

# **Electronic reporting of information to the UNFCCC: Lessons from current experience**

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# Outline

- Why is reporting important?
- Reporting under the Paris Agreement
- Current experience with electronic reporting
  - Common Tabular Formats (CTF) for support;
  - Common Reporting Format (CRF) tables for national GHG inventories
  - Tables for Kyoto Protocol units
- Opportunities for electronic reporting under the Paris Agreement
- Conclusions

# Why is reporting important?

- Regular reporting of information has numerous benefits



## At the national level

- Inform policy- and decision-making
- Inform development of NDCs and LT-LEDS
- Support policy-implementation



## At the international level

- Promote transparency and trust;
- Inform the Global Stocktake
- Conduct research and analysis of global trends

- To fulfil all these uses, reported data would ideally be: accurate, accessible, comprehensive, consistent, granular and machine-readable.

- **How data is reported will impact some of these aspects as well as the ease with which the data can be collected, aggregated, compared, undergo QA/QC checks etc.**

# Reporting under the Paris Agreement

- Some of the information to potentially be provided under **Article 6** (pending agreement on reporting guidelines) may overlap with information that is to be reported under **Article 13**.
- Parties will have to report all this information **electronically** to the UNFCCC in **different formats** and at **different times**.
- What lessons can be drawn from current experience that can feed into the new reporting system to enhance efficiencies and usefulness of electronic reporting under the Paris Agreement?

# Current electronic reporting experience

- Under the current frameworks, Parties have already been reporting information electronically:
  - Through **different file formats** (PDF, MS Excel, XML)
  - For some items, via **reporting software / tools**
- Current experience shows that each file format presents different benefits as well as some disadvantages.
- Furthermore **how a certain format is generated** (i.e. whether it is generated manually or by a reporting software), will have implications on how data can be used.

# Electronic Reporting in MS Excel file format

- Annex I Parties are required to **electronically report** on financial support provided using **Common Tabular Formats (CTFs)**
- CTFs for financial support provided are reported biannually in the form of **MS Excel tables** that are **filled in manually**.

## Benefits:

- Data is structured in a common format, easing comparability / machine-readability
- MS Excel format allows for basic data analysis activities and data quality checks;
- Information is publicly-available on the UNFCCC website

## Downsides:

- Not all fields require use of standardised labels, rendering data analysis more difficult;
- Individual Parties' data is stored in separate files, and not in a common database

# Example of CTF on support

Recipient country/ region/project/programme <sup>b</sup>	Total amount		Status <sup>c, 3</sup>	Funding source <sup>e, 4</sup>	Financial instrument <sup>e, 3</sup>	Type of support <sup>e, 4, 5</sup>	Sector <sup>d, e, 7</sup>
	Climate-specific <sup>f, 2</sup>						
	NAT	USD					
Democratic Republic of Congo	100,000.00	100,000.00	disbursed	ODA	Grant	Adaptation	Agriculture, forestry, other

Difficult to automate aggregation/  
analyse free text strings

- Congo, Dem Rep of
- Congo DR
- Congo Rep of
- Congo, Republic of
- Congo, Democratic Republic of
- Congo, the Democratic Republic
- DCR
- ...

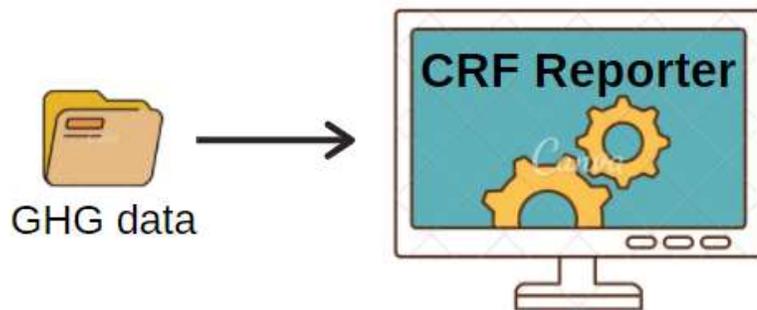
Easy to aggregate / analyse  
(quantitative data and nominal  
data)

Difficult to  
aggregate /  
analyse

- Agroforestry
- Agriculture and forests
- Agriculture and forestry
- Agriculture/Forestry
- 31110
- 31210
- ...

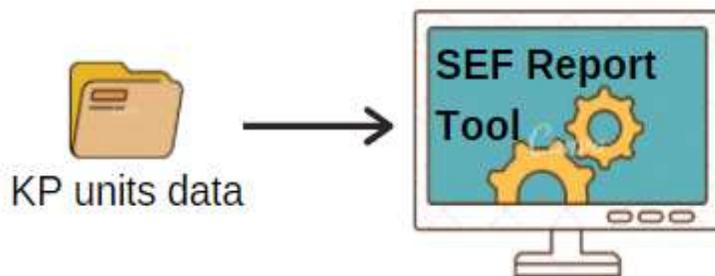
# Electronic Reporting through a reporting tool

- Annex I Parties are required to **electronically report** national GHG inventories using **Common Reporting Format (CRF) tables**
- CRF tables for GHG inventories are reported *annually* in the form of **MS Excel tables** that are **generated by a reporting software: the CRF Reporter.**



# Electronic Reporting through a reporting tool

- Annex I Parties are required to **electronically report** Kyoto Protocol units using a **Standard Electronic Format (SEF)**
- SEF tables for KP units are reported *annually* in the form of **MS Excel tables** that are **generated by the SEF Report Tool**.



# Electronic Reporting through a reporting tool

## Benefits:

- Can save time / reduce reporting burden.
- Data points reported can be outputted in different file formats;
- Data can be stored in a common database;
- Specific software functions can facilitate reporting by performing calculations and automatically filling in relevant cells;
- Output tables and files are highly standardised, facilitating data analysis and QA/QC checks.

## Downsides:

- Development of a reporting software requires time and resources;
- XML files are not publicly available;
- Capacity and technical issues (trainings, internet access, etc.)
- May be more difficult to use a reporting software where qualitative data needs to be reported.

- Use of a reporting software may work best for quantitative (e.g. emissions) and nominal (e.g. sectors) data, and not so much for qualitative (e.g. project description) data.

# Opportunities for enhanced electronic reporting under the Paris Agreement

- Electronic reporting in a **MS Excel file format** can help improve accessibility, consistency, granularity, and machine-readability of data.
- To further enhance the benefits of MS Excel file formats under the Paris Agreement, Parties could consider **approaches for promoting data harmonisation**.
- Important to consider the introduction and use of agreed standardised nominal data through:
  - Use of labels or agreed codes, e.g. IMO country codes
  - Use of drop-down menus; e.g. to select a sector or category
  - Use of standardised notation keys e.g. to explain why data is not available.

# How can electronic reporting of information work in practice?

- Electronic reporting in a **MS Excel file format** can be more useful / efficient if the tables are **generated by a reporting software / tool** and therefore if data is reported through a reporting platform.
- **A reporting platform could help with storing and archiving data, performing some basic calculations, linking information reported under different Articles of the PA, extracting information and automatically filling in relevant reporting tables.**
  - Such reporting software/tool could build upon the characteristics of the CRF Reporter (i.e. be freely available and hosted by the UNFCCC).
- Through a reporting software, Parties would need to **report data points**, which could potentially be presented in any output table / structure that is developed and agreed by the SBSTA

# Benefits and risks of an enhanced electronic reporting system

## Benefits:

- Significant benefits for TACCC principles;
- Significant improvements to machine-readability of data;
- Reduction of reporting burden by e.g. linking information in different reports and places;
- Reduction of human error by e.g. automatically detecting quantitative inconsistencies to improve QA/QC processes;
- Allow for centralised archiving of data.

## Disadvantages/Open questions:

- Resources and time needed to develop a reporting portal;
- Technical and capacity issues
- Timing issues, i.e. how often can information be reported? Could delays in e.g. A13 reporting negatively impact A6 reporting and vice versa?
- Would a reporting portal allow for reporting of qualitative information?

# Conclusions

- Current experience reveals several opportunities **to improve usefulness/ effectiveness/transparency of reporting** under the Paris Agreement.
  - This is a timely moment to have these discussions, i.e. before reporting issues under the PA are finalised.
- Electronic reporting in the form of MS Excel tables can be improved by **integrating use of standardised labels / elements**
- The **use of a reporting tool / software / portal** to generate these MS Excel and to report under different Articles of the PA and tables can provide further benefits, e.g. **reduced reporting burden, increased efficiency.**
- There is a value in co-ordinating discussions on A13 and on A6 reporting and for further discussing how a co-ordinated reporting portal could work in practice to address potential risks and open questions, **e.g. would delays in reporting under ETF generate issues for A6 transparency?**

# Thank You!

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