Global project on the updating of National Implementation Plans for POPs

Initial assessment of NIP data

Sandra Castro Scarone
Martín Benzo

Presentation outline

1. Objectives and scope
2. Data sources
3. Methodology
4. Data quality and viability
5. Main difficulties
6. Interaction with the integrated SC toolkit to improve the transmission of information under Articles 07 and 15

1. Objectives and scope

- Gather quantitative POPs information presented by Parties
- Organize the information in a suitable format to be used later in the construction of a global distribution map for the selected POPs
- Identify information gaps and data uncertainty

SCOPE

DDT ; PCBs and PFOS

2. Data sources

The information gathered was obtained from the following sources:

Option	Description
Disposal project	Information obtained directly of a specific project for identification and disposal of POP Pesticides in the Country/Region
Government Statistics not published in NIP	Information obtained directly from government authorities that was not published in NIP
NIP	Information obtained either directly from the country's NIP or from another source which reported extracting it from the NIP
Other convention report	Information obtained directly or indirectly from other reports by SC (UNEP/POPS/DDTBP.1/2, DDT Questionnaire 2012-2014, Road Map for the Development of Alternatives to DDT (UNEP/DTIE Chemicals Branch, February 2015). Global DDT Inventory Excel sheet that was estimated from survey results
Other non-official information	Internal emails, published articles, presentations, etc.
SC Article 15 report	Information obtained directly from a country's SC Article 15 Report

2. Data sources

Data source	Country	Date	Description
Effectiveness Evaluation Report	Stockholm Convention	April 2016	Excel spreadsheet containing information on all POPs for all 180 SC parties until 2016 (SC Art 15 National Reports)
Report for the evaluation of information on perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride - Note by the Secretariat	Stockholm Convention	May 2016	Assessment by the Secretariat of information for the process for the evaluation of PFOS, its salts and PFOSF in accordance with the Terms of Reference provided in decision POPRC-9/5.
Global Inventory of DDT	Stockholm Convention	2018	Global inventory of DDT stockpiles and contaminated sites
NIP	Uruguay	2017	-
NIP	Burundi	2018	-
NIP	Cameroon	2015	-

2. Data sources

Data source	Country	Date	Description
NIP	Zimbabwe	2017	-
NIP	Argentina	2017	-
NIP	Morocco	2018	-
NIP	Paraguay	2017	-
NIP	Georgia	2017	-
NIP	Suriname	2018	-
NIP	Solomon Islands	2018	-
NIP	Chile	2017	-
NIP	Viet Nam	2016	-
NIP	Albania	2017	-
NIP	Colombia	2017	-
NIP	Czech Republic	2017	-

2. Data sources

NIP	**Côte d'Ivoire**	**2016**	-
NIP	Iceland	2017	-
NIP	Japan	2016	-
NIP	Lebanon	2017	-
NIP	Norway	2017	-
NIP	Poland	2017	-
NIP	Sweden	2017	-
NIP	United Kingdom	2017	-
NIP	Madagascar	2017	-
NIP	Afghanistan	2017	-
NIP	Croatia	2016	-
NIP	Brazil	2015	-
NIP	Costa Rica	2015	-
NIP	Honduras	2015	-
Inventory development for perfluorooctane sulfonic acid (PFOS) in Turkey: challenges to control chemicals in articles and products	Turkey	2014	Published article by authors M. Kemal Korucu, Kadir Gedik, Roland Weber, Aykan Karademir, Perihan Binnur, Kurt-Karakus

3. Methodology

- Definition of excel template

- The final version of the template was defined so the collected data could be entered directly in the global distribution map software.

- To avoid typing errors and differences in nomenclature, dropdown lists with limited options were created for some columns.

3. Methodology

Final Template

- Three POPs in one Excel file
- 25 collumns
- Total of 849 entries were input into the template: 258 DDT, 282 PCB, 309 PFOS.

Final template content

3. Methodology

Title	POP	Country	Region	City	Owner	Code ISO 3	Latitude	Longitude	Status	Year of data	Owner-sector	Contamination-Concentration	Nº of units	Estimation of the total mass of equipment (kg)
Explanations and examples	String	Choose a country in the dropdown list (If the dropdown list is not available, always enter the country's name in english)	Enter the region's name in english	Enter the city's name in english	Enter the owner's name in english	Enter the ISO 3166-1 alpha-3 code for the country (e.g. for Madagascar, enter MDG)	If known , enter the latitude (South/North) in decimal degrees (e.g. 29.123843) and WGS84 (EPSG: 4326) reference system	If known, enter the longitude (West/East) in decimal degrees (e.g. 1.221411) and WGS84 (EPSG: 4326) reference system	Choose between: - In use - Stockpile - Disposed - Production - Import-article - Import-POP - Import for disposal - Export-article - Export-POP - Not specified	Integer only YYYY (Empty cell if not specified Do not enter multiple years, e.g. 1994-2001)	Choose between the different sectors (see "Options" or dropdown list)	Choose between the different types of contamination for each POP (see “Options” or dropdown list)	Number Fill only for PCB, if reported. Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Fill only for PCB, if reported. Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.
Abbreviation	pop	country	Region	City	Owner	iso_code	coord_y	coord_x	status	year_of_data	owner_sector	contamination	num_unit	estim_amount_equip

3. Methodology

Amount equipment/articles (kg)	Estimation of the oil amount (tonnes) thanks to conversion factors (see sheet 3)	Amount oil (L)	Min amount of POP estimated (kg)	Max amount of POP estimated (kg)	Total POPs (tonnes)	Data source	Most viable	Quality	Storage condition	Type
Number Fill only for PCB and PFOS, if reported. Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Fill only for PCB, if reported. Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Fill only for PCB, if reported. Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Number Let an empty cell when values are unknown, not specified, not estimated, not reported,... etc.	Choose between: - NIP - SC Art 15 report - Other convention report - Government statistics not reported in NIP - Disposal project - Other non-official information	1 or 0 1=yes 0=no	Choose between: - High - Medium - Low - Not specified	Choose between: - Problematic - Compliant (or almost) - N/A - Not specified	Fill for PCB only.Choose between: - Transformers - Capacitors - Transformers and capacitors - Equipment - Oil - Drums - Open applications - Others -Not specified
amount_equip	estim_amount_oil	amount_oil	amount_pop_min	amount_pop_max	tot_pops	data_source	viable	quality	storage_con	type

4. Data Quality and viability

Data quality- criteria applied

Level	Description
High	Data obtained from NIP/other source with detailed description of the methodology (questionnaires, surveys, data bases, etc.).
Medium	Data obtained from government statistics. Data obtained from NIPs where the methodology is unclear.
Low	Data which is not final. Data with unclear origins. Estimations made using wide assumptions.
Not specified	Data obtained from an indirect source (for example, data obtained from "Other convention reports" which quote the country's NIP as their source)

4. Data Quality and viability

Viability - Criteria applied

The viability of the entries was evaluated as follows:

- If there are two sets of data for the same year, with the same status, the one with higher data quality is labeled 1 in “Most Viable” column.

- Data from more recent years which invalidates data from previous years, are labeled 1 in “Most Viable” column (for example, if country reports existent stockpiles in 2009 and later reports no stockpiles in 2017, the data from 2017 is labeled as the Most Viable).

5. Main difficulties - PFOS

Lack of uniformity in the format of the reported results	• Most of the countries use the methodology from the UNEP's Toolkit, and report the estimation of PFOS use for each acceptable use/specific exemption. Others mention used this methodology, but only report total PFOS use for the country in a given year (not reporting the amounts of PFOS, or articles containing PFOS, in each sector).
Overestimation of PFOS in the majority of cases	• In general, the amount of articles used for the estimation of PFOS in each sector is calculated using total imports, exports and production for the sector assuming worst scenario. • Others countries use only a percentage of the totals
Gaps in the information reported	• Some countries do not report the estimation of PFOS and only report the total amount of articles imported/produced/used for the sector • Other countries do not report a PFOS inventory
Lack of uniformity in the use of emission factors	• Some countries use the emission factors from UNEP Guidelines • Others use emission factors from other sources which they do not report
Probable errors in estimations of PFOS content	• In some cases, the reported result does not correspond to the calculation with the emission factors and articles consumption reported in the NIP. This could be due to errors in the original calculations.
Uncertainty in information obtained indirectly	• For information obtained from SC reports and Effectiveness Evaluation Reports, it was difficult to assess the quality of the data, since only global amounts of the POP were reported, and the information was extracted previously from other sources (NIP, National Reports)

5. Main difficulties - PCB

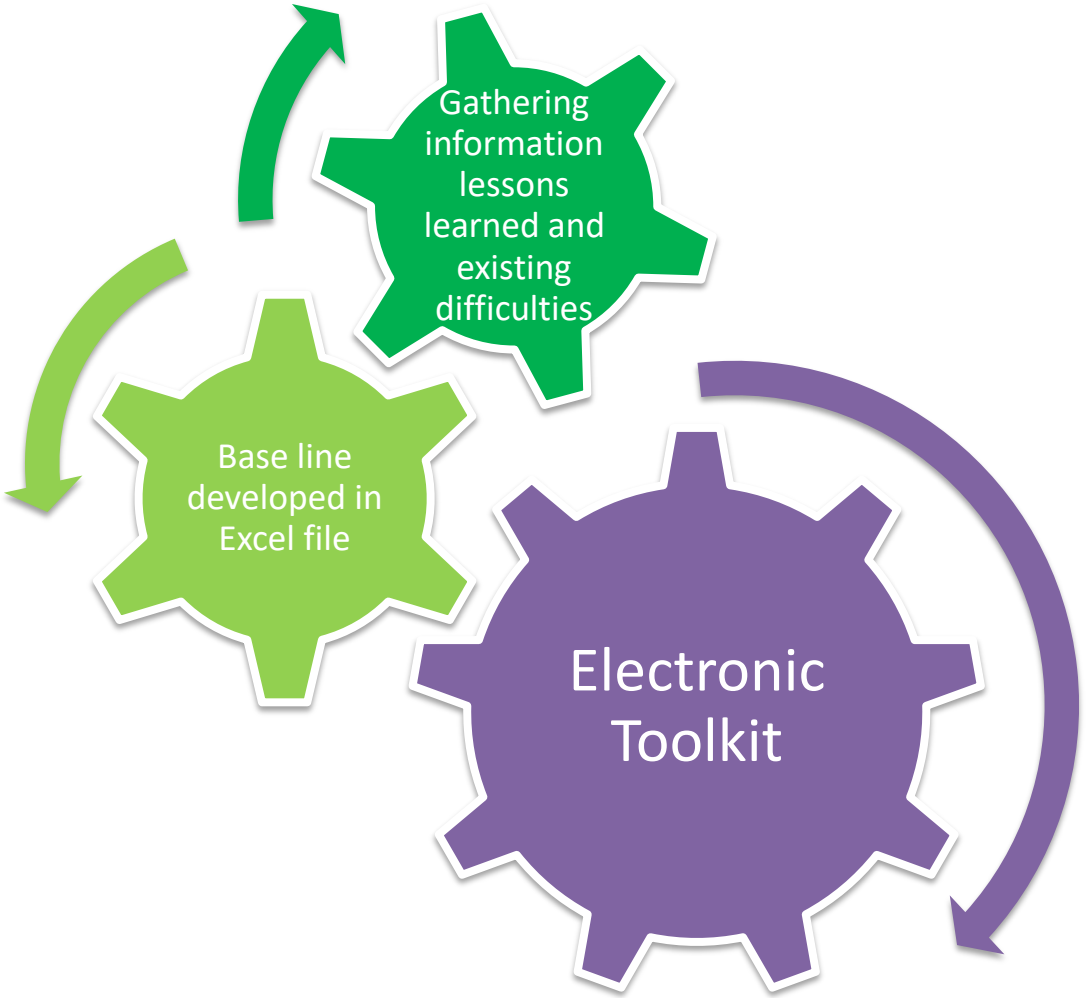
Lack of detailed information for PCB in some sources	• Some countries report a detailed inventory for PCB contaminated equipment (transformers, capacitors, etc). • Others have little information on PCB in their NIPs, generally countries which have carried a strategy for PCB elimination in the past
Lack of uniformity in the methodology of identification of contaminated equipment	• Some countries report laboratory analyses results. • Others classify the contaminated equipment according to other criteria (fabrication year). • In some cases countries do not specify the criteria used for identifying contaminated equipment.
Gaps in the information reported	• In many cases, it was unclear if the amounts reported corresponded to PCB equipment in use, or if it was a stockpile
Uncertainty in information obtained indirectly	• For information obtained from SC reports and Effectiveness Evaluation Reports, it was difficult to assess the quality of the data, since only global amounts of the POP were reported, and the information was extracted previously from other sources (NIP, National Reports)

5. Main difficulties - DDT

Lack of detailed information for DDT in some sources	• Some countries report a detailed inventory for DDT. • Others have little information on DDT in their NIPs generally countries which have carried a strategy for DDT elimination in the past).
Lack of information on storage conditions	• For stockpiles, in most cases no information was reported on storage conditions
Uncertainty in information obtained indirectly	• For information obtained from SC reports and Effectiveness Evaluation Reports, it was difficult to assess the quality of the data, since only global amounts of the POP were reported, and the information was extracted previously from other sources (NIP, National Reports)

6. Interaction with the integrated SC toolkit to improve the transmission of information under Articles 07 and 15

- Important baseline done to be used as entry point for the toolkit developing process
- Depht knowledge regarding data collected and reported by countries



Thank you

UN environment

Questions? Comments?