

# REFRESHER SEMINAR ON STEPWISE APPROACH TO INVENTORY REVIEWS AND BEST PRACTICES FOR THE REVIEW PROCESS

*Daniela Romano, Newton Paciornik*



## Topic IV: Preparation of the review report



# The review report

---

- Final result of a long process
- All the effort, time and work spent during the months of the review process should be reflected in the report
- The quality of the report is what attests the quality of the work done by the team. Utmost care must be taken regarding its content and form
- Guidance and intervention of LRs and experienced experts in the compilation of the final report is often very limited
- Lead Reviewers should instead play a main role
- Do not forget that the **responsibility of the document is collective**



# The review report

---

## QUALITY STANDARDS TO BE ACHIEVED

### Transparency and accuracy in the description of the issues

(as expected to be fulfilled by the inventory under review)

- It is difficult to define a quality standard for a text, but it is fundamental that the description of an issue is clear enough to let the Party address and solve the problem without any misunderstanding



# The review report

---

## Consistency across years

- New ERTs can identify new problems. This is a positive inconsistency. However, they should carefully review the work of past ERTs
- New ERTs may change the recommendations provided by past ERTs to Parties. If they do this they should clearly state the reasons for the changes and clearly support this decision based on the IPCC GPG or Revised 1996 GLs



# The review report

---

## Consistency across sectors

- Similar issues across sectors must be dealt similarly and basic data cross checked, e.g. energy and industrial processes (iron and steel), energy and waste (waste treatment with energy recovery), agriculture and LULUCF (areas of cultivation).

*This consistency is the responsibility of the whole ERT and in particular LRs*

- Space allotted to the various categories must be balanced, while taking into account the relative importance of topics.

*This balance is the responsibility of LRs*



# The review report

---

## Comparability among Parties

- If following properly the guidelines, problems of comparability should not arise. But sometimes different interpretation of them may occur leading to issues differently addressed by the ERT among Parties (LULUCF)
- Reports should allow for comparability at least within each reporting cycle
- This can be problematic. It is easier during a centralized review
- It is important to rely on experts' experience, LRs and the Secretariat, who can point out cases of Parties with similar issues



# The review report

---

## Completeness in the analysis of the topics

- All sectoral experts should deliver a section of the ARR with sector specific information together with relevant cross cutting issues to be covered in the general section
- All the sections should be properly compiled following the description of methodologies, EFs and data choice, consistency with IPCC GLs and GPG, key categories, uncertainty etc.





# The review report

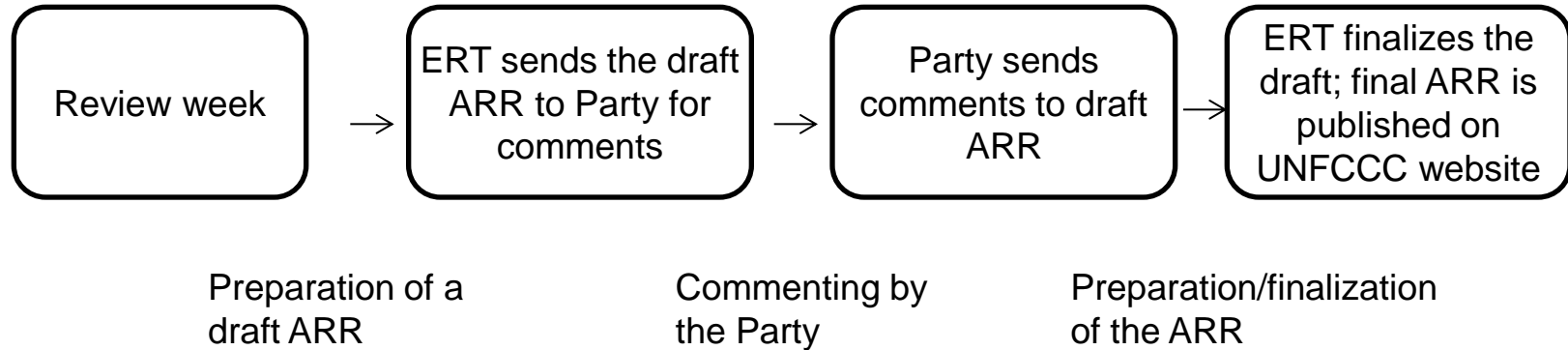
---

## Timeliness

- Zero order drafts produced at the end of the review week are often poor quality or incomplete
- However, 'first' zero order draft can be the basis for a better zero order draft after the review week
- LRs (with the help of generalist experts) should ensure reviewers produce a revised zero order draft no later than one-two weeks after the review in order to be able to meet the future deadlines



# The review report



## **Total duration of report preparation**

Convention in-country: 14 weeks

Convention centralized: 25 weeks

Convention in-country: 14 weeks

KP without Saturday paper: 16 weeks

KP with Saturday paper: 22 weeks

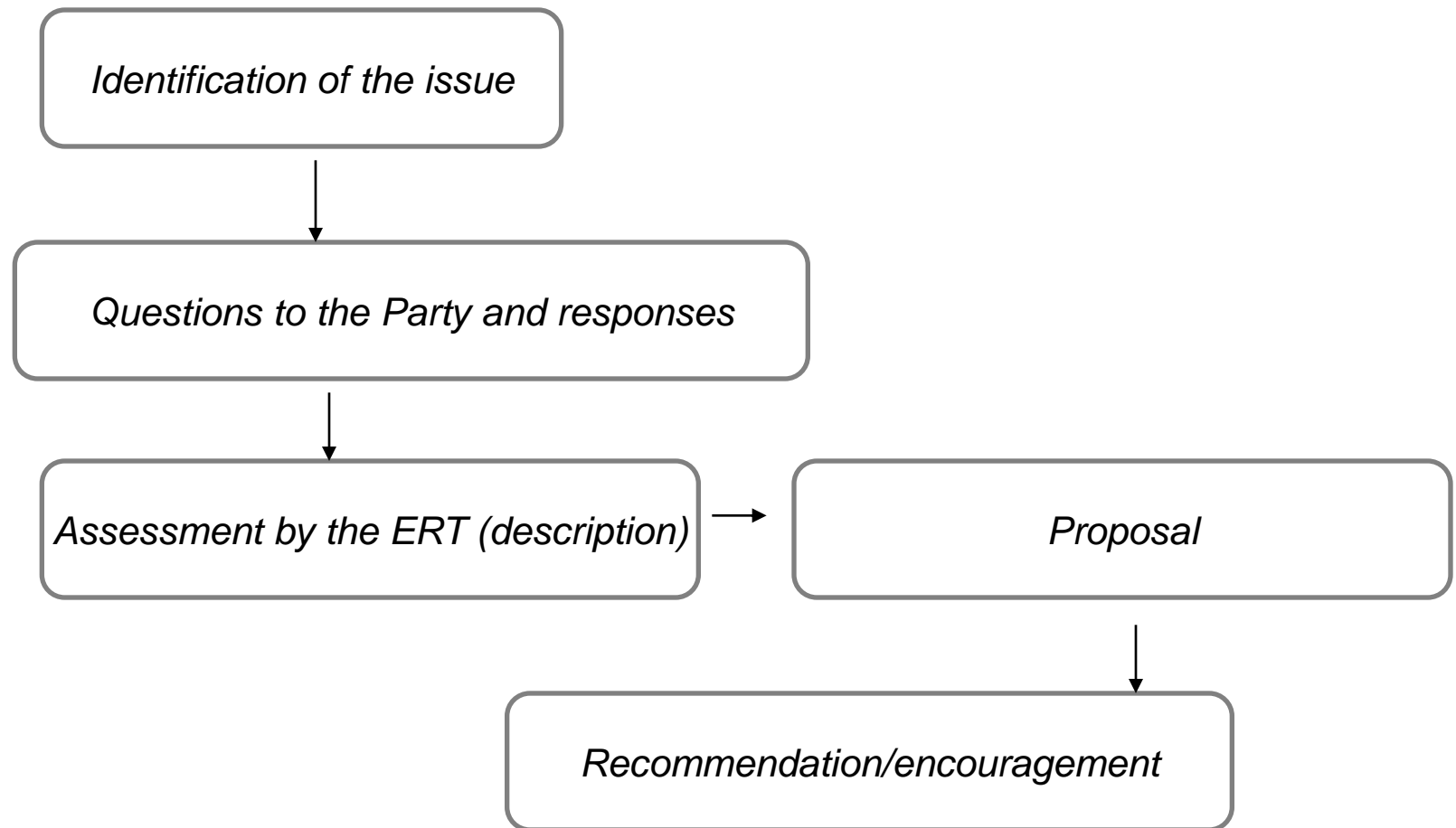
Overall: reports to be published not later than 14 April next year (1 year duration)



# The review report

---

## ➤ How to describe a specific topic



# The review report

---

## ➤ How to describe a specific topic

- Identify the problem in relation to the category and gas under examination as well as the period/years. Clearly state the nature of the problem (methodology? errors in the estimation calculation? non-transparent description?)
- Describe questions by the ERT and responses by the Party (e.g. question 1, response 1; question 2; response 2, etc.)
- Objectively assess responses and references from Parties before and during the review week, indicating whether they were ultimately satisfactory
- Base your assessment on UNFCCC GLs, the IPCC GPG and 1996 IPCC GLs and/or



# The review report

---

## ➤ How to describe a specific topic (at the end)

- **Make the proper proposal: recommend, encourage, strongly recommend**
  - *“Recommend” – for issues related to mandatory requirements (“shall” requirements in UNFCCC Annex I reporting guidelines and KP decisions)*
  - *“Encourage” – for issues related to non-mandatory requirements (“should” requirements in UNFCCC Annex I reporting guidelines and KP decisions)*
  - *“Strongly recommend” – for critical issues or mandatory issues repeated along the years*



# Actions of the ERT

---

## ➤ What should each reviewer do?

- Write the draft review report  
(from zero order draft to final version for publication)
- Follow the logical path
- Consider which proposal is more appropriate:  
“recommend” or “encourage” for each issue
- Ensure that each recommendation/encouragement  
provides the Party with clear advice on a way forward
- Respond to any comments received from the LRs or from  
the reviewer officer and QA by the secretariat by making  
the necessary changes in the text



# Actions of the ERT

---

## ➤ What should each reviewer do? (continued)

- Provide rationale for any changes not accepted (try to rephrase the text, if there was a problem it may be for a lack of clarity)
- Read carefully zero order drafts prepared by each reviewer, at least the critical issues, and provide comments (experts sometimes concentrate on their sector and forget that the ARR is an overall collective work of the ERT)

***It is the responsibility of LRs to ensure that each reviewer follow the above steps***



# Actions of the LRs

---

## ➤ What should the Lead Reviewers do?

- Take an active part in the collective process: *LRs should ensure that each reviewer follow the steps we have discussed*
- Stimulate ERT members to become aware of and contribute to critical issues *outside* their own sector
- In case of centralized reviews stimulate the close interaction of experts within a sector
- Assist and guide the ERT in the preparation of the zero order draft





# Actions of the LRs

---

## ➤ What should the Lead Reviewers do? (continued)

- *Advise reviewers to follow the logical sequence in drafting paragraphs:*
  - identification of the issue (with details, e.g. values, %, etc.)
  - assessment of the issue, why is this an issue (TCCCA)?
  - recommendation/encouragement consistent with the assessment of the issue



# Actions of the LRs

---

## ➤ What should the lead reviewers do? (continued)

- Keep watching the progress of each reviewer's work, and encourage them to produce draft reports in a timely manner
- Read carefully zero order drafts prepared by each reviewer, and provide comments (substantive and editorial)
- Check the revised drafts by each reviewer to see if and how comments from LRs and the secretariat are carefully dealt with and if something crucial is missing



# Actions of the LRs

---

## ➤ What should the Lead reviewers do? Towards the end..

- Provide a complete, quality controlled draft report to the secretariat that reflects the views of the ERT and facilitates the subsequent stages of the review
- More attention and efforts put in the very first weeks after the review week will diminish the burden of the final stage
- ✓ The actions already listed apply to all versions of the ARR: the first order draft, including responses to the Saturday paper (reasons for adjustment and question of implementation, if the case), considering comments received by the Party to the drafts until the finalization of the report



# Actions of the ERT

---

## ➤ Some simple steps to follow:

Always be precise:

- ✓ Let the reader know which issue you are referring to, describe the problem in detail
- ✓ Describe precisely the Q&A process in relation to identified issues
- ✓ Specify whether the issue has been solved
- ✓ If not solved, indicate the remaining critical problems, providing a recommendation or encouragement, etc.



## Actions of the ERT - examples

### Vagueness. Avoid generic statements

“In 2010 CH<sub>4</sub> and N<sub>2</sub>O emissions from agricultural residues were 12.48 Gg CO<sub>2</sub> eq and 3.95 Gg CO<sub>2</sub> eq respectively. These represent 0.1 per cent and 0.02 per cent of CH<sub>4</sub> and N<sub>2</sub>O emissions from the sector, respectively. Emissions from fixed residues and stubble, burnt on open field are reported under this category while emissions from removable residues burn-off-site are reported under the waste sector.”

*The first part of the paragraph is simply factual and could be omitted, unless followed by the description of an issue, a proposal or recommendation. The second part however simply describes a reporting without stating whether it is in accordance with the IPCC guidelines and UNFCCC reporting guidelines*



# Actions of the ERT

---

## ➤ In case of...

### *Lack of transparency*

- Avoid generic statements and vague sentences. Specify what exactly is the problem, why, and how could be solved: description of the methodology, references of the EFs, deviations from GPG, etc.



# Lack of transparency

---

## ➤ Vagueness. Avoid generic statements

.. when referring to transparency

“The ERT noted that the transparency of the Party’s NIR could be significantly improved. The ERT encourages the Party to follow the UNFCCC reporting guidelines for the energy sector.”

“The ERT noted that the transparency of the NIR could be improved.”

*It is not enough to simply state that a report is not transparent. The ERT should specifically state why the NIR is not transparent, e.g. methodology, references of the EFs, which is missing or unclear, etc.*



# In case of...

---

## *Large recalculations*

- *Specify not only the percentage but also the main factors that led to the recalculation at the level where the recalculation was performed*





# Large recalculations

---

“The Party has made recalculations for the energy sector between the 2010 and 2011 submissions ..., in order to lift applied adjustments, following changes in AD and EFs and in order to rectify identified errors. The impact of these recalculations on the energy sector is a decrease in emissions of 0.8 per cent for 2008. The main recalculation took place in the transport category, and estimates of emissions for navigation (coastal shipping) decreased by 70.1 per cent due to a change in the methodology which is now based on detailed shipping movement data instead of estimates from national energy statistics.

However, recalculations have affected all gases and all categories...”

*Good: Reasons and the main factors for the change are specified.*



# Large recalculations

---

“The Party has performed recalculations in the LULUCF sector between the 2011 and 2012 annual submissions ... The impact of these recalculations on the LULUCF sector is a decrease in removals of 27.0, 102.2 and 79.2 per cent for 1990, 2008 and 2009, respectively, with this impact largely driven by the recalculation undertaken for forest land remaining forest land. ....”

*Large recalculations: Specify the reasons and the main factors for the change. Add short and concise explanations on the main reasons for recalculations*

**due to the use of an updated data set on forest land after the year 2002 that had previously been reported based on extrapolated data from 2000 to 2002**



# In case of...

---

## *Follow up on previous recommendations*

- Describe the issue and the actions implemented by the Party to address it. Specify if the issue can be considered solved



## Follow up on previous recommendations

---

“The Party is commended for the improvements undertaken as a response to recommendations from previous reviews, including: application of QA/QC procedures to the NEB, the reporting of emissions from marine bunkers, the commencement of a research project focused on data exchange between the EU ETS and national GHG reporting [...].

*Good: The ERT identified the issues that are pending from the previous review: an improvement in the timeliness of the provision of the NEB; the inclusion of information on the results of the QA/QC procedures; and the provision [...].“*



## Follow up on previous recommendations

---

“Following a recommendation made in the previous review report, Party has presented more information in the NIR on data for cattle types, [and the..] resulting EFs. ... The ERT welcomes the improvements made by the Party. However, extra information to support the lower EFs for swine, goats and sheep are still missing. The ERT recommends that Party provide this information in its next annual submission.”

*The report should clearly illustrate the question / answer process followed. In the above, instead it is unclear whether the ERT asked for the missing information at some stage in the review. The ERT should also at least provide some indication of the nature of the missing information*



# In case of...

---

## *Inconsistencies*

- Specify where the inconsistency occur, in the figures between the NIR and CRF or within the NIR and/or CRF and identify which is the wrong figure, text or reference and clarify the actions/ corrections for the next submission



# Inconsistency

---

“The ERT found that Party has not applied the correct share of hydrate lime in its reporting of AD in the CRF tables. Party clarified that the correction is taken into account when calculating the emissions, but not when reporting the AD in the CRF tables.”

*Specify the issue (where does this inconsistency occur, within the CRF, or does it apply also to the NIR). How it was identified? To what extent is the IEF affected by this error? Or the emission calculations?*

*Specify which AD is correct and which one is wrong. Clarify the actions/ corrections for the next submission*



# In case of ...

---

## *Discrepancies with international datasets*

- Highlight the main reasons, if the Party is already aware of the problem, which information is more plausible, what can be done to solve the discrepancy

## *Incompleteness*

- Reported as NE cells (categories/gases). Check if methodologies are available





# Incompleteness

---

“Party has reported CO<sub>2</sub> emissions from coal mining and handling and CH<sub>4</sub> emissions from post-mining activities for surface mines as “NE”. The ERT recommends that Party check whether country-specific methods and emissions are available for the estimation of CO<sub>2</sub> emissions. The ERT strongly recommends that Party estimate CO<sub>2</sub> emissions from coal mining and handling and CH<sub>4</sub> emissions from post-mining activities for surface mines using country-specific or default methods and EFs provided in the Revised 1996 IPCC Guidelines and IPCC good practice guidance, and that Party report thereon in its next annual submission”

*This issue should have been included in the SP. What to do if a NE category was not put on the Saturday paper? Strong recommendation?*

*Recommendation to provide estimates for CH<sub>4</sub> using a tier 1 IPCC method.*

*Difference in the treatment of CO<sub>2</sub> and CH<sub>4</sub>. CO<sub>2</sub> emissions can be of relevance only for countries with intense activities, which usually should have monitoring systems for these emissions (encouragement..) Are emissions relevant?*



# In case of ...

---

## *Previous adjusted estimates*

- Describe in detail if any recalculations have been performed and solved the previous issue and explain the state of the issue now

## *Pending issues from previous year report in case of delay of publication of the review report*

- Reiterate recommendation

## *Use of the 2006 IPCC guidelines*

- Clearly report the ERT final consideration on *account of the information provided by the Party, if the 2006 GLs use is justified by country specificities or not*



# Other issues

---

## ➤ Other 'sensitive' areas:

- Availability of data has changed: use of different methods (data sets) over the time series
- Same questions by the ERT along the years
- Some “missed” identification of emissions underestimations or overestimation of removals
- Confidential data: These are already checked?
- Cross cutting issues that need to be jointly addressed with other reviewers



## Missed potential problems

---

“In the CRF tables Party reported PLFs for HFC-134 and C3F8 of 1.0 per cent for commercial refrigeration. During the review, Party confirmed that this was an error and that the EF should be 10.0 per cent (or higher if used in transport refrigeration). This has resulted in an underestimation of 1.30 Gg CO<sub>2</sub> eq for 2009. Party confirmed this will be corrected before the next annual submission. The ERT strongly recommends that Party correct these errors in time for the 2012 annual submission.”

*The ERT describes an error confirmed by the Party during the review. This underestimation however should have been included in the Saturday paper and solved by the Party or adjusted by the ERT*



## Confidential data

---

“Party estimates N<sub>2</sub>O emissions from nitric acid production using plant-specific activity data, multiplied by default emission factors, reflecting the different production and abatement technologies. In order to understand the trend in emissions, the ERT requested Party to provide, for each year of the time-series, the average emission factor for each production technology, as well as information on abatement devices and their efficiency. This information was provided by the Party during the review week; however, the Party placed it under confidentiality restrictions. As nitric acid production has become a key category, the ERT encourages the Party to improve the transparency of the information provided in the submission.”

*The detail requested was in the end production data and associated technology for each plant. AS the information at detailed level was confidential, the ERT should have asked for a more explanation on the trend of average IEFs. In addition, it is not clear whether the information was satisfactory to the ERT*



### Iron and steel production - CO2 (IP)

“Consistent with the IPCC good practice guidance, Party provides the energy and carbon balance in the iron and steel category, with a detailed explanation. However, CO2 emissions due to the consumption of coke, coal and other reducing agents used in the iron and steel industry have been accounted for as fuel consumption and reported in the energy sector. Therefore, the ERT considers that the aggregated GHG emissions in the energy sector are not in line with the IPCC good practice guidance. Reiterating recommendations in the previous review report, the ERT recommends that the Party disaggregate the process emissions from iron and steel production and report them in the industrial processes sector in the next annual submission in order to improve transparency and comparability”

*No reference to the issue was present in the energy section. At the beginning here, and in the energy section it was stated that the inventory was consistent with the GPG. Why referring to “aggregated GHG emissions in the energy sector” as they were not in line?*



## *Summary*



# The review report

---

- The quality of the report is what attests the quality of the work done by the team
- The ERT should be somehow proud of the product and should not forget that the responsibility of the document is collective
- Lead Reviewers should play a main role in involving the whole team in the preparation of the whole report and contribute to critical issues outside their own sector
- To improve the sense of responsibility, experts should be involved in the preparation of the report in all the phases (e.g exchange of emails, information, critical issues)

