selection on each step in the product life cycle as well as the potential trade-off between considerations. Among the publications related to the design of sustainable plastics is the 2021 report [A Chemicals Perspective on Designing with Sustainable Plastics : Goals, Considerations and Trade-offs](#) whose main contribution is an overall approach to sustainable plastic selection from a chemicals perspective, and the identification of a set of generalisable sustainable design goals, life-cycle considerations and trade-offs. The report was accompanied by four supporting case studies on biscuit wrappers, detergent bottles, flooring and insulation (see Table 8 for a comprehensive list of publications related to sustainable chemistry and other areas of risk prevention and reduction).

51. Additional work on sustainable chemistry has included the development of case-studies at the chemicals/waste interface in order to work towards better alignment of chemicals and waste management policy and hence improve risk management of chemicals along their life-cycle [[ENV/JM/MONO\(2020\)27](#)].

52. The WPRM continues to aid the development of tools and approaches to support decision-making for the substitution of hazardous chemicals. In early 2021, the WPRM published the report *Guidance on Key Considerations for the Identification and Selection of Safer Chemical Alternatives* [[ENV/CBC/MONO\(2021\)3](#)], which was developed with the aim to advance broader agreement on a general approach and criteria for the selection of safer alternatives, with a focus on chemical substitution. In 2022 a workshop was held on government approaches to incentivise substitution including lessons learned. Three documents have been published including a report on approaches used by governments [[ENV/CBC/MONO\(2023\)2](#)], a report on third-party approaches to support substitution [[ENV/CBC/MONO\(2023\)3](#)] and economic approaches to support substitution [[ENV/CBC/MONO\(2023\)4](#)]. These documents share best practices and risk management approaches, in line with the provisions of the Decision-Recommendation.

53. The OECD/UNEP Global Perfluorinated Chemicals Group facilitates since 2012 the exchange of information on Per- and Polyfluoroalkyl Substances (PFAS) and supports a global transition towards safer alternatives. The group regularly organises webinars (see Table 7) and publishes reports to share information on PFASs and risk management. In 2021, the group published the report *Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance* [[ENV/CBC/MONO\(2021\)25](#)], which summarises efforts of the Global PFC Group since 2018 in reviewing the universe and terminology of PFASs to provide recommendations and practical guidance to all stakeholders with regard to the terminology of PFASs. Further publications on the topic of PFASs are listed below in Table 8 and include information on shifting to safer alternatives. This links to recommendation XI and XIII on Adherents identifying activities to prevent or reduce the risks of identified chemicals.

54. In collaboration with the Environmental Policy Committee's Working Party on Integrating Environment and Economic Policies, the WPRM is working on the development of analysis and information to support improving cost/benefit estimates done in the context of regulatory risk management decision-making. This includes a large-scale study regarding the survey of the willingness-to-pay for reduction in risk related to 10 health endpoints. This supports Adherents in implementing elements of the Decision-Recommendation on improving socio-economic analysis (recommendation XIV). In addition the WPRM developed a scoping study to understand the current science of valuation of environmental endpoints ([ENV/CBC/MONO\(2022\)42](#)).

Table 8: Risk prevention and reduction-related publications since the adoption of the Decision-Recommendation

Year	Publication Title	Reference
2018	Economic valuation in 1-Methyl-2-pyrrolidone (NMP) regulation	ENV/WKP(2018)5
2018	Economic assessments of the benefits of regulating mercury: a review	ENV/WKP(2018)6
2018	Socio-economic assessment of phthalates	ENV/WKP(2018)7
2018	Economic valuation in formaldehyde regulation	ENV/WKP(2018)8
2018	Assessing the economic valuation of the benefits of regulating chemicals: Lessons learned from five case studies	ENV/WKP(2018)10
2018	Global Forum on Environment: Plastics in a Circular Economy – Design of Sustainable Plastics from a Chemicals Perspective. Meeting Report.	ENV/JM/MONO(2018)34
2019	Cross Country Analysis: Approaches to Support Alternatives Assessment and Substitution of Chemicals of Concern	ENV/JM/MONO(2019)2
2019	Synthesis Report: OECD Workshop on Approaches to Support Substitution and Alternatives Assessment	ENV/JM/MONO(2019)3
2019	Technical Tools and Approaches in the Design of Sustainable Plastics	ENV/JM/MONO(2019)4
2019	Considerations and Criteria for Sustainable Plastics from a Chemicals Perspective	ENV/JM/MONO(2019)5
2019	Findings of a Review of Performance Measurement of Chemicals Management Systems	ENV/JM/MONO(2019)7
2019	Policy Approaches to Incentivise Sustainable Plastic Design	ENV/WKP(2019)8
2020	PFAS and Alternatives in Food Packaging (Paper and Paperboard). Report on the Commercial Availability and Current Uses	ENV/JM/MONO(2020)15
2020	Workshop Report for the OECD Workshop on Improving Alignment of Chemicals and Waste Management Policy	ENV/JM/MONO(2020)27
2021	Guidance on Key Consideration for the Identification and Selection of Safer Chemicals Alternatives	ENV/CBC/MONO(2021)3
2021	Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance	ENV/CBC/MONO(2021)25
2021	A Chemicals Perspective on Designing with Sustainable Plastics. Goals, Considerations and Trade-offs	ENV/CBC/MONO(2021)30
2021	Case study on detergent bottles. An example of weighing sustainability criteria for rigid plastic non-food packaging	ENV/CBC/MONO(2021)31
2021	Case study on biscuit wrappers. An example of weighing sustainability criteria for plastic flexible food packaging from a chemicals perspective	ENV/CBC/MONO(2021)32
2021	Case study on flooring. An example of chemical considerations for sustainable plastics design	ENV/CBC/MONO(2021)33
2021	Case study on insulation. An example of chemical considerations for sustainable plastics design	ENV/CBC/MONO(2021)34
2022	Fact Cards of Major Groups of Per- and Polyfluoroalkyl Substances (PFASs)	ENV/CBC/MONO(2022)1
2022	PFAS and Alternatives in Food Packaging (Paper and Paperboard): Hazard Profile	ENV/CBC/MONO(2022)2
2022	Per- and Polyfluoroalkyl Substances and Alternatives in Coatings, Paints and Varnishes (CPVs)	ENV/CBC/MONO(2022)4
2022	Synthesis Report on Understanding Side-Chain Fluorinated Polymers and Their Life Cycle	ENV/CBC/MONO(2022)35
2022	Government Risk Management Approaches Used for Chemicals Management	ENV/CBC/MONO(2022)41
2022	Valuing the Impacts of Chemicals on Environmental Endpoints: A Scoping Study	ENV/CBC/MONO(2022)42
2023	Report - OECD Workshop on Flexible Food-Grade Plastic Packaging	ENV/CBC/MONO(2023)1
2023	Cross Country Analysis: Approaches to Support Alternatives Assessment and Substitution of Chemicals of Concern – 2nd edition	ENV/CBC/MONO(2023)2
2023	Lessons Learned from Third-Party Approaches that Support Substitution of Chemicals of Concern	ENV/CBC/MONO(2023)3
2023	Economic instruments to incentivise substitution of chemicals of concern – a review	ENV/CBC/MONO(2023)4

55. The OECD Substitution and Alternatives Assessment Toolbox - SAAT Toolbox- is an online database⁹ that compiles resources relevant to chemical substitution and alternatives assessments. It includes a list of tools and data sources to inform assessments

of chemical substitution or alternatives, a list of frameworks, guides, toolkits and product rating systems developed by Adherents, industry, as well as third-party organisations in response to regulations of chemical substances, case studies on substitution and methodology that describe alternatives assessments conducted by government bodies or manufacturers, academic institutions, NGOs, and a list of non-hazard assessment tools (Figure 4). Since 2018, additional tools and case studies have been added to the Toolbox and the existing content maintained. In addition, the Toolbox was moved from an external website and integrated within the OECD website on substitution¹⁰.

Figure 4: Screenshot of the OECD SAAT Toolbox



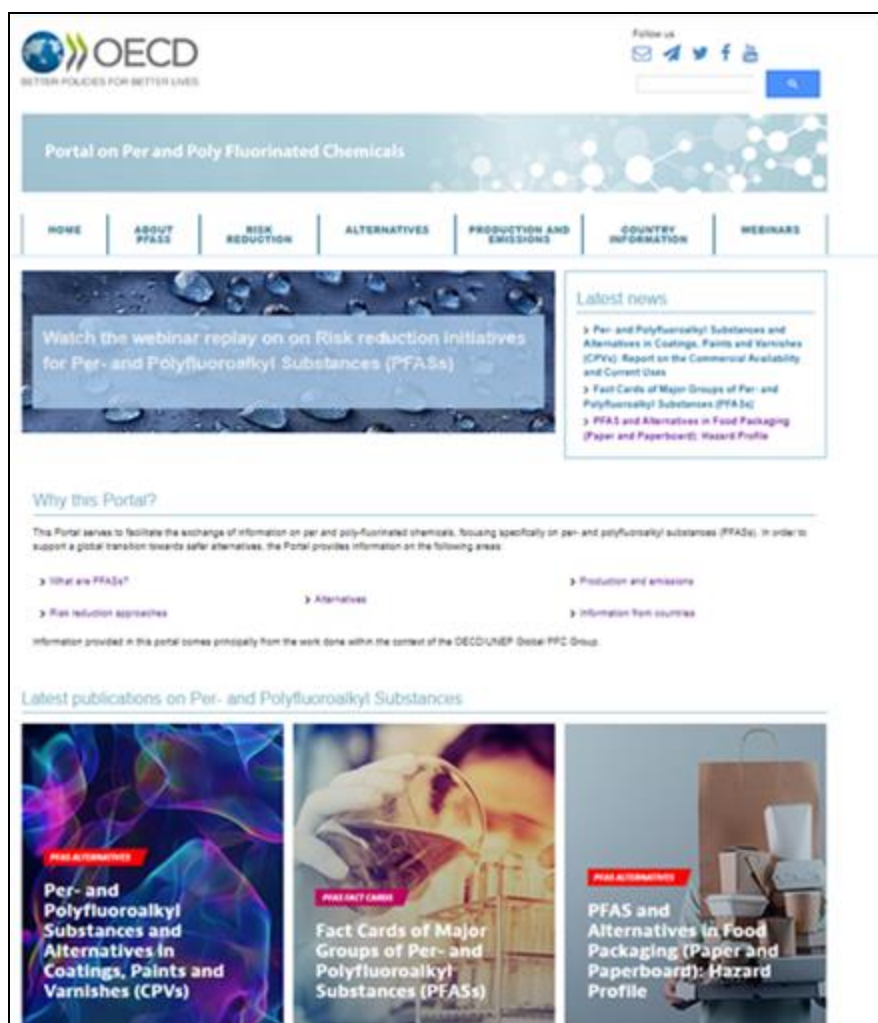
Source: OECD

56. The Portal on Per- and Polyfluorinated Chemicals serves to facilitate the exchange of information on per- and polyfluorinated chemicals, focusing specifically on per- and polyfluoroalkyl substances (PFAS). In order to support a global transition towards safer alternatives, the portal provides information on the characteristics as well as current and historical uses of PFASs, their production and emission, risk reduction approaches for PFASs, and alternatives (Figure 5). Country information in the portal is updated one or two times per year and the portal provides a means to disseminate the reports and webinars of the Global PFC Group.

⁹ <http://www.oecdsatoolbox.org/>

¹⁰ <https://www.oecd.org/chemicalsafety/risk-management/substitution-of-hazardous-chemicals/>

Figure 5: Screenshot from Portal on Per- and Polyfluorinated Chemicals



Source: OECD Portal on Per- and Polyfluorinated Chemicals

3.3. Information-sharing aspects of the Decision-Recommendation

57. Collaboration at the OECD in the context of the CBC and its WPs has also aimed at supporting the implementation of information-sharing provisions of the Decision-Recommendation (decision V, recommendations X and XII). This in relation to eChemPortal and working on interoperability of information-sharing tools through the implementation of OECD Harmonised Templates and the International Uniform Chemical Information Database (IUCLID) software application. In section 3.4, implementation by Adherents at a national level is also described as national activities feed into tools such as the eChemPortal.

Co-operative Investigation and Assessment

V. DECIDES that Adherents shall make information on hazards and exposure to chemicals obtained from their investigations publicly available, respecting the protection of confidential data and proprietary rights.

Risk Prevention or Reduction

X. RECOMMENDS that Adherents communicate and share classifications derived pursuant to the GHS with other Adherents.

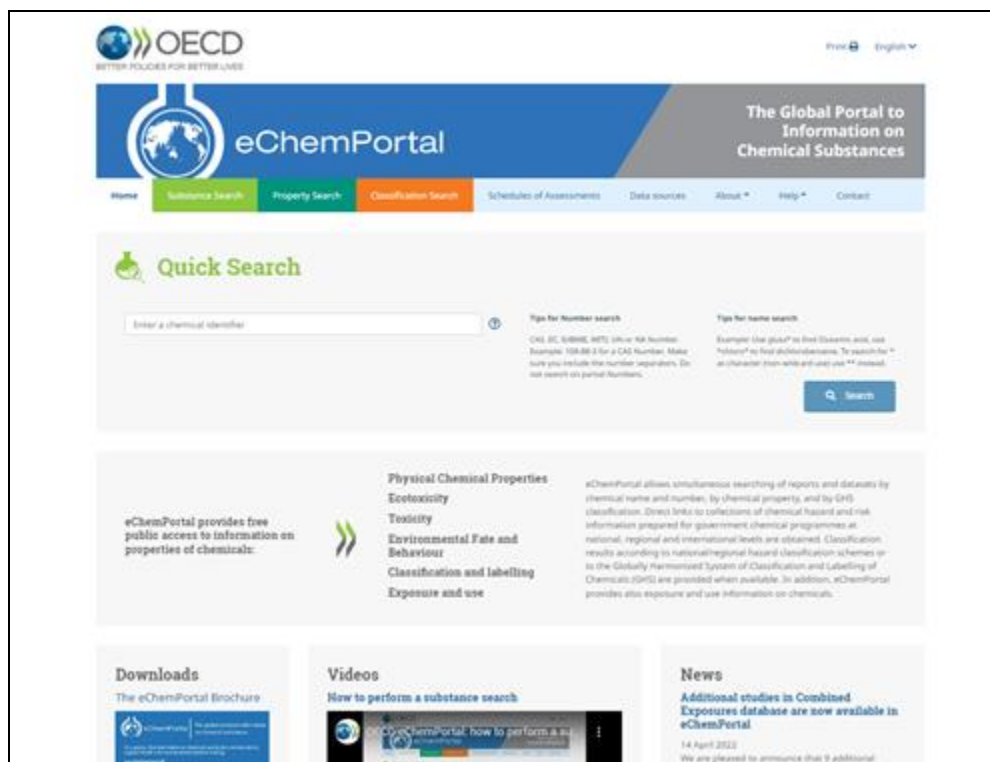
XII. RECOMMENDS that Adherents communicate and share the outcomes of risk assessments, particularly when chemicals are identified as requiring risk management.

58. The eChemPortal¹¹, developed and maintained by the OECD and hosted by the European Chemicals Agency, is a global portal to information on chemical substances and offers free public access to information on properties and hazards of chemicals (see Figure 6). In addition to making information available, the eChemPortal also supports Adherents in sharing information by facilitating collaboration and communication among regulators and stakeholders. It provides direct access to, and a way to search, peer-reviewed information from 34 databases of authorities and international organisations on physical-chemical properties, environmental fate and pathways, ecotoxicity or toxicity of chemicals, as well as their use and exposure and thereby brings together individual dissemination activities in a global portal.

59. Moreover, the eChemPortal provides a GHS classification search functionality to link to national and regional databases where classifications are available for individual chemicals. In December 2022, the eChemPortal was updated to include Fact Cards on 15 groups of more than 100 PFAS substances.

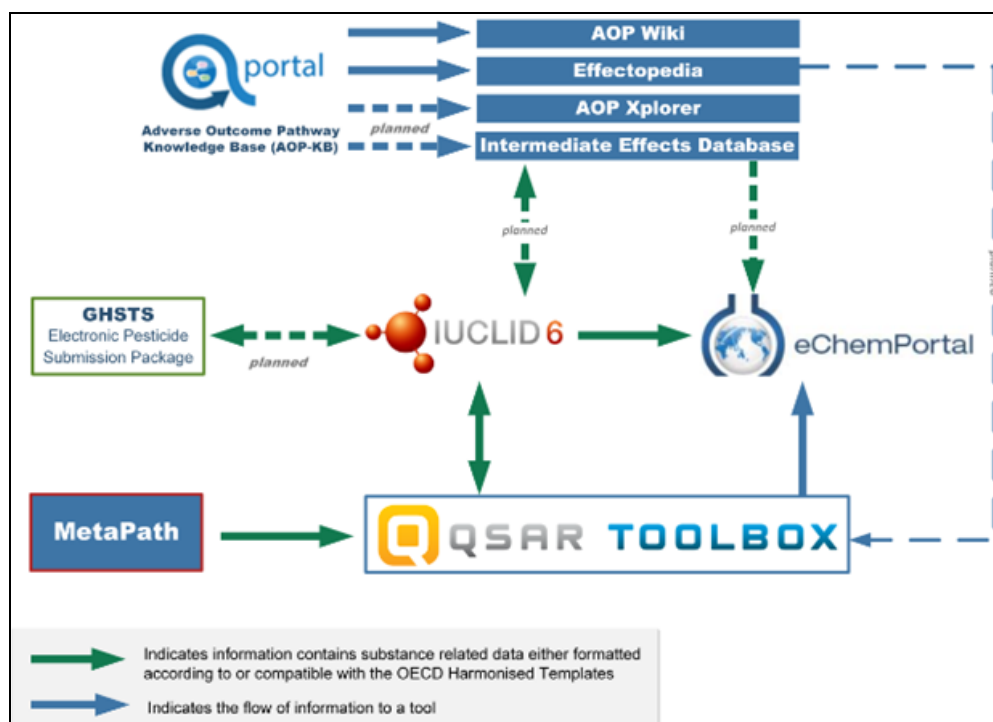
¹¹ <https://www.echemportal.org/echemportal/>

Figure 6. Screenshot of eChemPortal



Source: OECD eChemPortal

Figure 7. Interlinkage of OECD IT tools developed to support chemical management

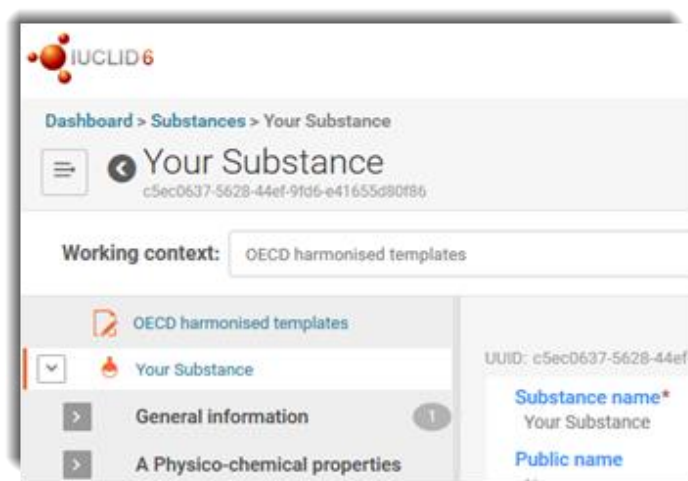


Source: OECD

60. In addition, the OECD continues to support the interoperability of IT tools related to information sharing on chemicals (see Figure 7). This interlinkage is built upon the OECD Harmonised Templates (OHTs) which are standard data formats for reporting information used for the risk assessment of chemicals, mainly studies done on chemicals to determine their properties or effects on human health and the environment, but also for storing data on use and exposure¹². They are aimed at developers of database systems, as they prescribe the formats by which information can be entered into and maintained in a database. By using these templates, regulators and industry are easily able to electronically exchange test study summary information.

61. The International Uniform Chemical Information Database (IUCLID)¹³ is a software application designed to record, store, maintain and exchange data on the intrinsic and hazard properties of chemical substances or mixtures, as well as the uses of these substances and the associated exposure levels (See Figure 8). It is a key software application for both regulatory bodies and the chemical industry where it is used in the implementation of various regulatory programmes. IUCLID is developed and maintained by the European Chemicals Agency with input from Adherents through the established OECD IUCLID User Group Expert Panel. The Expert Panel identifies worldwide business requirements for enhancement of IUCLID independent of the context, giving priority to users' needs in regulatory settings, and promotes and facilitates the use of IUCLID in OECD Members and non-Members. IUCLID is part of an “ecosystem” of IT tools developed and promoted by the OECD Secretariat and Members around common harmonised electronic formats. Its format captures information which complies with the reporting requirements of the OECD Test Guidelines¹⁴, the OECD Harmonised Templates for Reporting Chemical Test Summaries (OHTs)¹⁵ and other national and international methods used for chemical studies.

Figure 8. Screenshot of IUCLID



Source: <https://iuclid6.echa.europa.eu/>

¹² <https://www.oecd.org/ehs/templates/>

¹³ <https://iuclid6.echa.europa.eu/>

¹⁴ <https://www.oecd.org/chemicalsafety/testing/oecdguidelinesforthetestingofchemicals.htm>

¹⁵ <https://www.oecd.org/ehs/templates/>

Implementation by Adherents through Domestic and Regional (EU) Activities

62. This section presents a summary and analysis of responses received to the questionnaire. It covers the provisions V, VI, VII, VIII, IX, X and XII of the Decision-Recommendation.

3.4. Co-operative Investigation and Assessment

V. DECIDES that Adherents shall make information on hazards and exposure to chemicals obtained from their investigations publicly available, respecting the protection of confidential data and proprietary rights.

63. All Respondents indicated that they make available information on the hazards and exposure to chemicals that they obtained from evaluations conducted. These results are being made publicly available using publications, notifications, and websites typically at the domestic or regional (EU) level. Recurring features of these approaches are the following:

- Results of hazard, exposure and risk assessments
- List of substances currently undergoing evaluation
- Information on the evaluation of new substances
- List of domestic/non-domestic substances
- List of hazardous substances
- List of substances with PBT properties (persistent, bioaccumulative, toxic)
- List of endocrine disruptors
- List of High Production Volume chemicals

64. Australia, Canada, the United States and EU Member States have established mechanisms that allow for applications to keep information confidential in cases where it cannot be proven that public interest does not outweigh commercial prejudice. Applications are generally limited to a certain period and are reviewed before being renewed or revoked.

VI. RECOMMENDS that, in order to promote efficiencies and effectiveness in chemical assessment, Adherents use the results of investigations of chemicals carried out by other Adherents in preparing assessments of the potential health and environmental impacts of chemicals.

65. Respondents to this question expressed willingness and readiness of national regulators to consider assessments prepared or published by other Adherents during the assessment of chemicals, without specifying conditions or specific criteria required for such a use of external data. In most cases this is not formalised by specific agreements or frameworks,

66. Australia, Canada, Japan, New Zealand and the United States have made use of assessments and evaluations conducted by other jurisdictions in their own risk evaluations and assessments.

67. While the EU routinely refers to assessments conducted by other jurisdictions, it is necessary that ECHA or EU Member States conduct their own assessments due to differences in policy frameworks across jurisdictions.

68. In Australia, in the context of the Australian Industrial Chemicals Introduction Scheme (AICIS), trusted regulators are listed within the General Rules of the scheme and when a trusted overseas body has previously performed an assessment of a substance, these can be leveraged for introduction of a chemical in Australia.

69. New Zealand is in the process of amending its Hazardous Substances and New Organisms Act to allow its regulator to give greater weight to evaluations conducted by other Adherents.

70. Canada has established the Identification of Risk Assessment Priorities (IRAP) framework, under which it considers new information to identify potentially harmful chemicals that can include hazard classifications or risk assessments conducted elsewhere. Canada also developed the Chemicals Management Plan Risk Assessment toolbox to identify approaches that have previously been used to address substances and includes approaches that have been streamlined to allow assessment of a substance with reduced effort on hazard and/or exposure characterisation, which includes adoption of existing hazard characterisations from international organisations.

71. It is further intended that Canada's New Substances programme will use results of investigations of chemicals carried out by other Adherents in preparing assessments of potential health and/or environmental impacts of new substances when the required information is supplied under the New Substances Notification Regulations (NSNR).

VII. RECOMMENDS that Adherents co-operate to share the burden for data generation and improve access to information on chemicals throughout their life-cycle, respecting data ownership rights.

72. While several Respondents indicated that their respective legislations require industry to generate the data on chemicals (Australia, New Zealand and EU), the majority highlighted that they contribute to collective efforts of data generation. Some of these are centred around OECD projects including the IATA Case Studies and the QSAR Toolbox.

73. It was noted that direct co-operation between Adherents in data generation may take place in the case of re-assessments of existing substances and where additional data is required.

74. Data input to the OECD eChemPortal were cited by Canada, the EU, New Zealand, and the United States as means through which they co-operate to improve access to information on chemicals. Other OECD-developed tools cited were IUCLID and the OECD Harmonised Templates.

75. Several bilateral agreements and informal mechanisms to share data and information related to chemicals management exist, such as the Assessment Collaboration Framework between the United States Environmental Protection Agency (EPA) and Environment and Climate Change Canada and Health Canada that was established in

2018¹⁶, the Memorandum of Understanding between the European Chemicals Agency (ECHA) and Environment Canada / Health Canada signed in 2010¹⁷, as well as the Cooperative Agreement between the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) of Australia and the Department of Environment of Canada and the Department of Health of Canada Related to Enhancing Technical Cooperation and Sharing Information on Industrial Chemicals signed in 2011¹⁸, all of which are implemented through rolling work plans.

3.5. Risk Prevention or Reduction

VIII. DECIDES that Adherents shall establish or strengthen national programmes aimed at the prevention or reduction of risks from chemicals to the environment and the health of the general public or workers.

76. Respondents highlighted recent efforts in updating their previously established national risk management programmes.

77. The Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS) was replaced in July 2020 by the Australian Industrial Chemicals Introduction Scheme (AICIS)¹⁹ with a transition period that ended on 31 August 2022. The AICIS is better aligned with international practices and standards and promotes international harmonisation.

78. Australia also recently established the Industrial Chemicals Environmental Management Standard (IChEMS)²⁰, a national standard for the environmental risk management of industrial chemicals that aims to fill gaps between Commonwealth and State governed regulatory systems. The standard is currently being adopted by Australian governments through their respective on-ground management and regulatory frameworks, including the requirement to provide risk management information throughout the supply chain using non-labelling means such as Safety Data Sheets.

79. Several pieces of EU REACH legislation have been amended in recent years, such as the restriction on use and manufacture of several chemicals²¹, information requirements²², ecolabelling requirements²³ or rules for financial incentives for production of alternatives to substances of concern²⁴. In addition, the Chemicals Strategy for

¹⁶ <https://www.canada.ca/en/environment-climate-change/services/evaluating-existing-substances/assessment-collaboration-framework-us-epa-eccc-hc.html>

¹⁷<https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/europe/understanding-chemicals.html>

¹⁸<https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/australia/cooperation-industrial-chemicals.html>

¹⁹ <https://www.industrialchemicals.gov.au/>

²⁰ <https://www.dcceew.gov.au/environment/protection/chemicals-management/national-standard>

²¹ <https://ec.europa.eu/docsroom/documents/49354>

²² <https://echa.europa.eu/regulations/reach/registration/information-requirements>

²³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0066>

²⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0667&rid=4>

Sustainability²⁵ published in 2020, and Zero pollution action plan²⁶, published in 2021, announced further intentions for strengthening the legal framework.

80. In Japan, “The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof” was established in 1999. The PRTR (Pollutant Release and Transfer Register) system requires businesses handling chemical substances that are potentially hazardous to the environment to estimate the amounts of chemical substances released and transferred in waste, and to report the data to their local governments, and requires that the national government then compiles data submitted and makes the results public. Japan has since updated its PRTR system to include the latest information on hazards and the current status of emissions.

81. New Zealand recently provided additional government funding to strengthen its chemical reassessment programme, which screens previously approved hazardous substances to strengthen controls on approvals, to restrict uses or to revoke approvals. Priorities for reassessment are set taking into account emerging issues and the reviews undertaken by other international regulatory authorities. Other initiatives have been undertaken to strengthen the regulation of specific substances (e.g. PFAS²⁷) or product types (e.g. cosmetics²⁸) or to increase public awareness regarding domestic use of chemicals (e.g. Healthy Homes²⁹).

82. WorkSafe, New Zealand’s primary workplace health and safety regulator, has regularly updated and amended its 2017 Health and Safety at Work (Hazardous Substances) Regulations³⁰, which sets out the rules for work-related activities involving hazardous substances.

83. On June 22, 2016, the Frank R. Lautenberg Chemical Safety for the 21st Century Act (Lautenberg Chemical Safety Act) was signed into law. The Lautenberg Chemical Safety Act amends the Toxic Substances Control Act (TSCA) of 1976, the nation’s primary chemicals management law. This has led to increased activities on risk management of chemicals³¹. Also, the United States has increased its emphasis in regards to their risk management efforts in pollution prevention, seeking to reduce, eliminate, or prevent pollution at its source prior to recycling, treatment or disposal³².

²⁵ https://environment.ec.europa.eu/strategy/chemicals-strategy_en

²⁶ https://environment.ec.europa.eu/strategy/zero-pollution-action-plan_en

²⁷ Environmental Protection Agency (2022) Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances. 87 FR 54415.

²⁸ Environmental Protection Agency (2020) Cosmetic Products Group Standard 2020. HSR002552.

²⁹ <https://www.hud.govt.nz/our-work/healthy-homes-standards/>

³⁰ <https://www.legislation.govt.nz/regulation/public/2017/0131/latest/DLM7309401.html>

³¹ <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca>

³² <https://www.epa.gov/p2>

IX. DECIDES that Adherents shall implement the GHS in order to further hazard communication in the supply chain. Such implementation can be done by Adherents applying those elements of the GHS that are appropriate to them and may vary by product category and stage in the lifecycle.

X. RECOMMENDS that Adherents communicate and share classifications derived pursuant the GHS with other Adherents.

84. All Respondents indicated that they have implemented the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) by incorporating it into national and/or regional legislation. In the EU, the Classification, Labelling and Packaging (CLP) Regulation ((EC) No 1272/2008)³³ is based on the GHS and is legally binding for Member States and directly applicable to all industrial sectors. GHS rules for safety data sheets (SDSs) have also been taken into account in the requirements for SDSs as outlined by REACH regulation.³⁴

85. The United Nations Committee of Experts on GHS publishes updates to the GHS every two years and the latest version, the 9th Revised Edition, was formally released in 2021. These updates require implementing agencies to continuously revise their related legislations and regulations, as was noted by the United States Occupational Safety and Health Administration (OSHA), New Zealand EPA and Australia who are currently in the process of implementing the latest GHS revisions.

86. The large majority of Respondents include GHS labelling in their communication of risk assessments of chemicals (see paragraph 63).

Box 1. International implementation of the GHS

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) was developed by the United Nations (UN) and formally adopted in 2002. The GHS was devised in the context of an increasingly globalised trade of chemicals that necessitated an internationally harmonised approach to classification and labelling.

The system established a set of rules for classifying the hazards of chemical substances, materials and mixtures as well as several hazard communication tools such as a standardised format for SDSs and hazard and precautionary statements, symbols and signal words for labels and SDSs. It is designed to ensure that information on physical hazards and toxicity from chemicals is coherent and available in order to protect human health and the environment during the handling, transport and use of these chemicals. The GHS also provides a basis for the harmonisation of rules and regulation on chemicals at national, regional and international level.

At the 2002 World Summit on Sustainable Development in Johannesburg, countries were encouraged to implement the GHS, and it is explicitly mentioned in relation to the original objectives 1 to 4 of the SAICM Global Plan of Action and their related activities

³³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008R1272>

³⁴ Annex II (Section 9) of the Registration, Evaluation and Authorisation of Chemicals (REACH) Regulation (EC) No 1907/2006 was updated to align with GHS in July 2020. The amendment came into force on 1 January 2021.

on risk reduction, strengthening knowledge and information sharing, governance, strengthening of institutions, law and policy, as well as capacity building.

A number of international organisations, UN programmes as well as specialised agencies contribute to the implementation of the GHS by developing, amending or revising their relevant international standards concerned with chemical safety:

- The International Labour Organisation (ILO) included GHS requirements in a number of International Labour Standards (ILS) related to chemicals and occupational safety and health³⁵.
- The Food and Agriculture Organization (FAO) has revised and included recommendations and guidance for the classification and labelling of pesticides in accordance with GHS criteria³⁶.
- The World Health Organization (WHO) updated its *Recommended Classification of pesticides by hazards* to incorporate the GHS³⁷.
- The United Nations Economic Commission for Europe (UNECE) implemented the GHS through the *UN Recommendations on the Transport of Dangerous Goods. Model Regulations*³⁸ and several other transport legal international instruments addressing the different modes of transport (maritime, air, land). It further included a list defining hazardous activities classified in accordance to the GHS in the UNECE Convention on the Transboundary Effects of Industrial Accidents³⁹.

Source: UNECE(2022) <https://unece.org/about-ghs>

XII. RECOMMENDS that Adherents communicate and share the outcomes of risk assessments, particularly when chemicals are identified as requiring risk management.

87. Risk assessments published by the respective agencies generally includes information on hazards and exposure of chemicals. Please refer to paragraph 63.

³⁵ ILO (2022) [The Globally Harmonized System of Classification and Labelling of Chemicals \(GHS\): Brochure](#). Online.

³⁶ FAO and WHO (2022) Guidance on good labelling practice for pesticides (Second revision) – International Code of Conduct on Pesticide Management. Rome.

³⁷ WHO (2020) WHO recommended classification of pesticides by hazard and guidelines to classification, 2019 edition. Geneva: World Health Organization.

³⁸ UN (2021) UN Recommendations on the Transport of Dangerous Goods. Model Regulations. New York: United Nations Publications.

³⁹ UNECE (2017) Convention on the Transboundary Effects of Industrial Accidents.

4. Dissemination

XV. INVITES Adherents and the Secretary-General to disseminate this Decision-Recommendation and take the necessary steps to ensure that this work is carried out in co-operation with other international organisations, in particular with the other Participating Organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC).

88. In the Decision-Recommendation, the Council invited the Secretary-General and Adherents to disseminate the Decision-Recommendation. While dissemination of legal instruments typically refers to promotion of the existence of the Decision-Recommendation, since collaborative work is on-going at the OECD also in terms of implementation of the Decision-Recommendation, this is included in the description of dissemination.

89. With a view to increasing the dissemination and impact of the collaborative implementation carried out at the OECD of the Decision-Recommendation, the Secretariat has attended many international events to speak about activities. Examples of these are listed in Table 9. In addition, the meetings of the WPHA, the WPEA, and the recently established WPRM, all of which are subsidiary bodies of the CBC, constitute fora for the exchange of information, policy practices and lessons learned along with the development of methodologies and approaches which constitute implementation aspects of this Decision-Recommendation. While the meetings of these three Working Parties are vehicles for implementation, they are also a vehicle for dissemination of the guidance, documents and other tools implementing the provisions (as described above). A listing of these events can be found in sections 3.1 and 3.2.

90. The CBC is also provided highlights of the implementation activities of the WPHA, WPRM and WPEA at each of its meetings and declassifies the outputs. All documents produced are provided free of charge on the OECD website.

Table 9. Examples of dissemination of the Decision-Recommendation implementation activities by the OECD Secretariat at External events

Date	Event	Nature of dissemination
Events relevant to Hazard Assessment		
28-29 March 2018	17th International Fresenius Conference "Food Safety and Dietary Risk Assessment" - Düsseldorf, Germany	Presentation of OECD work related to assessment of combined exposures to chemicals
11-15 June 2018	QSAR 2018 Conference - Bled, Slovenia	Presentation on OECD QSAR Toolbox
10-11 October 2018	3rd Accelerating the Pace of Chemical Risk Assessment (APCRA) Working Meeting – Ottawa, Canada	Presentation of OECD work related to hazard assessment methodologies
26 / 27 October 2018	The Chemical Cocktail Challenge workshop / Outputs of the EuroMix project and ECD-Mix Risk Projects - , Belgium	Presentations of OECD work related to assessment of combined exposures to chemicals
21-24 May 2019	EuroToxRisk Read-Across Workshop - Helsinki, Finland	Dissemination of OECD work related to read-across, QSAR, combined exposures to chemicals
October 2019	4th Accelerating the Pace of Chemical Risk Assessment (APCRA) Working Meeting, United States	Presentation of OECD work related to hazard assessment methodologies
23-27 August 2021	World Congress for Alternatives and Animal Use in Life Sciences. (virtual)	Session Chair on AOPs and Key Characteristics/Presentation on IATA Case Studies Project
28-29 September 2021	ICCVAM Scientific Advisory Committee on Alternative Toxicological Methods (SACATM) (virtual)	Presentation on OECD activities related to alternative methods

12-14 October 2021	10th Annual Meeting of the American Society for Cellular and Computational Toxicology (ASCCT), (virtual)	Plenary Presentation on OECD activities related to alternative methods
8-12 November 2021	Chemical Regulatory Annual Conference, China. (virtual)	Panel moderator for discussion on global implementation of new approach methods
30 November 2021	ECHA Webinar on QSAR Toolbox (virtual)	Presentation on OECD activities related to QSAR Toolbox
30 April 2022	ECHA Webinar on use of new approach methods (virtual)	Promotion of OECD QSAR Toolbox
4-5 May 2022	ONTOX Annual Forum, Brussels, Belgium	Scientific Advisory Board member to facilitate coordination of activities with Hazard Assessment Programme
8-9 June 2022	Helsinki Chemicals Forum, Helsinki, Finland	Organizer/panel moderator for session on new approach methodologies in regulatory assessment
20-24 June 2022	ChemCon, London, UK	Presentation on OECD activities supporting chemical grouping
12 August 2022	DyNAMIC Discussions: The future of Risk Assessment is already here (virtual)	Presentation on OECD Hazard Assessment Programme
22-24 August 2022	Swiss Health Agency workshop on NGRA methods for agrochemical formulations	Presentation and panel discussion on OECD activities related to next generation risk assessment
6-7 September 2022	Workshop on the Future of Chemical Safety Assessment: Regulatory use of non-animal methods. Seoul, Korea.	Workshop co-organizer/presentation
8-12 September 2022	International Congress of Toxicology. September Maastricht, the Netherlands.	Session co-chair/presentations (2) on OECD activities related to data standardization and IATA Case Studies
12-13 October 2022	US EPA Conference on the State of the Science and Use of NAMs for Chemical Safety Testing - Washington DC, USA	Presentation
25-26 October 2022	JRC Workshop on Academic Data - Ispra, Italy	Workshop participation
27 October 2022	NICEATM Symposium on New Approach Methods to Address Population Variability - Washington DC, USA	Breakout Session participation
24-26 November 2022	ASPIS Cluster Meeting - Sitges, Spain	Panel Discussion on NAMs for use in regulatory contexts
13 December 2022	CropLife Europe Human Health Meeting	Presentation
Events relevant to Exposure Assessment		
29-30 May 2018	Joint H2020 Workshop, Joint Research Centre, Ispra, Italy	Presentation of OECD work related to assessment of combined exposures to chemicals
26-30 August 2018	ISES-ISEE 2018 Joint Annual Meeting, Ottawa, Canada	A specific session for the Working Party on Exposure Assessment activities
25 October 2018	3rd EuroMix workshop, London, the UK	Presentation on ongoing work on harmonisation of exposure assessment methodologies
29-30 Oct 2019	3rd International Akademie Fresenius Mixtox Conference Cologne, Germany	Presentation of OECD work related to assessment of combined exposures to chemicals
2 Oct 2020	International Conference under the German EU presidency – Berlin, Germany	Presentation of OECD work on occupational biomonitoring
25 Nov 2021	International Symposium on Children's Environmental Health – Seoul, Korea	Presentation of OECD work on children-specific exposure assessment methodology
Events relevant to Risk Reduction		
13 May 2019	Norwegian Substitution Seminar - Oslo, Norway	Presentation of the OECD work on Substitution and the OECD Substitution and Alternatives Assessment Toolbox
12-13 June 2019	Implementing Chemicals and Waste Multilateral Environmental Agreements in Asia through Enhancing Understanding and Building Capacity (MEAs Project) - Beijing, China	Presented OECD work on shifting to safer alternatives on PFAS chemicals
4-5 December 2019	International Solid Waste Association Workshop on Waste & Chemicals - From proper classification to sustainable recycling – Paris, France	Presented OECD work at the chemicals/waste interface
4-5 August 2020	Organisation for the Prohibition of Chemical Weapons - Expert Group Meeting on Green and Sustainable Chemistry for Safety and Security - online	Presented OECD projects related to sustainable chemistry

20 January 2021	Chemical Watch Conference - Global Chemicals Management Towards 2030 and Beyond - online	Presented OECD document on selection of safer alternatives
12 April 2021	Society for the Advancement of Alternatives Assessment and Substitution Webinar - online	Presented OECD document on selection of safer alternatives
14 April 2021	IOMC WEBINAR ON: Leveraging Green and Sustainable Chemistry for sound management of Chemicals and waste beyond 2020 - online	Presented OECD document on selection of safer alternatives
23 September 2021	Royal Society of Chemistry Seminar on PFAS - online	Presented OECD Recommendations and Practical Guidance for PFAS Terminology
20-23 October 2021	ASIATOX 2021 Conference – Hangzhou, China & online	Presented OECD document on selection of safer alternatives
24 March 2022	Chemical Watch PFAS Global 2022 Conference - online	Presentations on OECD work on PFAS including terminology and safer alternatives
15 June 2022	SAICM Chemicals in Products Community of Practice Discussion on "Assessment of Alternatives" - online	Presented OECD document on selection of safer alternatives
27 – 29 June 2022	Conference on Industrial Technologies IndTech2022 organised under the French EU Presidency - Grenoble, France	Presented OECD work on Sustainable Design of Plastics from a Chemicals Perspective
15-16 September 2022	2022 Green Chemistry and Commerce Council European Forum – Billund, Denmark	Presented OECD work on Sustainable Design of Plastics from a Chemicals Perspective
19 October 2022	SAICM/UCT Chemicals and Sustainable Development Goals Community of Practice – online	Presented OECD work on Sustainable Design of Plastics from a Chemicals Perspective
29 November 2022	Society for the Advancement of Alternatives Assessment and Substitution Webinar - online	Circularity: The Role for Substitution Thinking – Presented OECD work on substitution and sustainable chemistry

91. Furthermore, of the 11 responses to the survey, 10 contained information pertaining to dissemination of the existence of the Decision-Recommendation itself. Of these, 8/10 indicated that they had disseminated the Decision-Recommendation within their own governments, typically through correspondence and briefings, while two indicated the dissemination via weblinks to the Decision-Recommendation. Of the Respondents, only Australia indicated that the Decision-Recommendation was disseminated at regional levels, and no translations into other languages were reported.

92. Only 4/10 indicated dissemination of the Decision-Recommendation beyond Adherents, such as non-Adherents or non-governmental actors, two via weblinks and one through discussion with non-Adherents or other third-parties.

93. The Decision-Recommendation also invites Adherents and the Secretary-General to take the necessary steps to ensure that this work is carried out in co-operation with other international organisations, in particular with the other Participating Organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC).⁴⁰

94. The OECD co-operates closely with other international organisations, most notably eight UN agencies involved in chemical safety, through the Inter-organization Programme for the Sound Management of Chemicals (IOMC)⁴¹ towards the implementation of the

⁴⁰ The Participating Organisations include, in addition to the OECD, the Food and Agriculture Organization (FAO), the International Labour Organization (ILO), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), the World Health Organization (WHO), and the World Bank.

⁴¹ www.iomc.info

Strategic Approach to International Chemicals Management (SAICM)⁴² which bring together governments from more than 150 countries and various stakeholders.

95. The objective is to strengthen international co-operation in the field of chemicals and to increase the effectiveness of the organisations' international chemicals programmes; and to promote co-ordination of policies and activities, pursued jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

96. Currently all the Participating Organisations of the Inter-Organisation Programme on the Sound Management of Chemicals (IOMC) are observers to the CBC: United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), the World Bank and the United Nations Development Programme (UNDP) [[C\(2020\)60](#)].

97. The IOMC has also developed the IOMC Toolbox for Decision-Making in Chemicals Management. It is an internet-based tool that enables Adherents and non-Adherents to identify the most relevant and efficient tools to address specific national problems in chemicals management. It is managed by the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).

98. The Toolbox contains recommendations for setting-up seven types of management schemes: a pesticides management scheme; an occupational health and safety system; a chemical accidents prevention, preparedness and response system for major hazards; a PRTR system; an industrial chemicals management system; a Globally Harmonised System for Classification and Labelling (GHS) implementation scheme and a public health management scheme of chemicals.

99. Adherents and non-Adherents will find different options proposed, according to their level of available resources (low, medium, high), for setting up or improving their chemical management scheme and all the related guidance documents and tools available for each implementation step. Special focus is given to identifying simple cost-effective solutions to national chemicals management issues. A subset of the OECD documents described in the section on the implementation of this Decision-Recommendation are included in the IOMC Toolbox (see Table 6).

⁴² www.saicm.org

Figure 9: Screenshot of IOMC Toolbox for Decision-Making in Chemicals Management



Source: <https://iomctoolbox.org/>

5. Summary and Conclusions

5.1. Implementation

100. The information gathered by the Secretariat, and the collected survey responses suggest that Adherents, domestically and in the context of collaborative work at the OECD, have made significant and ongoing efforts to implement the Decision-Recommendation, including progress on the development of novel hazard and exposure assessment methodologies, dissemination of information on hazards and exposure to chemicals including through the GHS (Globally Harmonised System of Classification and Labelling) and increased collaboration regarding risk management approaches.

101. The implementation of several provisions of the Decision-Recommendation occurs through activities of the WPHA, the WPEA and the WPRM, as overseen by the CBC, including:

- Held more than 65 meetings of OECD bodies, webinars and events related to the topics of the Decision-Recommendation;
- Published more than 95 reports (guidance, case studies, information) related to the topics of the Decision-Recommendation;
- Developed, or contributed to the development of, several publicly available electronic tools and portals related to the Decision-Recommendation including examples such as the eChemPortal, the OECD Per- and Polyfluoroalkyl Substances (PFAS) Portal, IUCLID (International Uniform Chemical Information Database), the QSAR (Quantitative structure-activity relationship) Toolbox, Substitution and Alternative Assessment (SAAT) Toolbox and the eAOP (Adverse Outcome Pathway) Portal.

102. While the Decision-Recommendation is overall well-implemented by Adherents, there are some challenges to its implementation, which mainly pertain to the evolving nature of the field. Given that scientific knowledge is continually advancing, hazard and exposure methodologies as well as risk management approaches are constantly evolving. Therefore, the sharing of best practices and development of novel methodologies will remain a constant goal to keep pace with developments. This means that implementation of many of the provisions of the Decision-Recommendation will always be a moving target for Adherents to work towards (i.e. decision II, recommendations IV, XII, XIV).

103. One of the constant criticisms in the field of chemical risk assessment and management is the lack of information on chemicals to inform decision-making. While this Report highlights advances in sharing of information on chemicals and risk management decisions, there is a continuing need to improve the implementation of related provisions in the Decision-Recommendation (decision V, recommendations VII, X, XII).

104. To continue to promote efficiencies and effectiveness in chemical assessment, it is recommended that Adherents build upon the practices to use the results of investigations of chemicals carried out by other Adherents in preparing assessments of the potential health and environmental impacts of chemicals (recommendation VI). This leverages the results of the development of harmonised approaches and best practices.

5.2. Dissemination

105. The following activities have been undertaken to support the dissemination of the Decision-Recommendation to Adherents and non-Adherents. Since elements of this Decision-Recommendations are implemented through collaborative activities at the OECD, these implementation activities are also reflected in the context of ‘dissemination’:

- The Secretariat has presented elements of the work implemented under the Decision-Recommendation at over 45 events external to the OECD;
- Several Respondents indicated that they had disseminated the Decision-Recommendation within their own governments, typically through correspondence and briefings, and half of Respondents have reported dissemination of the Decision-Recommendation beyond Adherents, to non-Adherents or non-governmental actors;
- The OECD co-operates closely with other international organisations, most notably the eight other UN organisations involved in chemical safety, through the Inter-organization Programme for the Sound Management of Chemicals (IOMC)⁴³ towards the implementation of the Strategic Approach to International Chemicals Management (SAICM)⁴⁴ to strengthen international co-operation in the field of chemicals as the Decision-Recommendation invites Adherents and the Secretary-General to do.

106. While these actions have already contributed to wide dissemination of the Decision-Recommendation to both Adherents and non-Adherents, possible opportunities to further enhance dissemination could include:

- Further dissemination of the activities and outputs (reports, electronic tools etc.) of the implementation of the Decision-Recommendation to non-Adherents;
- Further dissemination of harmonised approaches beyond delegates to the individual Working Parties and the CBC involved in the implementation of the Decision-Recommendation.

5.3. Continued relevance

107. The survey further included a question on the overall relevance of the Decision-Recommendation in a format that allowed Respondents to choose between *a) The Decision-Recommendation is still relevant and no further action is needed*, *b) The Decision-Recommendation is still relevant but it needs to be updated*, and *c) The Decision-Recommendation is obsolete*.

108. All Respondents agreed that the Decision-Recommendation remains relevant in 2022 and only two Respondents expressed a need for an update. In terms of updates, one Respondent indicated that specific types of hazards could be added to recommendation III part iii) including Endocrine Disruptors (ED) leading to effects in the environment, ED leading to effects on human health, very persistent and very bioaccumulative substances (vPvB), persistent, mobile and toxic substances (PMT) and very persistent and mobile substances (vPvM). Such an update to the list of priority endpoints to be addressed can be taken up in the work of the respective Working Party Programme without the need to update

⁴³ www.iomc.info

⁴⁴ www.saicm.org

the Decision-Recommendation itself. Another Respondent indicated that it did not identify any specific areas where the Decision-Recommendation needs to be updated but would be supportive of a review to evaluate if there are any such areas that merit an update.

5.4. Next steps

109. In light of the above, in order to further support implementation and dissemination of the Decision-Recommendation, the following actions are proposed:

- a) For Adherents to continue disseminating and implementing all aspects of the Decision-Recommendation, and in particular address the challenges identified in the “Summary and conclusions” section of the Report including by:
 - (i) developing novel hazard and exposure assessment methodologies;
 - (ii) sharing of risk management approaches and best practices;
 - (iii) further improving the dissemination of risk assessment outcomes and associated risk management activities including the dissemination of information regarding chemical substances;
 - (iv) leveraging the investigations of chemicals of other Adherents in their assessment activities;
- b) For the Chemicals and Biotechnology Committee (CBC), through the Working Party on Hazard Assessment (WPHA), the Working Party on Exposure Assessment (WPEA) and the Working Party on Risk Management (WPRM):
 - (i) continue supporting the implementation of this Decision-Recommendation, notably through:
 - a. ensuring collaborative work towards implementation of provisions of the Decision-Recommendation in the relevant Working Parties of the CBC;
 - b. strengthening its efforts to ensure co-operation with other international organisations, in particular with the other Participating Organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC);
 - (ii) continue promoting international awareness of this Decision-Recommendation, with a view to informing, advising and encouraging non-Adherents to participate in the OECD’s work in the field of cooperative investigation and risk reduction of chemicals;
 - (iii) report back to Council on the implementation, dissemination and continued relevance of the Decision-Recommendation in 10 years or earlier if developments in the field warrant it.