



Analysis on the Greenhouse Gas Inventory Review Reports-2018

Xiang GAO

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Bonn



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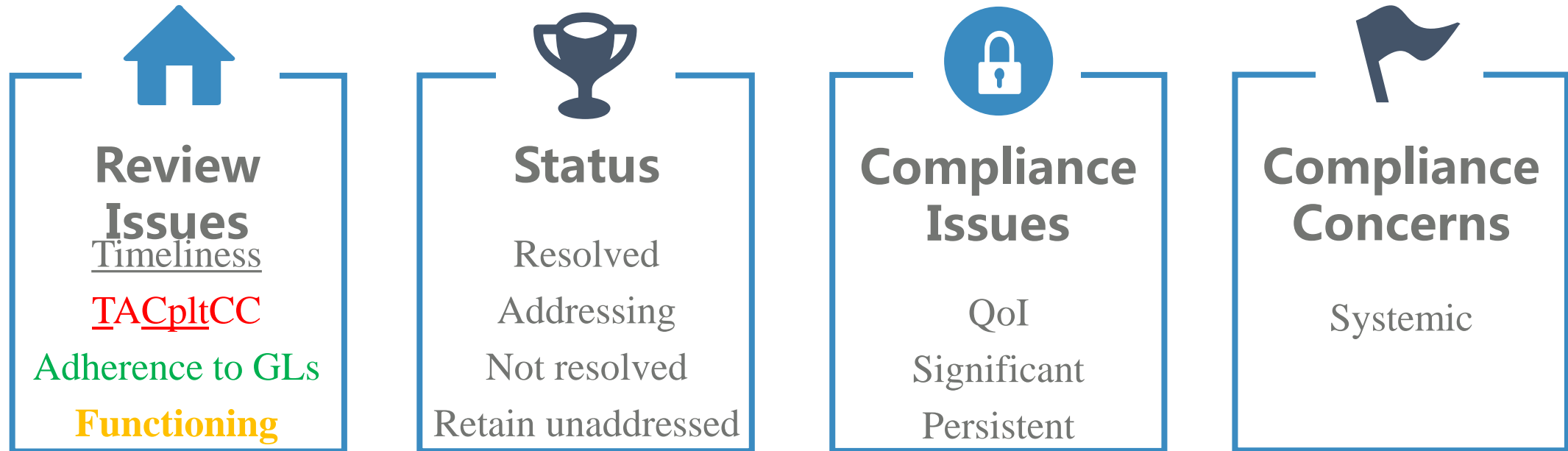
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Overview and common issues

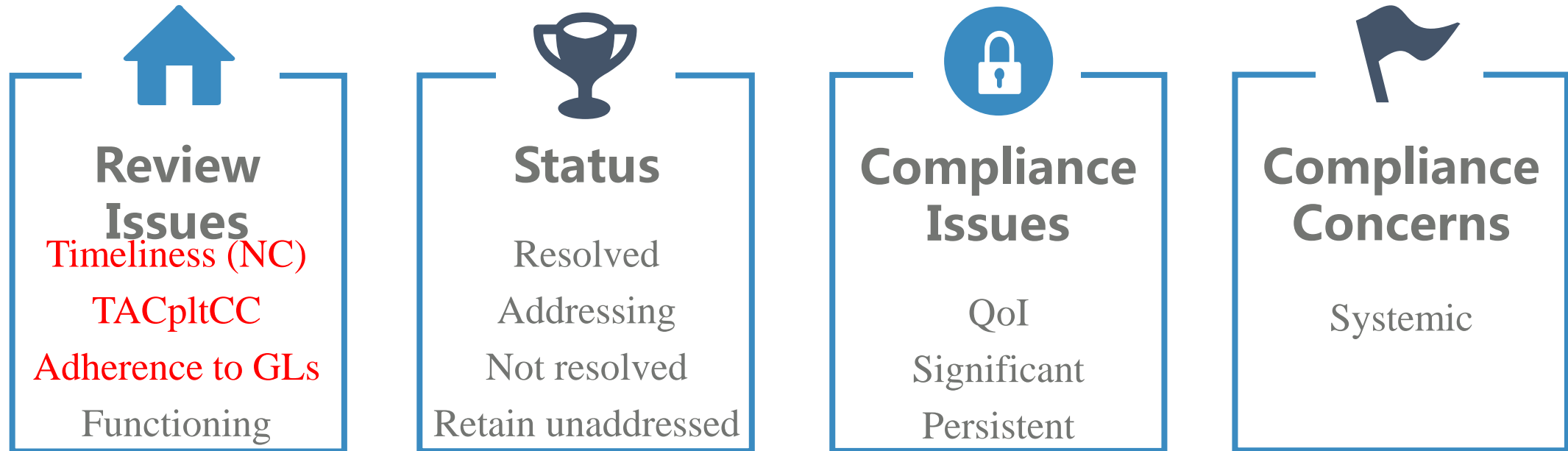


Mandate

CP-2

Decision 22/CMP.1: The review process established under these guidelines shall encompass any existing review under the Convention. / II: **annual inventories**/ III: *assigned amounts*/ IV: **national systems** / V: **national registries** / VI: Art. 3.14/ VII: national communications / VIII: reinstatement of eligibility

Overview and common issues



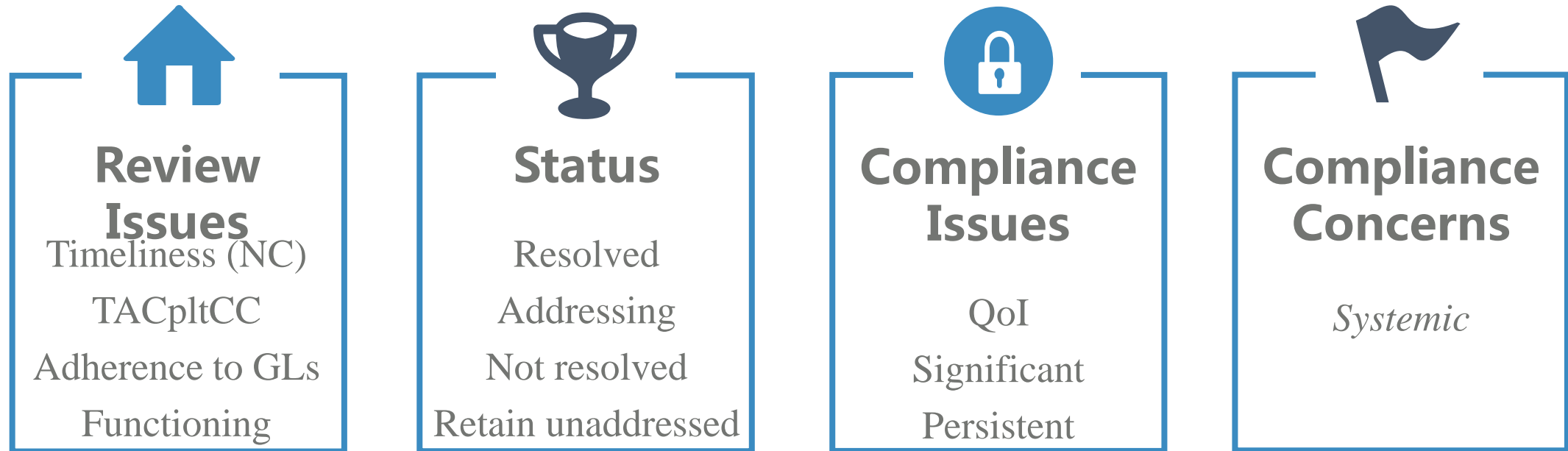
Mandate

Decision 13/CP.20 (2014): 81. Issues will be identified as a failure to follow the requirements and definitions in the UNFCCC Annex I inventory reporting guidelines...

83. ... an issue has been identified in three successive reviews ... and has not been addressed by the Party, the ERT will include a prominent paragraph ... (Start from FCCC/ARR/2015/XXX)

1

Overview and common issues



Mandate

Decision 27/CMP.1: overall under para. 4.

QoI: Art. 3.14, and supplementarity of use KP-units

Early warning advice and facilitation: mitigation commitments, national system and inventory, reporting

MCO and a group

AUT, CAN, HRV, ITA

Overview and common issues (to see the excel document)

STEPS (for analysis of an ARR)	Suggested ACTIONS
Review Section VIII of the ARR	Whether there is Question of Implementation? If yes, the CC will be notified of it, and will proceed on the basis of a decision by the CC Bureau on allocation.
Review Table 2 of the ARR	If the original submission is delayed for more than three months (for inventory the due date is April 15th, for NC it is January 1st), then there is an issue of timeliness. It should be recorded in our analytical tool and the CC/FB may wish to take actions 3 and (4 or 5).
Review Table 4 of the ARR	If there is any issue listed in this table, there is an issue of persistency. It should be recorded in our analytical tool and the CC/FB may wish to take actions (2 and/or 3) and (4 or 5).
Review Table 3 of the ARR	<p>If there is any issue listed in this table identified as "Not resolved" or "Addressing" in column 4, there could be an issue of persistency. It should be recorded in our analytical tool and the CC/FB may wish to take actions 1 and (2 and/or 3) and/or (5 or 6).</p> <p>In this case, the CC/FB should also review previous ARR/IDR, and compare the progress made towards such issue.</p> <p>If there is any issue highlighted by review expert that needs further observation, it should be recorded in our analytical tool and the CC/FB so to take action 5 as a reminder in future analysis.</p> <p>In the case that the issue is of accuracy or the Party can't demonstrate its fulfillment of obligation under the KP, this could be a significant issue, but the CC/FB may wish to consult the ERT for further understanding, thus may wish to take actions 1 and 2 (and/or 3) and/or 5.</p> <p>In the case that the issue is not significant and is a kind of pure technical one regarding to calculation or reporting (e.g. choose of AD or EF) that the CC/FB can't provide effective support, the CC/FB could take action 5 or 6, without taking actions 2 or 3.</p> <p>In the case that the issue is a kind of error (unless it is a QA/QC problem), or the review expert believe there will be improvement in the next reporting, the CC/FB could take action 6, without taking actions 1 or other.</p>
Review Table 5 of the ARR	<p>If there is any issue as identified in column 4, it should be recorded in our analytical tool and the CC/FB may wish to take action 1 and (2 and/or 3) and/or (5 or 6).</p> <p>If there is any issue highlighted by review expert that needs further observation, it should be recorded in our analytical tool and the CC/FB should take action 5 as a reminder in future analysis.</p> <p>In the case that the issue is of accuracy or the Party can't demonstrate its fulfillment of obligation under the KP, this could be a significant issue, but the CC/FB may wish to consult the ERT for further understanding, thus may wish to take actions 1 and 2 (and/or 3) and/or 5.</p> <p>In the case that the issue is not significant and is a kind of pure technical one regarding to calculation or reporting (e.g. choose of AD or EF) that the CC/FB can't provide effective support, the CC/FB could take action 5 or 6, without taking actions 2 or 3.</p> <p>In the case that the issue is a kind of error, or the review expert believe there will be improvement in the next reporting, the CC/FB could take action 6, without taking actions 1 or other.</p>
Review Table 6 of the ARR	<i>To be optional, unless it is an issue of accuracy, as this table includes "new" and usually "minor" issues found by ERT, and it will be difficult for CC/FB to identify whether they are significant or systemic.</i>

2

Persistent issues

The review of the 2017 annual submission of Germany did not take place during 2017. Therefore, **the year 2017 is not taken into account** when counting the number of successive years in table 4. In addition, as the reviews of the 2015 and 2016 annual submissions were held in conjunction with each other, they are not considered “successive” years and **2015/2016 is considered as one year**.



Who identifies

- 1 ERT
- 2 MDA
- 3 CC-FB

Table 4
Issues identified in three successive reviews and not addressed by Austria

ID#	Previous recommendation for the issue identified	Number of successive reviews issue not addressed ^f
General	No such general issues were identified	
4.A.1 Forest land remaining forest land – CO ₂ (L.2, 2016) (L.2, 2015) (57, 2014) (60, 2013) (73, 2012) Completeness	Provide estimates of the carbon stock changes for forests not in yield when the new NFI data become available and use the correct notation key.	Addressing. During the review, Austria explained that the NFI is currently ongoing and that new data will be ready for submission in 2022, which is the last submission under the second commitment period of the Kyoto Protocol. Austria used the notation key “NE” for carbon stock changes in living biomass for forests not in yield, in accordance with the recommendation from the previous reviews.

CC-FB

- Table 4 as reference
- Count by times of reporting with such issue
- Modify Table 4 for our purpose
- For years without review: as an issue by default if earlier and later have

Persistent issues

Party	Persistent issues	May need to re-count times
AUT	Table 3 Table 4	X issues 0
DEU	Table 3 Table 4	X issues 0
DNK	Table 3 Table 4	X issues 4 issues
EST	Table 3 Table 4	X issues 1 issue
SVN	Table 3 Table 4	X issues 6 issues
ROU	Table 3 Table 4	X issues 14 issues

Significant issues



Who identifies

- 1 MDA- initial check
- 2 ERT- QoI
- 3 CC-FB

Additional information to support findings in table 2

Missing categories that may affect completeness

The categories for which methods are included in the 2006 IPCC Guidelines that were reported as “NE” or for which the ERT otherwise determined that there may be an issue with the completeness of reporting in the Party’s inventory are the following:

- (a) CH₄ and N₂O emissions from biomass burning in settlements (see ID# L.10 in table 5);
- (b) CO₂ emissions from HWP’s for 1990 and 1991 (see ID# KL.12 in table 5).

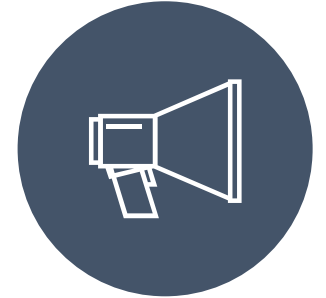
CC-FB

- Art. 3.14
- Supplementarity of use KP-units
- Completeness
- Accuracy
- QA/QC system

Significant issues

Party	Art. 3.14	Supplementarity	Completeness	Accuracy	QA/QC system
AUT	1	0	2	0	1
DEU	0	0	0	8	0
DNK	0	0	1	8	2
EST	0	0	4	12	1
SVN	0	0	7	19	0
ROU	0	0	5	17	5

Systemic issues



Who identifies

- 1 LRM
- 2 MDA
- 3 CC-FB

3	Comparable	Energy	Page 11, Table 3, E.5	Two cells in the CRF table 1s2 are blank. The ERT believes if the Party uses appropriate notation key in CRF table, it will meet the requirement.
7	Comparable	LULUCF	Page 15, Table 3, L.4	Mis-use of notation key.
19	Comparable	Energy	Page 22, Table 5, E.6	There is a need to use the correct notation key in CRF table 1.A(d) for CO2 emissions from the non-energy use of bitumen (i.e. "NO" instead of "NE").
1	Transparent	IPPU	Page 17, Table 4, I.6	The use of "NO" for the AD of HFCs and SF6 is not transparent. (For "NO", it is not needed to explain, however, since the ERT request the Party to explain, it seems relevant emissions should exist, then it is an issue of accuracy that the Party may have under-estimated its emissions.)
6	Transparent	Energy	Page 12, Table 3, E.19	Notation key "NO" was used for the AD that should be available in the country.

CC-FB

- Collective efforts by analysis
- Interaction with LRM and MDA
- Training
- Recommendation for CMP to revise guidelines

Suggested test actions (To see the excel document)

Austria

SUGGESTED ACTIONS	Y/N/may	What to do
FB	Y	1) Discussion on QA/QC issue and KP-3.14 issue to see if they are systemic issues. 2) Discussion on other issues to see if there is any significant issue.
LRM	Y	1) Invite review experts to share their views on how QA/QC would influence the GHGs and KP-units data? Whether it is a systemic issue? Whether it could be a significant issue? How Parties could improve, taken into account different national circumstances? 2) Invite review experts to share their views on how to improve reporting on KP-3.14? Whether it is a systemic issue?
Specific review expert to this review report	Y	Discussion with the lead reviewer of this report to understand why issues 1-7 above were not listed in ARR Table 4?
Party concerned	may	Discussion with the Party concerned to understand the difficulties and causes of QA/QC issue and the reporting on KP-3.14.

Suggested test actions (To see the excel document)

Germany

SUGGESTED ACTIONS	Y/N/may	What to do
FB	Y	1) Discussion on the significant issues above, especially No. 8, 13, 46 and 48. 2) Discussion on the rest of issues to see if there is any significant or systemic issue.
LRM	N	
Specific review expert to this review report	Y	1) Discussion with the lead reviewer of this report to understand why issues 1-18 and 46 above were not listed in ARR Table 4? 2) Discuss with the LULUCF sector experts or lead reviewers to understand the situation regarding to issues No. 8 and 13 above. 3) Discuss with the waste sector experts or lead reviewers to understand the situation regarding to issues No. 46 and 48 above.
Party concerned	may	Discussion with the Party concerned to understand the situation regarding to issues 8 and 13 above.

Suggested test actions (To see the excel document)

Denmark

SUGGESTED ACTIONS	Y/N/may	What to do
FB	Y	1) Discussion on the significant issues above, especially No. 1 and 5. 2) Discussion on the rest of issues to see if there is any significant or systemic issue.
LRM	Y	1) Discuss on how common the Parties are using incorrect notation keys, the reasons, the influences, and the solutions. 2) Discussion on how the EU MS should make use of EU-ETS data to correct national inventory.
Specific review expert to this review report	Y	Discussion on how significant would the issues 1 and 11 lead to under or over-estimation of emissions.
Party concerned	may	Discussion on whether there are good approaches to ensure completeness of inventory, regarding to territories rather than categories.

Suggested test actions (To see the excel document)

Estonia

SUGGESTED ACTIONS	Y/N/may	What to do
FB	Y	1) Discussion on the significant issues above. 2) Discussion on the rest of issues to see if there is any significant or systemic issue.
LRM	Y	Discuss on how common the Parties are using incorrect notation keys, the reasons, the influences, and the solutions.
Specific review expert to this review report	Y	Discuss on issues No. 1, 6-9, 11-13, 16 and 19-26 above to see if there is under-estimation of emissions, and on issue 17 about over-estimation, if so, how significant it is.
Party concerned	may	Discuss on issues No. 1, 6-9, 11-13, 16 and 19-26 above to see if there is under-estimation of emissions, and on issue 17 about over-estimation, if so, how significant it is.

Suggested test actions

Potential conclusion

SUGGESTED ACTIONS	Y/N/may	What to do
FB	Y/may	<ol style="list-style-type: none"> 1) Hands-on training to understand the review process and review reports 2) Further analysis on ARR of 2019 by groups and by xx (month) 3) Test on IDR of 2017 for analysis tool (volunteers) 4) Identify if there is any actions to be taken to provide advice and facilitation
LRM/ several LRs	Y	<ol style="list-style-type: none"> 1) Invite several LRs for discussion on their and our understanding of systemic issues, including x, y, z 2) Their suggestion on identification of significant issues and persistent issues, especially on any criteria 3) Invite several LRs to support FB groups (volunteers)
Specific review expert to this review report	may	<ol style="list-style-type: none"> 1) To test if invitation to specific review expert to the discussion with FB helps understanding of issues in the ARR 2) cases # x, y, z
Party concerned	N	Maybe not at this stage.



谢谢
Thanks!

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