INTERGOVERNMENTAL PANEL ON climate change

FORTY-FIRST SESSION OF THE IPCC
Nairobi, Kenya, 24-27 February 2015

IPCC-XLI/INF. 1
(27.I.2015)
Agenda Item: 5.1
ENGLISH ONLY

FUTURE WORK OF THE IPCC

Collated comments from Governments on Further refined Options Paper IPCC-XL/Doc.13, Add.1

(Submitted by the IPCC Secretariat in support of the process of the Task Group on the Future Work of the IPCC)

IPCC Secretariat

c/o WMO • 7bis, Avenue de la Paix • C.P. 2300 • 1211 Geneva 2 • Switzerland
telephone : +41 (0) 22 730 8208 / 54 / 84 • fax : +41 (0) 22 730 8025 / 13 • email : IPCC-Sec@wmo.int • **www.ipcc.ch**

WMO UNEP

FUTURE WORK OF THE IPCC

Collated comments from Governments on
Further refined Options Paper, IPCC-XL/Doc.13, Add.1

After the third meeting of the Task Group on the Future Work of the IPCC (TGF) on Sunday 26 October 2014 in Copenhagen, Denmark, the Task Group Co-chairs prepared a "Further Refined Options Paper" on future IPCC work. This options paper was submitted as document IPCC-XL/Doc.13, Add.1 to the 40th Session of the Panel (Copenhagen, 27-31 October 2014) for its consideration and guidance. During the 40th Session it was agreed to allow a last round of comments in order to meet the concerns of some Members who had indicated that they need more time to consider the document.

On 11 November 2014 Governments were invited to provide comments on document IPCC-XL/Doc.13, Add.1. The following submissions were received by Governments. Comments are by alphabetical order:

Governments

- Argentina
- Brazil
- Canada
- Columbia
- Denmark
- Egypt
- France
- Germany
- Ireland
- Japan
- Libya
- Madagascar
- Maldives
- Republic of Korea
- Russian Federation
- Sweden
- Switzerland
- United Kingdom
- United States of America

Observer Organization

- European Union

Working Group I Co-Chairs and Technical Support Unit

Working Group II Co-Chair, Mr Vicente Barros

ARGENTINA

Jefatura de Gabinete de Ministros
Secretaría de Ambiente y Desarrollo Sustentable

Argentina's views on the "**Further Refined Options Paper**" on future IPCC work

In relation to previous submissions, and as Argentina already stated, we would like to stress the following ideas:

- In relation to "*Products, their timing and their usability"*, Argentina considers that it could be also useful to carry on regional reports (focused on specific issues).
- Regarding the organization of the IPCC, and in particular to the Authors role, Argentina understands that, at least, CLAs (both form developing and developed countries), should receive financial support for their activities.
- We support the idea of initiating an open (online) process to identify experts to increase inclusiveness in the selection of experts.
- In relation to options to improve support for developing countries Co- chairs, participation in the Bureau and TSUs, we consider that is important to give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and reviewers (option 4). In this regard, it may result important to increase the number of Expert Meeting and workshops in DCs to enhance the visibility of the IPCC.
- Regarding financial schemes, as a preliminary approach, we suggest considering the French proposal of accessing funding through the Green Climate Fund, not only to increase DC participation but also for the general functioning of the IPCC.

BRAZIL

Dear Sir/Madam,

In response to the request for comments on the "Further Refined Options Paper", prepared by the Co-Chairs of the Task Group on the Future Work of the IPCC, please find below comments by Brazil:

1. In general, the text seems balanced and very informative. The options reflect the main issues where there is general consensus. Brazil agrees with most of the options presented in each section, although there is a need to adapt the language to better suit a "recommendations format".

2. Regarding the alignment of the IPCC and the UNFCCC processes, it is important to highlight the recently adopted decision by UNFCCC, at COP-20, entitled "Fifth Assessment Report of the Intergovernmental Panel on Climate Change", which addresses the mutual influence between the two organizations. Paragraph 7 reads "Invites the Intergovernmental Panel on Climate Change to continue to provide relevant information to Parties on the scientific, technical and socioeconomic aspects of climate change, taking into account the work of the UNFCCC in determining its future products and assessment cycles;"

2. There is a need for further discussion about the Synthesis Report (SYR). Since the "Refined Options paper" was discussed previously to the Panel session that approved the SYR of the AR5, the lessons learned from that process could not be entirely capture by the TGF.

3. In section C of Topic I, increasing readability through a communication specialist raises the question of how this would affect the approval process of SPMs.

4. On the last paragraph of section B of Topic II (page 5), a list of activities is suggested for the Secretariat, nonetheless, for the TSU, there is only a mention to "support". Further discussion on the role of the TSU might be needed.

5. In section C of Topic II, the option 6 raises concerns about the legitimacy of scientists identified in the suggested process, considering the intergovernmental nature of the IPCC. If implemented, the experts selected should have to be approved by the countries they represent. Also, an open online process might over-emphasize experts from developed countries, due to the better conditions these countries have to access and participate in such a process.

6. Under the "Current situation" of Topic III, as a suggestion of action regarding the importance of a dialogue with developing countries, there could be, at least, a questionnaire about their key challenges and needs, similarly to the one currently being submitted to Focal Points about the experiences with the review process and expert nomination.

7. About the second paragraph of section B of Topic III, there is no doubt that developing countries are making use of all their available resources to be as active as possible in IPCC sessions, however, it is well know that these resources are limited, therefore it is not a matter of "trying to be more active", but of "being able to", considering their national circumstances.

8. The last paragraph of section D of Topic III makes a good point regarding the limits of IPCC's mandate and capacity in addressing support and training of young scientists.

Other organizations can play an essential part in this regard, however, the Panel is the ultimate source of information about its products and processes. No specific action will be implemented to promote the knowledge about IPCC's work without the engagement of the Panel. The IPCC has to reach out for other organizations and provide the substantive matter.

9. In general, the ideas under Topic III are of great importance to developing countries and to Brazil. A broad and enhanced participation of developing countries in the new assessment cycle (be it in regards to non-English language literature, to the structure of the Panel and/or to the support of scientists) is an important step to grasp a more complete panorama of the scientific knowledge about climate change.

10. On a more technical note, the first paragraph of page 2 seems to have a slight confusion about the timeline of activities held by the TGF: the "Options paper" was discussed at the second meeting (Geneva) and a "Refined Options paper" was discussed at the third meeting (Copenhagen, immediately before IPCC-40). The "Second progress report by the Task Group on the Future Work of the IPCC" (IPCC-XL/Doc. 13) states this more clearly and presents the idea of a "Further Refined Options paper".

Best regards,

Divisão de Clima, Ozônio e Segurança Química

Ministério das Relações Exteriores - Brasil

CANADA

CANADA'S COMMENTS ON THE FURTHER REFINED OPTIONS PAPER RESULTING FROM THE DISCUSSIONS AT THE THIRD MEETING OF THE TASK GROUP ON THE FUTURE WORK OF THE IPCC

Overall comments

We are generally supportive of the options paper and the options contained therein. In the final transformation of this document into a recommendations paper, we suggest that the Task Group Co-Chairs and Secretariat consider including some recommendations about the next steps for work in areas that may require more detailed discussion. For example, in our comments below, we recommend that that the Panel could agree on an overall number of SRs and MRs for the AR6 cycle and invite Parties and the Bureau to submit topic proposals following IPCC-41. We also note that during the Task Group's deliberations, a number of Parties raised specific comments relating to the procedures of the IPCC (e.g., procedures for government approval of reports, etc.). These procedural issues would benefit from discussion at future meetings.

I. Future products of the IPCC, their timing and their usability

A. Options for product types and their timing

- Canada's preference is for a longer time period of 6-7 years of comprehensive ARs together with the three-stage review process. A timeframe closer to seven years would allow for sufficient time for the state of the science to advance, particularly for the physical science basis. Supplemental SRs will continue to allow for earlier updates on policy-relevant cross-cutting issues.
- While full alignment may be difficult, consideration should still be given to feeding into discussions of the review of the UNFCCC global goal. In fact, the need for IPCC products may not present itself until a year or two after the review of the global goal begins in 2020. This may provide a more realistic timeline for IPCC WGs to produce their reports. The IPCC may wish to collaborate further with the UNFCCC Secretariat in the scoping of the AR6 to consider which products would be most timely and when.
- Canada agrees that scoping of the WG SPMs and SYR should begin early. On the SYR in particular, during the AR5 approval sessions, several Parties expressed ongoing interest in seeing deeper synthesis and a more impactful document for policymakers. This could be an area for further discussion by the Bureau or Panel following the overall decisions that will be taken at IPCC-41.
- Following the decisions at IPCC-41, we recommend that the Panel could agree to a proposed number of SRs and MRs for the AR6 cycle in order to support effective management of the IPCC's budget. Parties, Bureau members and observers could then have the opportunity to submit, review and prioritize topic proposals. Although Canada can accept MRs related to guidance for the production of regional or national science assessments, we would not prioritize this work above other activities, such as SRs or the work of the TFI.

B. Options for cross-Working Group collaboration

- Canada is supportive of improved cross-WG collaboration through joint meetings or workshops, as well as other collaborative fora. As has been stated in previous IPCC Plenary meetings, the Panel should seek to find ways to achieve this collaboration while also minimizing overall costs and GHG emissions from air travel, for example, by improving engagement through digital platforms where possible.

C. Other issues raised:
    a. Options to increase the readability and usability of Assessment Reports
        - Canada is supportive of engaging writing or communication specialists to advise on the readability and usability of the SPMs and SYR. The Bureau could be asked to provide specific guidance on where in the process this would be most useful.
        - Canada also notes that the scoping phase is of key importance in supporting the usability of the reports. Ongoing efforts to enhance the engagement of the UNFCCC, WMO, UNEP, and other users in the scoping process would support this.
    b. Options for digitalization
        - Canada is supportive of the IPCC exploring new ways of using digital means for improving information sharing and conducting paperless meetings, and encourages the Secretariat to further refine options set forth in the concept paper developed as input to the TG considerations (document IPCC-XL/INF.2 – Annex I). In particular, Canada suggests the IPCC consider expanding the use of digital means for fostering cross-WG collaboration, and conducting meetings, where appropriate, to further reduce the carbon footprint of the IPCC. These options are currently not well reflected in the aforementioned concept paper.

II. Organization of the IPCC

A. Options for IPCC structure
- Canada is supportive of retaining the current three WG structure and the Task Force on National Greenhouse Gas Inventories to allow for continuity between ARs, and comparisons between them over time.
- Canada is flexible regarding how individual topics are distributed between the WGs. We note that this could be further discussed as part of a robust scoping process that is inclusive of the user perspective.

B. Options for the IPCC Secretariat and TSUs
- Canada notes that the options related to the hiring, funding and management of TSUs (options 2 and 3) are dependent on the laws and rules of the host governments that support the TSU facilities and staff. We encourage the options to remain flexible to allow for individual host governments' circumstances.
- Regarding option 4, we do not see a need for separate TSUs for SRs, particularly since these reports are of shorter duration than the assessment cycle. We do think that establishing a small task team for SRs amongst staff of two or more existing TSUs would be beneficial – if this is the intent of this recommendation, we suggest that it be clarified.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process
- Canada acknowledges the increased burden on CLAs and LAs in the IPCC report writing process, and we are supportive of considering these options to reduce the burden where possible. Taking a final decision on this matter will require more detailed information on the potential costs and benefits of the various options. We recommend that this be presented in an annex or that this issue be identified as an area requiring ongoing consideration by the Panel following IPCC-41. The Bureau may have some useful perspective to provide here about where increased support to authors can have the greatest impact.

- Canada also believes in fostering an open and transparent process in the identification of experts, and supports efforts to achieve this through additional avenues to the government-led practice of nominations, such as open online calls.

III. Involvement of developing countries

Canada is supportive of increasing participation of developing countries (DCs) in the IPCC process through efforts that are within the mandate of the IPCC, but notes that there are other organizations that are better equipped to carry out scientific training and capacity building activities (e.g., WMO, UNEP and other international and environmental and/or development organizations). It is particularly important for the IPCC to be separate from the process of funding scientific research in all countries in order to maintain its credibility as a neutral organization in the production of scientific knowledge. There is a paragraph at the end of the options paper that speaks directly to this consideration. We suggest that this consideration could be integrated near the top of this section or directly into each option, which could help the Panel to narrow the options in this section by understanding what is directly relevant to the IPCC and what could be better achieved through partnerships with other organizations.

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs
   - Canada is supportive of improving support for DC Co-Chairs, and participation of DCs in the Bureau and TSUs, but notes as stated in section 2, that options related to the hiring, funding and management of TSUs are dependent on the laws and rules of the host governments that support the TSU facilities and staff. We therefore encourage the IPCC to approach this option in a manner that remains flexible to the developed and developing countries' host governments' circumstances.

B. Options to increase developing country participation
   - Canada is supportive of increasing DC participation, and we look forward to consideration of the paper from the Government of France about the potential for accessing the Green Climate Fund to achieve some of the IPCC's goals in this area. It could be clearer in this section whether option 1 refers to training specifically on the preparation of IPCC assessment reports, or whether it refers to scientific training more broadly. If the latter is intended here, then suggest that this could be best achieved by partnering with other organizations with a greater mandate for training and capacity building.

C. Options for accessing non-English language literature
   - Improving integration of non-English language literature in the IPCC process would be an impactful way to broaden the relevant literature base across all regions. In particular, the IPCC could consider partnering with other organizations, such as existing regional networks or committees (e.g., the Inter-American Institute for Global Change Research), who could facilitate such exchanges.

D. Options for support and training of (young) scientists
   - As mentioned above, Canada recommends that these options may be best achieved through partnering with other organizations with a greater mandate for training and capacity building.

COLUMBIA

Dear Ms. IPCC,

In attention to your communication 5338-14 / IPCC / GEN, in which you request some comments of the document “FUTURE WORK OF THE

IPCC “ , Is important for the Colombian Government knows and provide some comment or suggestion to this document.

It is gratifying to observing that there are many strategies that include developing countries, these activities involve actively the countries on check process and build work of the IPCC. Further, we consider to developing strategies for training and capacity building in developing countries would contribute to national and regional capacity.

Is important the inclusion of the National Meteorological Institutes as partners in the training process as receptor and replicator of information and Knowles on IPCC work reference.

Best Regards.

Carolina Gonzalez R.
International Cooperation
IDEAM.

19 December 2014

DENMARK

Future of the IPCC – comments from Denmark

Danmarks Meteorologiske Institut

Lyngbyvej 100
2100 København Ø

T 3915 7500
F 3927 1080

www.dmi.dk
epost@dmi.dk

CVR 1815 9104
EAN 5798000893252

We would like to thank the Co-Chairs of the Task Group on the Future of the IPCC and the Secretariat for preparing the Further Refined Options Paper and for the invitation to provide further input.

I. Products

We agree with the options outlined in A1, A2 and A3: Maintaining the current assessment cycle of comprehensive ARs with a thorough review process, supplemented with SRs and MRs, with a view to the importance of SPMs and SYR.

Regarding the options on cross-WG collaboration outlined in B1 and B2, we agree on strengthening the collaboration. However, we find that the experience from AR5 underlines that a long delay between publishing of the different WG contributions should be avoided. Such a delay may weaken the impact of the AR, and we find that this outweighs the advantage of incorporating new WGI findings into WGII and WGIII. Regarding more SRs and TPs we find that this should depend on the subjects for the reports, and we find that a process for selection of topics should be clear.

Regarding other issues raised in C: We support involving communication specialists in the writing of SPMs and SYR, with the purpose of ensuring that both text and figures are easily understandable, while noting that it would be important that the author team approves the wording. We agree with the objectives outlined by the secretariat in the IT strategy.

II. Organization

The Further refined Options Paper mentions suggestions to increase the Bureau with 2 additional positions for Asia. We do not find that there is a need to introduce any changes to the current structure of the Bureau. Any change would need careful considerations of potential implications on the regional balance in the Bureau, as well as in the Executive Committee, the three WGs and the TFI.

III. Involvement of developing countries

We support improving the involvement of developing countries in the IPCC-process, both as authors and as bureau members. However, it is beyond the mandate of the IPCC to engage in training or capacity building activities beyond the activities of the IPCC Scholarship Programme.

EGYPT

Dear Madam/Sir

With reference to refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014), we would like to draw your attention to many points of this considerable option paper needs to be discussed among the parties not to be commented at.
in this respect we would like the bureau and Secretariat to pot it up for discussion at the next up coming meeting.

Best Regards

Eng. Sherif Abd El Rahim
General Director of Climate Change Technology & Researches
Egyptian Environmental Affairs Agency - EEAA
National Focal point to IPCC

FRANCE

Comment (v1) by **France** on the document

FUTURE WORK OF THE IPCC
Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC
(Copenhagen, Denmark, 26 October 2014)

Ref. : 5338-14/IPCC/GEN of 11 November 2014

In Part I, section C, the text reads :

"Options to increase the readability and usability of Assessment Reports
Most governments felt that the SPMs in future ARs should be more readable than the current SPMs and that there are different ways to achieve this, for example with the assistance of a writing or communication specialist(s). The Panel would need to decide when in the process it would be most useful to incorporate such guidance/input."

We consider that there may be a difficulty in defining a new role in the process, and then selecting these specialists.

We consider that it is the responsibility of each writing team – e.g. each WG's writing team, or the SYR's writing team – to deliver clear and readable successive versions of the SPM. The incorporation of some guidance from a writing specialist may take place but is not a matter for the Panel ; it should remain an internal activity of each TSU or writing-team, under the responsibility of e.g. the co-chairs and the head of the TSU.

Our proposal, at this stage, and in order to minimize the modification to the document dated 26 October 2014 would be to insert an additional sentence at the end of the paragraph :
"(…)such guidance/input. The Panel may decide that this task remains internal to each TSU."

Signed by N. Beriot, IPCC focal point

GERMANY

Comments of the Government of Germany on the Further Refined Options Paper on the Future Work of the IPCC

The German governments thanks the Co-Chairs of the Task Group on the Future of the IPCC and the Secretariat for the invitation to provide input on the Further Refined Options Paper resulting from the discussions at the third meeting of the Task Group on the Future Work of the IPCC in Copenhagen.

We reiterate the characteristics of the IPCC's work that we see as most important to preserve the strengths of the IPCC while modernising it in a sustainable way:

- guarantee the scientific excellence and high quality of products
- improve user friendliness and political relevance of IPCC products
- reduce the workload for the IPCC authors
- improve efficiency of the work processes
- increase coherence and consistency across IPCC products
- continue to provide a communication platform that facilitates the integration of climate research across scientific disciplines
- ensure the participation of experts from developing countries and enhance the scientific knowledge base about climate change in such countries
- enhance the transparency of the IPCC working procedures

Below we comment on the options outlined under the three main topics of the Further Refined Options Paper and some provide additional suggestions. All these comments should be read in conjunction with our general position as outlined in the paragraph above.

I. Products, their timing and their usability

A. Options for product types and their timing

1) *Maintain the current 5-7 years assessment cycle of comprehensive ARs together with the three-stage review process, supplemented by SRs and MRs.*
2) *Both Summaries for Policymakers (SPMs) of the reports and the Synthesis Report (SYR) are the main products of the IPCC, for which the scoping on cross-cutting issues should start at an early stage and could be revisited by the Panel at a later stage.*
3) *Produce MRs or good practice guidance reports which would enable and assist countries and regions in preparing regional and/or national scientific assessments.*

We generally support options 1, 2 and 3.
Methodology Reports (MR) on national greenhouse gas inventories (TFI) remain necessary, but they should respond more precisely and in a more flexible manner to the requests and needs of the UNFCCC.

On option 1)

- The comprehensiveness of the ARs together with the extensive review process guarantees the high quality and reliability of the scientific assessments that are needed as a basis for climate policy.

- The ARs and SRs should become more concise with an enhanced focus on policy relevant topics in order to increase their usefulness for policy makers and to reduce the workload for authors. The Panel should decide on an indicative page limit for each report (for each chapter, including the SPM) at the time of scoping. In addition, issues that deserve a more detailed assessment should be treated by SRs that should be integrated to a higher degree into the AR than at the current cycle. This would increase the coherence of the established material from an assessment process and reduce the work load on the Co-Chairs, the authors and the TSUs.

On option 2)

- An initial scoping of the SYR should start before the scoping of the WG-reports, in order to help focusing on political relevant issues, increase cross WG-integration and -coherence, streamline reports, and reduce the workload for authors.
- A time line should be defined at the beginning of the AR6-cycle to revisit the scoping during writing process of the WG-reports. The writing process of the SYR should only start after the approval of the WG-reports.

B. Options for cross-Working Group collaboration

1)

a. *Enhance cooperation between WGs such as joint meetings, joint workshops, cross- WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics.*
b. *Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.*

2)

a. *Produce more SRs on cross-cutting issues.*
b. *Produce more TPs on cross-cutting issues.*

We support options 1a and 2a, but have reservations regarding option 1b and 2b.

On option 1a) and 2a)

- At the time of scoping, dedicated individuals should be appointed across author teams who are responsible for specific cross-or issues.
- In this regard a further clarification of the responsibilities and authorities of the WG Co-Chairs, CLAs, and Review Editors would be useful. The Terms of Reference of the IPCC Vice Chairs should be refined, e.g. defining responsibilities for cross-cutting issues and cooperation.
- Cooperation between the WGs could be achieved through enhanced cross-TSU coordination, in particular on technical issues like e.g. tools to manage the editing process, but also concerning definitions of concepts and language.

On option 1b)

- We do not support this option, because it would mean that the information from WGI will be outdated at the time the SYR is being published. All three WG contributions and the SYR must be published within one year.

- In addition, in AR6 scientists will use the same RCP-scenarios as in AR5, potentially with updates on the emission data and with new socioeconomic scenarios, but these changes will not be as significant as the change from SRES to RCP between AR4 and AR5. Hence even if WGII and WGIII cannot always use the latest information from WGI, the difference would probably be less significant.

On option 2b)

- This option might be interesting, but would depend on the topic of the TP.

C. Other issues raised:

1) *Options to increase the readability and usability of Assessment Reports*
   Most governments felt that the SPMs in future ARs should be more readable than the current SPMs and that there are different ways to achieve this, for example with the assistance of a writing or communication specialist(s). The Panel would need to decide when in the process it would be most useful to incorporate such guidance/input.
2) *Options for digitalization*
   The digital era allows new ways of sharing information and could make IPCC reports and the underlying data more readily accessible and user friendly. During the past and current cycles, information technology (IT) has been used increasingly to facilitate access to the information contained in IPCC reports and to facilitate the preparation of reports. To further enhance the use of up-to-date IT technology the IPCC Secretariat has submitted a concept paper as input to the TG considerations (see document IPCC-XL/INF.2 (Annex 1)).

We support option 1.
We have reservations against option 2.

On option 1)

- The involvement of communication or writing specialists during the writing process of the SPMS and the SYR, and during their approval is supported. In addition, the figures should be more intuitive.
- However, all material published by the IPCC should remain under the authority of the author team, and budget implications of this suggestion have to be explored.

On option 2)

- We appreciate the effort by the Secretariat to develop an IT Strategy for the next assessment cycle. We support the objectives of the strategy, in particular the modernized IT-system, and enhanced collaboration between the TSU and the Secretariat.
- However, the IT-strategy addresses very technical issues which to our view should be handled at the level of the Executive Committee, and not by the Panel. In addition, the IT-strategy has not been discussed by the Task Group on the Future Work of the IPCC.
- A Web Team reporting to the Executive Committee should be established in early 2016 to further elaborate the issues, building on experiences and tools of the Secretariat and the TSUs of the AR5.
- A decision on IT-matters should be taken by new Executive Committee of the AR6. Some issues of the IT-strategy concern communication activities of the IPCC, e.g. the use of

social media or of micro-sites. These should be further developed and presented to the Panel for decision at its second session in 2016.

II. Organization of the IPCC

The IPCC Bureau

The work of the IPCC as a whole depends strongly on the scientific excellence of its Bureau members. At the same time, a balanced regional participation and striving for gender balance is important. However, an active role of members of the IPCC leadership (IPCC Chair, Vice Chairs, Working Group and Task Force Co-Chairs, and other members of the IPCC Bureau) in official government functions might affect the scientific integrity of the IPCC since such activity could be perceived as a conflict of interest. This issue should be properly reflected in the IPCC's Conflict of Interest Policy. We appreciate the recent work of the Conflict of Interest Committee in this regard.

The Further Refined Options Paper mentions a change in the structure of the IPCC-Bureau, in particular the proposal to increase the number of positions for the Asian region by two. We would like to comment on this idea.

Any change of the number of positions needs careful considerations of potential implications on the regional balance in the Bureau and in the formations it consists of (the Executive Committee, the three WGs and the TFI). We do not see any merit in the proposed modification, because it does not imply an improvement of the representation for all regions in the Bureau, in particular for regions III, IV, and V.

A. Options for IPCC Structure

1) *Retain the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI).*
2) *Retain three WGs and the TFI but expand the mandate of WG I to include observed and projected impacts.*

We support option 1, but do not support option 2.

- Option 2 would either shift impacts on human systems from WGII to WGI, thus separating impacts from risks of climate change and adaption measures, or it would leave impacts on human systems in WGII and only shift impacts on natural systems to WGI, thus precluding an integrated assessment of impacts on natural and human systems. Both possibilities would affect valuable scientific discussions.
- However, we welcome an enhanced integration and less duplication between the impact assessments of WGI and WGII. This should be realized through dedicated liaison-authors who work in both author teams.

B. Options for the IPCC Secretariat and TSUs

1) *Further clarify the roles of the IPCC Secretariat and the TSU's at the beginning of an assessment cycle regarding, for example, administrative, operational and general coordination matters.*
2)
   a. *International recruitment of professional T SU staff – selection, performance appraisal and contract extension by both Co-Chairs of a WG/TF,*

b. with involvement of the IPCC Chair and Secretary of the IPCC.

3)

a. A TSU could be comprised of both developing and developed country institutes
b. and managed by the two Co-Chairs of a WG/TF.
c. Financing could be sourced from several countries
d. and be managed and coordinated by the IPCC Secretariat or the institutions involved.

4) In order to divide the workload, SRs could have a designated TSU working in collaboration with the WGs/TFI TSUs.

We support options 1, 2a, 3b and c.
We do not support options 2b, 3a and d, and 4.

On options 1) and 2b)

- In general, the Secretariat should be responsible for overall coordination, budget, meeting logistics, IT, administrative and communications/outreach tasks, while the TSUs should support the scientists in preparing their reports and support the WGs Bureau and authors.
- The cooperation between the TSUs and the IPCC Secretariat should be clarified. However, flexibility for daily work should be left to the AR6 team, micro-management should be avoided. Details about administration should not be decided by the IPCC Panel. There should be no principle decision on the location of the TSU.
- The Panel should request to TSUs and the Secretary to document their experiences and lessons learnt during the AR5 to be used to further improve operations and cooperation in the next cycle. This should be presented to the Panel at IPCC42. Based on this information, options for the administrative and operational details should be agreed by the Panel at the beginning of the AR6 cycle at IPCC 43.

On Option 2a:

- The current TSUs are composed of staff from mixed international origin and this practice should be continued in the future.

On Option 2d, 3a,b,d:

- The task of the TSUs is to support the scientific work of the IPCC. They should be committed to support both Co-Chairs, independent of their origin, and the associated author team. Both Co-chairs should be responsible for issues related to human resource and budget management of the TSUs. Involvement of the Chair or the Secretary of the IPCC would not be appropriate as the work of the TSUs does not affect their fields of activity. (See below for a comment on the SYR TSU.)

On Option 3c:

- Although in the past, TSUs have mostly been funded by one country, the possibility of sourcing from several countries and support from the IPCC Trust Fund has been implemented already for the current TSU of the Synthesis Report. This possibility should be further explored, inviting support from all members of the IPCC.
- The administration of funds for the TSUs should not be decided by the Panel, but should be implemented on a case by case basis as needed. This has been the case in the past, when funding for the TSUs was either administered through the IPCC Trust Fund (in the case of the TFI) or by the host country.

On option 4)

- The establishment of a SR provides an excellent opportunity for a TSU to gain experience and to establish links with other TSUs for cross-cutting SRs. The establishment of specific TSUs for SRs would be counter-productive.
- In a similar manner, the TSU of the SYR should be comprised of experienced members of the WG-TSUs, reinforced by additional staff specifically dedicated to the SYR. Thus, the SYR would profit from the experiences of the WGs and be integrated part of the writing process of the AR. This should be included in the personal, work and budget plans of the TSUs right from the start.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

1) *Exploring ways to enhance collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies.*
2) *Expand cooperation with regional institutes and universities from DCs in particular.*
3) *Assist the LAs in their tasks with IT, for instance with reference management.*
4) *Appoint research assistants to support the work of the TSUs and/or the CLAs.*
5) *Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.*
6) *Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC) to increase inclusiveness in the selection of experts.*

We broadly support all of these options. Further consideration of the details of implementation and potential budgetary implications is however needed.

On option 3, 4, and 5)

- The working conditions for authors should remain attractive for the world's best scientists in order to maintain the scientific excellence of products. Enhanced technical support given by the TSU or individual support like assisting chapter scientists will be helpful. The role and function of the latter in the assessment process should be clarified, and the Executive Committee should prepare Draft Terms of Reference or a guidance paper for the Panel to decide in 2016.

On option 2 and 6)

- The identification of experts is currently done by governments through nomination of experts to the IPCC. However, experience from the AR5 shows that a considerable number of the countries does not submit nominations. This situation should be improved; the conditions for option 6 need to be further specified by the Executive Committee of AR6.

III. Involvement of developing countries

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs

1) *Employ more experts from DCs in the TSUs through international recruitment of staff. Capacity building for scientists from DCs could happen by way of secondments to the TSUs.*

2) *Give stronger support to Co-Chairs from DCs, including the possibility of hosting a TSU in one of their countries or locating the TSU for a WG/TF in more than one country, while exploring alternative funding arrangements e.g. by a consortium of countries. [Note this option also appears under the heading of options for the IPCC Secretariat and TSUs].*
3) *Revise if necessary the TOR for the Bureau to ensure more active participation of Bureau members from DCs to address their regional role on outreach.*
4) *Give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and as reviewers.*

We support options 1, but have reservations to the remaining options.

On option 2)

- The task of the TSUs is to support the scientific work of the IPCC. They should be committed to support both Co-Chairs in equal measures, independent of their origin, and the associated author team.
- According to the IPCC Election Rules any country can host a TSU, including developing countries. In order to ease the financial constraints of developing countries, the possibility of sourcing from several countries should be further explored.

On option 3 and 4)

- We do not see how these suggestions could contribute to an enhanced participation of the DC in the work of the IPCC. It is the responsibility of the elected Bureau members to actively engage in the IPCC process.

B. Options to increase developing country participation:

1)
   a. *Ensure a mixture of experts*
   b. *and provide them with adequate training.*
2) *Increase the number of Expert Meetings and Workshops in DCs to enhance the visibility of the IPCC.*
3) *Explore further ways to broaden the nomination of authors and expert involvement in the review processes.*

We broadly support all options, with some reservations to 2 and 1b)
For Option 3) see our comments on Option III.C above.

On option 1)

- According to the Rules of Procedures of the IPCC a mixture of experts is strived for in all organizational and scientific grouping as far as possible.
- It is beyond the mandate of the IPCC to engage in training or capacity building activities. However, some limited support to accompanied “learning on the job” in order facilitate a smooth implementation of the work programme of the IPCC might be useful. Budget implications of such activities should be clarified.

On option 2)

- We have a lot of sympathy for this suggestion. However, meetings in DC would have to be funded by the IPCC Trust Fund, and the practicability of this suggestion depends on the

availability of funds. The IPCC has considered holding its meetings in Geneva in order to limit the financial burden on the Trust Fund.

We strongly support strengthening the participation of DC in the IPCC-process, both as authors and as bureau members. We suggest the following alternative options to improve the situation:

- Encourage DC Focal Points to engage experts from their country to participate in the IPCC process.
- Support DC countries experts by providing technical and/or administrative (enhanced) support through the TSUs and/or the IPCC-Secretariat. Experts should continue to contribute to the IPCC on a voluntary basis.
- Communicate the lack of knowledge and of scientific expertise to national and international funding organizations and research networks.
- Communicate the need of a stock taking of the needs for research in DC and the requirements enabling enhanced participation and contribution of DC experts in the work of the IPCC in order to improve the situation in the long run.

C. Options for accessing non-English language literature

1) *Establish (or use existing) regional committees or networks to improve access to non-English language literature.*
2) *Approach authors of such literature to provide expert opinion or specific inputs on particular topics.*
3) *Identify, in consultation with governments and international agencies, relevant government reports and literature published in languages other than English, in particular from DCs. A UN-based language service could assist in translating such documents and authors of such literature could be approached to provide expert opinion or specific inputs on relevant topics.*

The Panel should not take a decision on these issues. They concern the implementation of the scientific work programme of the IPCC and should be left to the new IPCC Bureau. Only those activities that might have budget implications should be considered by the Panel.

The Bureau members and authors from each region are mostly best suited for identifying relevant non-English sources from their respective language region and to bring them to the IPCC process. According to the IPCC Rules of Procedures, an English-language executive summary or abstract must be provided, not a translation of the full text. Therefore, the involvement of a costly UN language service is not appropriate. Translation can be provided by the IPCC experts. Please note that the language of the IPCC-reports is English.

D. Options for support and training of (young) scientists

1) Provide more funding to young scientists in DCs to participate in IPCC work.
2) Increase the number of young scientists from DCs in the staff of TSUs.
3) Provide support to DC scientists and experts to enhance and share regional research and knowledge as part of IPCC outreach activities. The support could include holding conferences, workshops and meetings to share knowledge and enhance capacity building, and partnering with academic institutions in DCs to provide training in climate assessment (using WGs reports as learning and teaching resources in universities for example).
4) Develop a training programme or summer school for younger skilled researchers from DCs to participate as junior scientific staff at each TSU. (See paragraph below).

We do not support any of these options. Training or capacity building activities are outside the mandate of the IPCC that is to provide scientific assessments of climate change.

Capacity building by the IPCC itself is limited to activities of the IPCC Scholarship Programme. IPCC could, however, communicate the advantage of a stock taking of the needs for research in DC and the requirements enabling enhanced participation and contribution of DC experts in the work of the IPCC.

IRELAND

Comments on the Further Refined Options Paper on the Future Work of the IPCC

The government of Ireland thanks the Co-Chairs for the work that they have done in progressing the Task Group on the Future of the IPCC. It also welcomes the opportunity to provide further input on the Further Refined Options Paper produced following the deliberations during the meeting of the IPCC in Copenhagen.

The work of the IPCC is, and should remain, central to the informing governments and other stakeholders, in civil society and the business and enterprise communities, on the scientific basis of climate change as well as the key response options to climate change through mitigation and adaptation.

Ireland is also of the view that the work of the IPCC should develop and evolve in the context of

1. The increased scientific understanding that it has through its work assessed and communicated since its inception in 1988
2. The large amount of relevant scientific material now being produced which is much greater than was the case when the IPCC was established
3. The development of responses and actions by world governments under the UNFCCC

A wide number of new bodies and institutions now provide a range of useful analysis of climate change. However, the IPCC has a unique position in the science policy interface and this must be preserved and if possible enhanced. This requires that the integrity, of the IPCC structures, practices and procedures, is maintained. This is required to ensure the comprehensiveness and robustness of its products.

While Ireland welcomes and supports the work of the Task Force it also considers that the next round of this type of process, i.e., following the anticipated 6th assessment cycle, could be informed by outside analysis of the work of the IPCC which would identify options for development of this. For example, the review of the IPCC by the Inter-Academies Council (IAC) was a useful exercise which informed governments in relation to options to improve the operation of the IPCC. A wider external review exercise, tasked with providing an assessments of options to improve the structures and operation of the IPCC, could take place during the expected 6th cycle. This would report during the cycle and would then assist government in their next considerations of the future of the IPCC.

Specific response to the options identified in the Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014 are provided below.

I. Products, their timing and their usability

A. Options for product types and their timing

i. Maintain the current 5-7 years assessment cycle of comprehensive ARs together with the three-stage review process, supplemented by SRs and MRs.

ii. Both Summaries for Policymakers (SPMs) of the reports and the Synthesis Report (SYR) are the main products of the IPCC, for which the scoping on cross-cutting issues should start at an early stage and could be revisited by the Panel at a later stage.

iii. Produce MRs or good practice guidance reports which would enable and assist countries and regions in preparing regional and/or national scientific assessments.

i. The products identified are central to the work of the IPCC and it should continue to produce these. Assessment reports should be produced on a 5-7 year cycle and follow the current writing and review process to insure the quality of these reports. These can build on previous reports and therefore can be more concise in areas where the understanding is well developed and robust, where updates can be sufficient to encompass material published since the previous report. Where there are specific, or new issues, and particularly those that are of relevance for policy, these should be considered in detail and the findings highlighted in a policy neutral manner.

ii. Special Reports are usually produced following a specific request or to address a topic that may be of interest for the work of the UNFCCC. This should continue and these should be produced to the same high standard as previously. In passing it is noted that there is not a process to update Special Reports. Some of the material in these reports may have become dated. The IPCC may consider if a process to review previously published SR may be required, to consider if they can or should be updated or flagged as being superseded. This could be part of an overall process to produce future SR.

The Synthesis Report (SYR) is the ultimate product from the Assessment Report production process. It should address key issues for policymakers through the provision of integrated analysis of material in the underlying reports. The scope of the SYR should provide guidance for the overall assessment report. The outline scope of the SYR should be determined at an early stage of the writing process and with a dynamic process of updating this as the shape of the underlying report and the scientific finding evolve. This should assist the authors in their writing process, and improve the discussion of cross-cutting issues.

iii. Methodology Reports (MR) e.g. on national greenhouse gas inventories (TFI) are a vital product from the IPCC. The process by which these are produced and updated has largely been in response to developments under the UNFCCC. Options to improve this process and to insure that the material is updated as scientific findings advance knowledge may be needed. There may also be a need to provide methodologies or guidance in other areas of climate change such as in adaptation.

B. Options for cross-Working Group collaboration

i Enhance cooperation between WGs such as joint meetings, joint workshops, cross- WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics.

ii Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.

iii Produce more SRs on cross-cutting issues. Produce more TPs on cross-cutting issues.

i. It is widely recognized that there is a need to have enhanced cooperation between WGs. This has been an ongoing challenge. The scope of the SYR report should identify areas/issues where integration through cooperation between WGs is needed. Ownership of this task for specific areas/issues could be assigned to key people within the relevant WGs to address and progress. This can be overseen by the Chair of the IPCC or vice-chairs as appropriate the specific tools used in doing this i.e. meeting workshops should be determined by the owners of these areas/issues

ii, The issue of WG cooperation and integration of material differs from issue of the timing of publication of the WG reports. It is considered that the WG reports should ideally be published over one calendrer year. This was not possible for the AR5 due in part to the move from emission data based on SRES to the use of RCPs. As this will not be the case for a future assessment report, the prolonged gap between publication of the WGI report and the other reports should be avoided. Also for the AR5 the time gap between publication of the WGII and WGIII report was very short. The next assessment report should, as stated, be published

over one calendar year, with at least 8 weeks between each report being published.

iii. The utility of SR and particularly TPs should be determined in the context of the overall scope of the 6th assessment cycle as well as requirements under the UNFCCC. The production of TPs should be limited to specific request from the UNFCCC. There should be more flexibility on SR with the considerations of the scientific community being a key input to decision making on topics and the scope for these.

C. Other issues raised:
i Options to increase the readability and usability of Assessment Reports
ii Options for digitalization

i. It is clear that the assessment reports should be as readable as possible while noting that scientific language and terminologies, which are not part of average reading material, are bound to be used. These uses should be as clear as possible. The readability of SPMs is of particular concern and the authors need to be alert to the use of obscure scientific terms and wording.

The uncertainly language used by the IPCC can act to reduce the readability of the report and approach to use these terms in a less obtrusive manner should be communicated to the CLA. In addition use of percentages may be clearer in certain cases. The use of experts in this area in the SPM writing process would be welcome, they should also pay particular attention to figures which can in some cases obscure or weaken messages particularly if overloaded with information. However, final decisions on the material provided by the IPCC should be made by the authors.

ii. Options for digitization are an operational matter for the IPCC and international standards should be used for this process.

II. Organization of the IPCC

A. Options for IPCC Structure
Retain the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI). Retain three WGs and the TFI but expand the mandate of WG I to include observed and projected impacts.

I. The current IPCC structure should be retained. The change proposed in option 2 could create difficulties for both working groups. Options to link work in these areas between WG1 and II should be explored with as a cross over area.

Options for the IPCC Secretariat and TSUs

i. Further clarify the roles of the IPCC Secretariat and the TSU's at the beginning of an assessment cycle regarding, for example, administrative, operational and general coordination matters.
ii. International recruitment of professional TSU staff – selection, performance appraisal and contract extension by both Co-Chairs of a WG/TF, with involvement of the IPCC Chair and Secretary of the IPCC.
iii. A TSU could be comprised of both developing and developed country institutes and managed by the two Co-Chairs of a WG/TF. Financing could be sourced from several countries and be managed and coordinated by the IPCC Secretariat or the institutions involved.
iv. In order to divide the workload, SRs could have a designated TSU working in collaboration with the WGs/TFI TSUs.

Option i. is clearly of value as the roles and responsibilities of these components of the IPCC should be complementary and mutually supportive.

On the other options we consider that these will largely be determined by the hosting institutions and follow their practices which should meet the highest international standards. These are to a large extent operational matters which are within the remit of the bureau and TSUs

On option iv. we would not at this point prescribe how the TSU would support SRs. This may be addressed once an SR has been agreed and if needed to address specific issues and challenges.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

i. *Exploring ways to enhance collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies.*
ii. *Expand cooperation with regional institutes and universities from DCs in particular.*
iii. *Assist the LAs in their tasks with IT, for instance with reference management.*
iv. *Appoint research assistants to support the work of the TSUs and/or the CLAs.*
v. *Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.*
vi. *Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC) to increase inclusiveness in the selection of experts.*

These options are very mixed and some would be operational while others such as 2 are really part of the next section. The key issue is that the operation of the IPCC has to be supported as much as possible while not giving rise to conflict of interest. A number of these have some merits but are very are likely to best addressed in specific issues rather than as a general case. On option iv. options for addressing the required support for authors to participate in the work of the IPCC if not nominated by governments should be identified.

Involvement of developing countries

Developing countries are involved at a high level in the work of the IPCC which has a balance of participation of developed and developing country co-chairs in its operational structures. This should continue. However, the mandate of the IPCC is to provide scientific assessment of climate change. There is a risk that the IPCC is being asked to address issues that are wider than its mandate. This should be avoided. The IPCC can through its work highlight some of these issues. Other international bodies as well as bilateral cooperation can subsequently use this material to inform actions to address these.

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs
i. Employ more experts from DCs in the TSUs through international recruitment of staff. Capacity building for scientists from DCs could happen by way of secondments to the TSUs.
ii. Give stronger support to Co-Chairs from DCs, including the possibility of hosting a TSU in one of their countries or locating the TSU for a WG/TF in more than one country, while exploring alternative funding arrangements e.g. by a consortium of countries. [Note this option also appears under the heading of options for the IPCC Secretariat and TSUs].
iii. Revise if necessary the TOR for the Bureau to ensure more active participation of Bureau members from DCs to address their regional role on outreach.
iv. Give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and as reviewers.

i. This is clearly a viable option but this would be under the control of the hosting institution which should have its own policy in this area.

ii. The location of a TSU is more than one country can lead to management, logistic and communication difficulties but if there were to be addressed and there was a reasonable proposal to do this then it could be supported.

iii. The TOR of the Bureau could be revised however this would need to done in a manner than does not compromise its mandate or operation. Further clarity on these options would be needed before any changes to the bureau could be considered.

iv. This may not be a useful development and would be of very limited value in addressing the real issues with respect to scientific work and outputs in some global regions. As with above further clarity on these options would be needed before any changes to the bureau could be considered

B. Options to increase developing country participation:

i. Ensure a mixture of experts and provide them with adequate training.
ii. Increase the number of Expert Meetings and Workshops in DCs to enhance the visibility of the IPCC.
iii. Explore further ways to broaden the nomination of authors and expert involvement in the review processes.

1. The Rules of Procedures of the IPCC a mixture of experts is strived for in all organizational and scientific grouping as far as possible. However, the IPCC does not have the mandate or capacity to act as a training centre

2. The IPCC should hold meetings in the most suitable venues.

3. This is not a very clear option but it would be useful to bodies funding research programmes with or in developing countries were advised as to the importance of directing IPCC focal points about their work and suggesting that top scientists in these countries are nominated for potential authorship roles with the IPCC. Again the mandate of the IPCC needs to be maintained and respected.

C. Options for accessing non-English language literature
Establish (or use existing) regional committees or networks to improve access to non-English language literature. Approach authors of such literature to provide expert opinion or specific inputs on particular topics. Identify, in consultation with governments and international agencies, relevant government reports and literature published in languages other than English, in particular from DCs. A UN-based language service could assist in translating such documents and authors of such literature could be approached to provide expert opinion or specific inputs on relevant topics.

The issue of translation is part of the operational process of the IPCC. It is difficult to see how a number of the above options could be implemented within the work of the IPCC. The IPCC Bureau may need to consider these issues further and return to the Panel with proposals.

D. Options for support and training of (young) scientists
Provide more funding to young scientists in DCs to participate in IPCC work.

i. Increase the number of young scientists from DCs in the staff of TSUs.
ii. Provide support to DC scientists and experts to enhance and share regional research and knowledge as

part of IPCC outreach activities. The support could include holding conferences, workshops and meetings to share knowledge and enhance capacity building, and partnering with academic institutions in DCs to provide training in climate assessment (using WGs reports as learning and teaching resources in universities for example).

iii. *Develop a training programme or summer school for younger skilled researchers from DCs to participate as junior scientific staff at each TSU. (See paragraph below).*

These options have largely been addressed earlier. The role and mandate of the IPCC has to be maintained. Extending its role may be difficult and problematic for the core work of the IPCC. There are a range of other bodies who have roles in this area. Governments and international bodies can use these avenues to address these issues. It may be of value for UNEP and WMO to provide a listing of bodies who from their knowledge support such work.

JAPAN

Country: Japan

[General Comment]

Japan considers that following points should be taken into consideration for the discussion on the Future Work of the IPCC;

(1). The current structure of the IPCC is efficient and should retain its structure of the three Working Groups and the Task Force on National Greenhouse Gas Inventories. Also, the ARs should continue to be the main products of the IPCC in the future. Based on these principles, future products of the IPCC should also deal with the need from the IPCC members, such as the integration of WGs achievements and enhancing support for the regional assessment.

(2). The IPCC should maintain its neutral position with respect to policy as stated in the "Principles Governing IPCC Work". Japan considers that, with keeping its policy neutrality, it is important for the IPCC to strengthen cooperation with existing UN organizations and other institutions as well as to encourage IPCC member countries to increase the number of and the quality of academic papers, especially those from developing countries.

(3). The high expertise of the staff members of the Technical Support Unit (TSU) is important for enhancing the quality of the IPCC products and it should be maintained.

I. Products, their timing and their usability

A. Options for product types and their timing

1. Japan generally supports maintaining the current 5-7 years assessment cycle as stated in option 1). It is important to develop cross-WG collaboration and mutual comprehension, and enhance integrity among three WGs' reports and within the synthesis report. The schedule should be set up to have a time for such coordination. In this regard, Japan also supports option 2), which will start scoping on cross-cutting issues at an early stage with a possible revision of them by the Panel at a later stage.

2. The current schedule under which governments and external experts are required to review all the reports within only one or two years does not provide sufficient time to examine them properly. In order to review them with deeper comprehension, longer review intervals are desirable.

3. There are growing needs for regional assessments. Producing MRs or good practice

guidance as indicated in option 3) could be one option for supporting those IPCC members with difficulties to have their own regional assessment.

4. It is important for the IPCC to enhance collaboration with relevant UN organizations such as the UNFCCC to keep their products policy-relevant. .

B. Options for cross-Working Group collaboration

5. Japan strongly supports enhancing cooperation between the WGs, as expressed in option 1). The schedule for cross-WGs collaboration should be further considered in order to have time for reflecting the achievements of the WGI report into the WGII and WGIII reports as well as for increasing consistency among each chapter of the synthesis report.

6. The WGI report found a larger likely range of the equilibrium climate sensitivity compared to the previous report. Limitation of the current future projection corresponding to this uncertainty, studies on reduction of such uncertainty, as well as ways to reflect on and interpretation of those uncertainty on long term scenarios should be discussed among WGs. Therefore, it is desirable to publish appropriate documents, such as Technical Papers (TP) on this topic during the assessment cycle of AR6, before the compilation of the report of the AR6 begins. In addition, topics such as “climate change impacts on especially vulnerable areas” have also gained a great deal of interest from governments. It is worth considering having TPs and/or SRs on these topics in the future.

C. Other issues raised:

Options to increase the readability and usability of Assessment Reports

7. Japan considers that delivering scientific knowledge to the public is important. In this regard, allocating writing or communication specialists for drafting the SPM is an option for increasing the readability and usability of Assessment Reports. It should be noted that the authors continue to be responsible for the content of the reports.

8. The number of issues covered by ARs has been increasing. Selecting and reducing the number of topics to be addressed at ARs could increase the quality of its contents by enabling deeper analysis on the chosen topics.

9. How the IPCC, authors and governments deliver the products of IPCC to the public is

as important as the products themselves. From this point of view, the words, figures or tables adopted through the governmental review process should be fully respected when delivering public presentations/documents. The contents of the reports, including SPM, TS and the full report, should be comprehensively presented to the public.

II. Organization of the IPCC

A. Options for IPCC Structure

10. Japan supports retaining the current WGs and TFI structure, as mentioned in option 1).

B. Options for the IPCC Secretariat and TSUs

11. Clarification on the roles of the IPCC Secretariat and the TSUs as indicated in Option 1), would help the smooth operations of the IPCC activities.

12. The situation of host organizations should be reflected appropriately when recruiting TSU staff members for the smooth operation of the TSU. The involvement of the IPCC Secretariat and Chair in the recruitment process might make the process complicated. This issue needs to be considered carefully.

13. Japan has been supporting the TFI activities and is ready to continue providing support these activities during the next assessment period.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

14. As mentioned in options 1) and 2), it is important to have input from other international organizations and networks such as Global Adaptation Network (GAN)*1 and Asia Pacific Adaptation Network (APAN)*2 as well as international academic institutes such as International Council for Science (ICSU). Cooperation with IPBES and CBD should also be promoted taking into account climate change impacts on biodiversity and impact evaluation of CDR technologies on biodiversity. It should be noted that the selection of the authors needs careful consideration so as to maintain the balance of the academic field and the neutrality of the IPCC with respect to policy.

*1 GAN: http://ganadapt.org/

*2 APAN: http://www.asiapacificadapt.net/

15. Japan considers the current selection process of authors is appropriate. Therefore, the current selection process should be retained. It can be an option to select technicians and engineers for CLA/LA/RE, if it is appropriate.

III. Involvement of developing countries

16. Japan considers that the participation of developing countries (DCs) to the activities of the IPCC are mainly achieved thorough encouraging their publication of high-quality academic papers.

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs

17. It would be helpful if Option 4) could be clarified in a more detailed manner.

B. Options to increase developing country participation:

18. Japan considers that utilizing existing organization and networks, such as the Asia-Pacific Network for Global Change Research (APN), is a good option for encouraging developing countries to enhance their research activities.

19. It would be also useful to utilize existing organization and networks for enhancing cooperation among scientists with deep knowledge on issues in developing countries so as to share knowledge and good practices. A proposal made by a representative from France, which is still at the early stage of discussions, should be carefully considered bearing in mind that all the authors, from developed and developing countries alike, share the same responsibility for conducting objective scientific analysis on climate change. Meanwhile this proposal should be treated separately from the existing options for the Future Work of the IPCC.

C. Options for accessing non-English language literature

20. Japan considers that utilizing existing regional networks and relevant organizations as mentioned in option 1), could be an option for enhancing access to non-English language literatures.

D. Options for support and training of (young) scientists

21. Japan considers that utilizing existing organizations and networks such as the Asia-Pacific Network for Global Change Research (APN) , is an option for supporting

young scientists in order to encourage developing countries to publish more scientific papers .

LIBYA

Dear Ms. Christ,

First of all, I greatly appreciate the work of the IPCC and its valuable achievements in climate change, and it is also a great honor to work with the IPCC as a National Focal Point.

As requested, please find below our comments on the future work of the IPCC :-

The aim of reviewing the IPCC's reports and participating in the sessions to adopt them is as follows :

- Preventing the amplification of conclusions to attract the attention of media.
- Decreasing unfair conclusions of fossil fuels.
- Reducing manipulative interpretations of scientific basis.
- Reducing non-objective analysis.
- Preventing binding recommendations which do not take into account the sovereign rights of developing countries.
- Making sure not to manipulate into the recommendations of basic chapters.

The tasks of the reviewers and negotiators, who are involved in climate change from developing countries and attending the sessions to adopt reports, should be as follows :

- Reading and identifying the elements in the main report.
- Ensuring scientific balance and prudence in the followed methodology.
- Ensuring a balance between chapters.
- Focusing on chapters that meet the needs of developing countries.
- Focusing on sustainable development issues.
- Determining agreed scientific basis and avoiding contentious and non-verified scientific points.
- Ensuring consistency and track changes between various drafts.
- Ensuring consistency between the final draft and basic chapters.

The vision of developing countries for the future of the IPCC is as follows :

- The technical support units for working groups should not be limited for developed countries, and the representation should be opened for developing countries as well to ensure the reduction of domination and bias.
- Fair representation of developing countries in the IPCC Panel.
- The IPCC's reports should include the important issues of developing countries.
- Enhancing the inclusion of non-English language literature in the IPCC's ARs and other products.

Best Regards

AbdElfatah H. Shibani
Director-General
National Meteorological Centre (NMC) / Libya
& IPCC Focal Point

MADAGASCAR

FUTURE WORK OF THE IPCC

COUNTRY: MADAGASCAR

I. Products, their timing and their usability:

- Madagascar believes that maintaining the current 5-7 years of assessment cycle is important but options should be emphasized in the organization of the IPCC to tackle the significant increase in the volume of literature and data to be assessed.
- MRs or good practice guidance reports helping to prepare regional and national scientific assessments would be welcome, and SRs reflecting as far as possible regional information would also be very useful.

II. Organization of the IPCC:

- We support that the current IPCC structure is good, and readjusting the mandate of WG1 to include observed and projected impacts would also be appropriate.
- We consider that the role of the TSUs and CLAs are crucial to ensure the quality of the assessment reports. To that end, appointing research assistants to support them is strongly encouraged to decrease the workload on the authors and other experts involved in the intensive process.
- The options enhancing collaborations among WGs and TSUs should also be encouraged.

III. Involvement of developing countries :

- In addition to the recruitment of more experts from DCs in the staff composition of TSUs, Madagascar also strongly supports options including the possibility for DCs to co-host the TSUs.
- We also believe that IPCC can contribute to capacity building by way of secondments to the TSUs. Otherwise cooperation through work via internet exchanges could also be considered.
- Stronger support to Co-Chairs from DCs is also important to increase the participation and contribution of DCs. In order to achieve this, options with possibilities to provide some financial support for authors and bureau members from DCs could be closely considered.

MALDIVES

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Ministry of Environment and Energy
Male', Republic of Maldives.

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Date: 7 Jan 2015

Maldives submission on the Future work of the IPCC

Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014)

With reference to the letter 5338-14/IPCC/GEN dated 11 November 2014, we hereby submit our options regarding the future work of the IPCC.

We feel that the current 5-7 years assessment cycle is a reasonable duration. The products could be improved through more effective cross collaboration among the working groups at various levels of engagement. In addition we also feel that involvement of the institutions from the developing countries could further be enhanced. Corporation between various institutions and use of research assistants from DCs could be utilized in the TSU's of the various working groups.

Following are the options chosen by us.

I. Products, their timing and their usability

A. Options for products types and their timing

1. Maintain the current 5-7 years assessment cycle of comprehensive ARs together with the three-stage review process, supplemented by SRs and MRs.

B. Options for cross-Working Group Collaboration

1. Enhance cooperation between WGs such as joint meetings, joint workshops, cross-WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics. Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.

II. Organization of the IPCC

A. Options of for IPCC structure

2. Retain three WGs and the TFI but expand the mandate of WG I to include observed and projected impacts

Green Building, Handhuvaree Hingun, Maafannu, Male', 20392, Republic of Maldives.
ގްރީނ ބިލްޑިންގ، ހަންދުވަރެ ހިންގުން، ދަފަންނު، ދާދި، 20392، ދިވެހިރާއްޖެ.
+(960) 301 8300 +(960) 301 8301 secretariat@environment.gov.mv
www.environment.gov.mv www.facebook.com/environment.gov.mv www.twitter.com/ENVgovMV

B. Options for the IPCC Secretariat and TSUs

2. International recruitment of professional TSU staff – selection, performance appraisal and contract extension by both Co-Chairs of a WG/TF, with involvement of the IPCC Chair and Secretary of the IPCC.
3. A TSU could be comprised of both developing and developed country institutes and managed by the two Co-Chairs of a WG/TF. Financing could be sourced from several countries and be managed and coordinated by the IPCC Secretariat or the institutions involved.
4. In order to divide the workload, SRs could have a designated TSU working in collaboration with the WGs/TFI TSUs.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

2. Expand cooperation with regional institutes and universities from DCs in particular.
4. Appoint research assistants to support the work of the TSUs and/or the CLAs.
5. Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.
6. Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC) to increase inclusiveness in the selection of experts

III. Involvement of developing countries

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs

1. Employ more experts from DCs in the TSUs through international recruitment of staff. Capacity building for scientists from DCs could happen by way of secondments to the TSUs.
2. Give stronger support to Co-Chairs from DCs, including the possibility of hosting a TSU in one of their countries or locating the TSU for a WG/TF in more than one country, while exploring alternative funding arrangements e.g. by a consortium of countries. [Note this option also appears under the heading of options for the IPCC Secretariat and TSUs].
3. Revise if necessary the TOR for the Bureau to ensure more active participation of Bureau members from DCs to address their regional role on outreach

B. Options to increase developing country participation:

1. Ensure a mixture of experts and provide them with adequate training.
2. Increase the number of Expert Meetings and Workshops in DCs to enhance the visibility of the IPCC.
3. Explore further ways to broaden the nomination of authors and expert involvement in the review processes.

Green Building, Handhuvaree Hingun, Maafannu, Male', 20392, Republic of Maldives.
ގްރީން ބިލްޑިންގ، ހަންދުވަރީ ހިނގުން، މާފަންނު، މާލެ، 20392، ދިވެހިރާއްޖެ.
+(960) 301 8300 +(960) 301 8301 secretariat@environment.gov.mv
www.environment.gov.mv www.facebook.com/environment.gov.mv www.twitter.com/ENVgovMV

C. Options for accessing non-English language literature

3. Identify, in consultation with governments and international agencies, relevant government reports and literature published in languages other than English, in particular from DCs. A UN-based language service could assist in translating such documents and authors of such literature could be approached to provide expert opinion or specific inputs on relevant topics.

D. Options for support and training of (young) scientists

1. Provide more funding to young scientists in DCs to participate in IPCC work.
2. Increase the number of young scientists from DCs in the staff of TSUs.

Green Building, Handhuvaree Hingun, Maafannu, Male', 20392, Republic of Maldives.
ގްރީން ބިލްޑިންގ، ހަންދުވަރީ ހިންގުން، ފާފަންނު، މާލެ، 20392، ދިވެހިރާއްޖެ
+(960) 301 8300 +(960) 301 8301 secretariat@environment.gov.mv
www.environment.gov.mv www.facebook.com/environment.gov.mv www.twitter.com/ENVgovMV

REPUBLIC OF KOREA

Korea Meteorological Administration
61 yeouidaebang-ro, 16-gil, Dongjak-gu, Seoul 156-720, Republic of Korea
Tel. +82 2 2181 0401 | Fax +82 2 2181 0469 | Email: ipcc_kor@korea.kr
www.kma.go.kr

Ref. No.: KMA 14/CPD-3925 19 December 2014

Dr. Renate Christ
Secretary
IPCC Secretariat
C/O World Meteorological Organization
7 bis, avenue de la Paix, Case postale 2300
CH-1211 Geneva 2
Switzerland

Dear Dr. Christ,

I wish to refer to your letter 5338-14/IPCC/GEN dated 11 November 2014 on ‘Refined Options Paper‘ on future IPCC work.

In this regard, I would like to inform you our comments on the options paper. Please find attached ‘Annex 1‘ in this letter.

Sincerely yours,

KI Miok
IPCC Focal Point of the Republic of Korea

Annex 1

Comments on ‘Refined Options Paper on future IPCC work’

- Republic of Korea -

Regarding to ‘C. Options for accessing non-English language literature’ in ‘III. Involvement of developing countries’, we think that there are lots of high-quality literatures in languages other than English. Those could be primary information to broaden the regional knowledge on climate change, especially for developing countries, in the future products of the IPCC. For this reason, we believe that the third option could be important to improve the accessibility of such literatures and suggest that the IPCC should make efforts to consider non-English literatures with governments and international organizations.

RUSSIAN FEDERATION

COMMENTS by the Russian Federation

on the IPCC-XL/Doc.13, Add.1 of 30.X.2014 (**FORTIETH SESSION OF THE IPCC Copenhagen, Denmark, 27-31 October 2014) 'FUTURE WORK OF THE IPCC. Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014)'**

We would like first to thank Co-Chairs and the Task Group for this version of the draft in which many comments of the IPCC members have been taken into account.

However, few points still require further deliberations, in particular in view of coming 41st session of the IPCC (February 24-27, 2015, Nairobi, Kenya) and short time remained. Two of them are given below.

Page 3: '**B. Options for cross-Working Group collaboration**
Governments showed broad support for more effective cross-WG cooperation. Several options were proposed to improve the cohesion and collaboration between the WGs:

1) Enhance cooperation between WGs such as joint meetings, joint workshops, cross- WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics. Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.'

A gap between WGI and the other WG reports (i.e., WGII and WGIII reports) allowing them to use effectively WGI outcomes should be 2 years or more. This time period is needed to adopt WGI findings, produce new results on impacts, adaptation or mitigation, and publish the results in periodicals. An alternative is to rely on WGI output of the previous cycle, which is not at all dramatic, since, for example, nothing paradigmatically new has appeared in the AR5 as compared to the AR4.

Page 5: '**C. Options for the selection of and support to CLAs and LAs and improving the writing and review process**
It is widely acknowledged that IPCC assessments are quite demanding on CLAs and LAs. Options concerning the support to CLAs and LA's include:
1) Exploring ways to enhance collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies.
2) Expand cooperation with regional institutes and universities from DCs in particular.
3) Assist the LAs in their tasks with IT, for instance with reference management.
4) Appoint research assistants to support the work of the TSUs and/or the CLAs.
5) Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.
6) Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC), in order to increase inclusiveness in the selection of experts.'

Three different issues are touched in this section: **1)** how select LAs and CLAs more efficiently; **2)** how support their work; **3)** how external resources, including the potential of other international organizations, could be used in the IPCC writing process.

1) We have a certain concern on the establishment a new channel for the recruitment of LAs and CLAs which is totally independent from governments. The IPCC is, first of all, an intergovernmental body. If one wish enhance a value of IPCC reports as a scientific basis for political decisions in the sphere of climate policy at both national and international levels, the role of governments in the nomination LAs and CLAs should be strengthened. However, the 'open (online) process', proposed under item 6, on the contrary, may weaken the role of governments. This needs further discussions.

Of course, sometimes, as we learnt from the AR5 preparation process, replacement of authors, especially from developing countries, for example, in the case of resignation, can be a problem. It may be expedient to assign Governmental Focal Points with the compilation and maintenance of national databases of potential IPCC authors. The database should contain basic information in English (names, postal and electronic addresses, phone/fax, CV, list of publication, etc.) about national experts, either working within the country or abroad, having the potential to serve as IPCC authors. An expert included in such national database should be approved in advance by the government of respective country for the IPCC service. Such a database may facilitate quick search of experts in case of the establishment or renewal of author groups. Such an approach is applicable for all countries, however, appears to be most useful with respect to developing countries and EIT countries.

2) Technical assistance from TSUs to LAs and CLAs would be extremely helpful. This is especially important for authors from DCs and EIT countries with regard to e-mail connections, web-conference equipment, free access to major electronic libraries and reference management.

3) As to 'collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies', the issue requires some further deliberations. Of course, certain cooperation would be useful in order to harmonize the joint efforts in the same field, namely, in the elaboration of scientific basis for the climate policy. Therefore, the IPCC should be responsive to requests of UNFCCC bodies, WMO, UNEP and others relevant organizations concerning the preparation of SRs, MRs or TPs. However, it should be emphasized that the IPCC has its own author selection system and a procedure for acceptance/adoption/approval of products. This system should be retained as such in any case.

SWEDEN

SMHI

Dr Renate Christ, Secretary of the IPCC,
IPCC Secretariat
WMO
7bis, Avenue de la Paix
P.O. Box 2300
1211 Geneva 2
SWITZERLAND

Date: 19 December 2014
Our ref:
Your ref: 5338-14/IPCC/GEN

Comments on Further refined Options Paper on the Future Work of the IPCC

We have been given the opportunity to submit our comments on the Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014).

I. Products, their timing and usability

A. Options for product types and their timing

Sweden supports all three suggested options that essentially complement each other. Sweden also point out that UNFCCC is a main and principal user of the IPCC products. However, as the IPCC and the UNFCCC timelines are note fully in phase because of the intrinsic timescales of the two processes special considerations are needed to produce 'IPCC quality standard' reports within the shorter time frame that would be required to meet the UNFCCC needs within the AR6 cycle.

B. Options for cross-Working Group collaboration

Sweden agrees with alternative 1. Considering alternative 2, this presupposes that the process for SRs and TPs on cross-cutting issues is transparent and that selection of topics is planned well in advance. To produce more SRs and TPs will be costly and it is important to discuss on how these may be financed.

C. Other issues raised

Options to increase the readability and usability of Assessment reports

Sweden stresses the importance of that the SPMs in future ARs should be more readable than the current ones and also preferably shorter. To engage writing or communication specialists to support the author teams is an essential step towards meeting this need.

As a further comment to points I.A and I.B Sweden suggests that within the AR6 cycle the specific need of UNFCCC could be met by a Special Report that would focus on updating the AR5 in areas of particular relevance for the UNFCCC and COP negotiations. In this way the SR would also be a substantial building block towards the AR6.

II. Organization of the IPCC

A. Options for IPCC Structure

Sweden supports both options and suggests that it might be worthwhile to consider whether the detailed perimeters of the reports (and TSUs) can defined at an early stage of the scoping process.

B. Options for IPCC Secretariat and TSUs

Sweden agrees with option 1 and 3. Considering option 2 this might be a way forward but not necessarily the most effective. Considering alternative 4; there is need for dividing the workload of producing SRs and ARs to a wider circle of authors. This might be achieved by having a specific TSU supporting SRs. However, this requires that appropriate funding is available.

Sweden welcomes the clarification of the roles, responsibilities etc. of the IPCC Secretariat and the TSUs and also the proposed structure where the TSUs is given the possibility of full focus on preparing reports and supporting the WGs Bureau and authors.

C. Options for the selection and support to CLAs and Las and improving the writing and review process

Sweden supports options 1 and 2, and for the latter particularly encourages increased interaction with regional institutes and universities from DCs.

Options 3 and 6 seems like good candidates for the Secretariat to introduce common IT tools and working procedures that then are implemented by the TSUs.

With respect to options 4 and 6 Sweden is positive but notes that such improvements are bound to come with a cost. This should probably be subject to funding outside the IPCC Trust Fund. The need and extent of these actions and external funding opportunities should be identified and approved by the IPCC Secretariat following agreed principles and procedures. It is not fully clear to what extent such principles and procedures already exist.

III. Involvement of developing countries

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs

Sweden is positive to efforts of linking DCs closer to the process and the possibility of secondments to the TSU is a very good way forward. The possibility for DCs to host a TSU should be enhanced providing that the IT-infrastructure needed already is in place.

B. Options to increase developing country participation

Sweden supports option 1 and 3. Considering option 2 this is a positive step to increase the proportion of working meetings in DC. However, meetings having the principal character of increasing the visibility of IPCC should be part of the IPCC Outreach Programme. Co-organisation of a working meeting and an outreach meeting could be an efficient way to get the most out of the invested resources.

C. Options for accessing non-English language literature

Sweden approves of all three options but stresses that the focus obviously still is on assessing science, and that the responsibility for this rests with the working group co-chairs and author teams. Option 3 is mainly relevant for regional chapters and specific products (SRs etc.).

D. Options for support and training of (young) scientists

Sweden agrees with option 1 if extra funding can be made available from the member states. Option 2 is an interesting way forward. Sweden supports option 3. Considering option 4, this is a difficult matter, perhaps there are other organisations better suited for the task, as the paragraph below alternative 4 suggests.

SWITZERLAND

Comments on
IPCC-XL/Doc.13, Add.1 (30.X.2014):
Further refined Options Paper resulting from the discussions at the Third meeting of the Task Group on the Future Work of the IPCC (Copenhagen, Denmark, 26 October 2014)

Switzerland would like to thank the Co-Chairs of the Task Group on the Future Work of the IPCC for their further refined document containing proposals for the future of the IPCC, and for the opportunity to provide comments on this document.

Background

We welcome the fact that in the course of the work of the Task Group, there has been tangible convergence of views among Governments and the scientific community on the future of the IPCC.

The IPCC has to continue to be a fully independent scientific body working with the highest scientific standards. Basically, we support the current role, mandate and governance of the IPCC, while recognizing the need to strengthen the functioning the IPCC in view to delivering high scientific products that respond to users' needs.

As pointed out in the document, options are not mutually exclusive and we will take this fact into consideration in our comments and proposals below.

I. Products, their timing and their usability

A. Options for product types and their timing

- We support the elaboration by the IPCC of comprehensive Assessment Reports every 5 to 7 years and a three-stage review process.
- We also support the elaboration of Special Reports and Methodology Reports according to current practice.
- In our view, Methodology Reports have also to include methodologies on e.g. good practice guidance on mitigation and adaptation, technology, products and processes, policy evaluation and performance. These Methodology Reports on new themes should be in addition to the current methodological work on national greenhouse gas inventories.
- We consider that the scoping process is an essential part of the elaboration of reports. Therefore, an extended and comprehensive scoping process before the elaboration of the reports should be organized, including at least two meetings and an efficient interaction between experts and users (Government representatives). Such a process could be revisited by the Panel at a later stage, in order to better address all relevant issues, including cross-cutting issues.
- In our view, both Summaries for Policymakers (SPMs) of the reports and the Synthesis Report (SYR) are very important parts of the reports, but not the unique and main IPCC products.
- The IPCC should remain responsive to the requests and needs of the UNFCCC, in particular to the UNFCCC review of a global goal. The IPCC should be aware of the UNFCCC calendar.

- In our view, another important IPCC product is information on the IPCC works and process. An “IPCC Portal” has to be established in the IPCC web site in order to facilitate access to the IPCC products.

B. Options for cross-Working Group collaboration

We support the proposed enhanced cooperation between Working Groups based on the scoping process and on cross-cutting issues.

We propose to strengthen this collaboration on matters related to finance (e.g. financing joint meetings) and, as appropriate, administration (e.g. contacts with experts).

C. Other issues raised

Options to increase the readability and usability of Assessment Reports

We agree that efforts should be done to facilitate readability of IPCC products, in particular SPMs, while preserving their high scientific level.

Options for digitalization

We support using digital technologies to facilitate the access and distribution of IPCC products in a way that their integrity, as adopted by the Panel, is not put in danger.

Safe ways to archive the IPCC products have to be established.

II. Organization of the IPCC

A. Options for IPCC Structure

We support retaining the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI).

On the mandate of the WGs, we consider that it would be helpful to discuss how to share mandates among WGs on a number of themes such as impacts, projections and cross-cutting issues.

A better definition of the role and mandate of the IPCC co-chairs would be useful.

B. Options for the IPCC Secretariat and TSUs

We join the general agreement on the need of “a more coherent structure with a clear division of responsibilities, which would enhance cooperation among TSUs and with the IPCC Secretariat and reduce redundancies and overlap, while allowing for an appropriate degree of flexibility in the working relationship.”

We also support a clarification of roles of the IPCC Secretariat and the TSU’s (including the support that the IPCC Secretariat could provide to the TSUs), and international recruitment of professional TSU staff.

For efficiency purposes, we consider that the TSUs should be close to the WGs’ co-chairs and managed by them.

We consider that these improvements have to be reached without creating any new bureaucratic layer. The establishment of the “IPCC Portal” including a section with reserved access only for the Executive Committee, the Secretariat, the TSUs and the National Focal Points may be a helpful managerial tool to achieve these improvements.

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

We support options 1) to 5), but have some concerns about 6). While we recognize the need to increase inclusiveness in the selection of experts, it is not clear who would identify (IPCC Secretariat?) and then designate (the Governments?) these additional experts.

We recognize the need to better support (including financially) the work of the experts engaged in the elaboration of IPCC products. But we are reluctant to “professionalize” them by paying them a salary for a full time IPCC job. Nevertheless, serious consideration has to be given to an effective support to experts, in particular CLAs.

When nominating experts, Governments have to be aware of the amount of work required from these experts, and Governments have to take appropriate steps to ensure that these experts are in a position (with enough time and means) to provide a high-level contribution to the work of the IPCC.

In our view, a pending issue is a clear definition of the role and mandate of Review Editors and WG co-chairs.

III. Involvement of developing countries

We support more involvement of developing countries at all levels in the IPCC process. Many of the proposals contained in the document are helpful in this regard.

We consider that the provision of information on the IPCC and the usefulness of its products should be intensified in view to increase developing country participation.

The full potential of the National IPCC Focal Points has to be realized for:

- Informing their country on the IPCC and its products;
- Identifying national institutions in a position to nominate relevant experts for participation to the IPCC process;
- Promoting support from their country to the IPCC;
- Enhancing participation of their country to the IPCC process.

We support efforts to access and use non-English language literature in IPCC products, within the respect of the Principles Governing IPCC Work.

Finally, we are not convinced that educating young scientists and investing in scientific capacity and infrastructure are within the mandate of the IPCC and we wonder if the IPCC is the appropriate organization for this task. Further discussions on these matters are necessary.

UNITED KINGDOM

Department of Energy & Climate Change

Renate Christ
Secretary of the IPCC
IPCC Secretariat

Department of Energy & Climate Change
3 Whitehall Place,
London SW1A 2AW
E: sarah.honour@decc.gsi.gov.uk
www.decc.gov.uk

Your ref: IPCC-XL/Doc.13, Add.1

12-12-2014

Dear Dr Christ

Thank you for inviting the UK to submit our views on the revised options paper on the future work of the IPCC. Please see Annex 1 for our complete response to each topic area.

We re-iterate what we have said before in previous responses on the IPCC's future. Over the course of 25 years and five assessment reports the IPCC has consistently delivered respected, authoritative documents and it is important that the quality and integrity of IPCC products is maintained. More can be achieved, however, as communications across society have continued to change, sometimes radically, during this time.

The UK believes the Assessment Reports would benefit from more emphasis being given to the Synthesis Report, and a few other commentators have argued for this too. This report is the most useful to Governments and a greater focus on it from the outset of the assessment cycle would help to improve its content and impact.

We feel that in order for the IPCC products to have maximum impact, it is important that they align with UNFCCC requirements and negotiations cycle. This may require more frequent updates of some aspects of the science or new types of product. This can be achieved without compromising the integrity of the review process and products.

We strongly recommend the inclusion of professional writers and designers in Summary for Policy Makers (SPM) writing teams. More use of electronic media and web-based tools is vital given the changes in knowledge transfer and formats since the original Assessment Report in 1990.

Whilst many of the views set out in Annex 1 are represented within the reduced options paper, some did not become options, and others dropped out from the original options paper. We request that they are included in the final Recommendations Paper to be submitted to the 41st Session of the Panel.

Yours sincerely

Sarah Honour
Department of Energy and Climate Change

Department of Energy & Climate Change

UK response to Further Refined Options Paper

Topic area	UK response to IPCC options
I. Products, their timing and their usability	
A. Product types and their timing	The UK maintains its view that the Synthesis report should be the main IPCC product; this should be included from the earliest stage of the Assessment Report scoping and planning. Working Group reports and other products should support the Synthesis Report in a structured way with the report providing a genuine distillation of the information in the whole assessment cycle, integrating messages and developing a joined-up narrative that provides key insights for policymakers. Focussing on the synthesis would provide both more impact for the messages and greater efficiency in delivering them. This would have the added advantages of improved cross-Working Group synthesis and consistency and, possibly, reduced workload for authors. The IPCC is the primary source of scientific information to the Convention and we strongly support the need for it to continue to produce products which meet UNFCCC needs. In particular the pace of scientific developments creates a need for more frequent updates on specific issues whilst the timing of some products needs to fit with the UNFCCC negotiations cycle. At the beginning of the IPCC Assessment Report cycle a plan should be developed which sets out how a range of Working Group Reports, Special Reports and Update Reports support the UNFCCC and feed into a final Synthesis Report.
B. Cross-Working Group collaboration	We support enhanced cooperation between WGs but think that having a longer gap between WG I and the other WG reports would have a detrimental impact on the assessment report and the production of the Synthesis Report, in that the output of Working Group I could be outdated by the time the Synthesis Report is published. We do not have an objection to more Special Reports and Technical Papers on cross-cutting issues but topics should always be selected based on need
C. Increasing the readability and usability of Assessment Reports	The UK would like to see the inclusion of professional writers and design specialists in the SPM writing teams. The UK would like to see the previous option “User consultation to gain more insight into how the IPCC might better tailor its products to user needs” reinstated.
D. Digitalization	The UK requests that the IPCC consider using electronic media and web-based tools more
II. Organization of the IPCC	
A. IPCC Structure	The UK’s preference is for Option 1, retain the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI).
B. IPCC Secretariat and TSUs	The UK supports a more flexible approach to the delivery of TSU activities to get broader engagement from Governments.

	If Governments feel it is necessary, the UK could support option 1, further clarification of the roles of the IPCC Secretariat and the TSU's at the beginning of an assessment cycle The UK supports Option 2, international recruitment, for senior and scientific staff. Options 3 and 4 require further elaboration of the details before firm views can be given
C. Selection of and support to authors and improving the writing and review process	The UK endorses enhanced collaboration with other relevant international organisations. The UK endorses the need for the implementation of best practice in the selection of authors and to provide appropriate support to their activities. Further consideration should be given to individual options once the results of the questionnaire on selection of authors and the management of the review process for IPCC reports are known.
III. Involvement of developing countries	
A. Improving support for Developing Country (DC) Co-Chairs, participation in the Bureau and TSUs	All four options have merit and are not mutually exclusive, we could support them all. In general the UK supports option 4 - give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and as reviewers. This could be supplemented by asking Co-Chairs to report back to plenary on their actions. This option does not exclude the implementation of some of the other options but allows the Bureau the flexibility to develop strategies to reflect specific circumstances.
B. Developing country participation	The UK fully supports actions that would expand meaningful participation from DCs. It notes that other organisations may be able to help expand participation e.g. National Academies.
C. Accessing non-English language literature	There are some interesting options to enhance the inclusion of non-English language literature in the IPCC however more detail is required to understand the scale and implications of what is being suggested. The UK suggests that the IPCC should consider a strategy for working with other organisations to increase developing country participation e.g. National Academies might help identify potential participants and non-English literature, and facilitate translation.
D. Options for support and training of (young) scientists	The mandate of the IPCC is to provide scientific assessments of climate change and not to undertake support and training activities for scientists. It could however encourage other organisations to provide appropriate support.

GOVERNMENT OF THE UNITED STATES OF AMERICA

Future Work of the IPCC

USA Comments on Further Refined Options Paper

I. Products, their timing and their usability

A. Options for product types and their timing

1) *Maintain the current 5-7 years assessment cycle of comprehensive ARs together with the three-stage review process, supplemented by SRs and MRs.*
2) *Both Summaries for Policymakers (SPMs) of the reports and the Synthesis Report (SYR) are the main products of the IPCC, for which the scoping on cross-cutting issues should start at an early stage and could be revisited by the Panel at a later stage.*
3) *Produce MRs or good practice guidance reports which would enable and assist countries and regions in preparing regional and/or national scientific assessments.*

The U.S. supports all three of these options, with some caveats.

Timing

- It is important for the IPCC to be mindful of the timing of the UNFCCC process, as the UNFCCC is a primary audience for IPCC products. It will be difficult to align this timing perfectly, as both the scientific advances (IPCC domain) and policy negotiations (UNFCCC space) will evolve, so a degree of flexibility is needed in the IPCC process; hence, we support a **5-7 year assessment cycle while maintaining flexibility in the interim to produce Special Report(s)** as needed on key topics that are either confined within one working group's purview or that are cross-cutting in nature.
- In addition to the broader issue of Assessment Report cycle timing, greater thought needs to be given to the timing of each of the three Working Group contributions in relation to one another. There were two problems with the AR5 cycle in this respect: (1) WG2 was not offset enough from WG1 to allow the model output from the WG1 community to be utilized – and published – by the WG2 community (which has in fact been an issue in previous IPCC assessments, as well), and (2) The review processes and approvals of the WG2 and WG3 reports were far too close together. As a result, we strongly recommend more of staggered schedule among the Working Groups, such that there is sufficient time for one Working Group to incorporate and reflect the output of another. For example, one option would be **staggering the publication of WG2 behind WG1 by (at least) a year**. In WG3, the body of literature assessed (i.e., concentration scenarios vs RCPs) is - and the models used (i.e., IAMs vs GCMs) by that community are – generally independent of WG1 and WG2 in many respects, so it can be produced, say, ~4-6 months after WG2**. Another option would be to release the Physical Science report one year, the Mitigation Report 4-8 months later and the adaptation report 4-8 months after that.**

Synthesis Report

- In addition to the traditional early scoping of the Synthesis Report (SYR), we suggest the **appointment of a team of experts dedicated from the start of the AR6 cycle to identify issues worth considering for the SYR**. The scoping of the SYR will have to be iterative in nature, largely being determined by what is ultimately assessed in the WG reports and suggested by this Team of Experts. An initial scoping of the SYR would be approved by the Panel as a whole. This Team of Experts (which could be a group of authors across the WGs, the Vice Chairs, some combination thereof, etc.) would then be charged with elaborating that initial scoping, as appropriate. Any additions, revisions, etc. to the initial scoping would be presented to the Bureau and if the Bureau deemed those changes substantive enough, the revised scoping would be sent back to the full Panel for approval.

Report Contents

WG1:

- Expand upon regional information contained in annex of WG1 AR5 report (i.e., add text to provide important context). This information should be combined with regional information in WG2 to produce a separate **Regional Information Volume** that does not require an additional Approval Session, but does have an Executive Summary that would go through the traditional multi-phase review process. The intent here is to elevate the regional information contained in the IPCC reports, especially since the amount of such information will only continue to increase during the AR6 cycle.

WG2:

- During the AR5 cycle, it became abundantly clear that the exponential growth in regional impacts information makes retaining WG2 in its current form an unsustainable proposition. **There should be less, not more, theoretical information on adaptation and decision-making.** That information is most appropriate in the regional and sectoral chapters where the discussion can be grounded in practical action and not in generic discussion chapters with key messages that must be over-generalized.
- In addition, as noted above, the regional information should be combined with the observations and projections contained in the WG1 assessment to provide a more holistic presentation of the state of knowledge on regional climate change. This information should be combined with the regional information in WG1 to produce a separate **Regional Information Volume** that does not require an additional Approval Session, but does have an Executive Summary that would go through the traditional multi-phase review process.
  - The creation of this more focused, deliberately-designed Regional Information Volume is responsive to the many calls we have heard throughout the TG on the Future of the IPCC process to elevate regional information. An expansion of this regional information could be the single most effective action we could undertake with developing countries because it could also engage more developing country authors and build that needed capacity.

WG3:

- **Retain focus on mitigation**. Specifically, in our view, the middle chapters of the WG3 contribution to AR5 were the most valuable (i.e., drivers and trends; energy systems; sectoral mitigation opportunities; etc.). Here too, we strongly recommend there be less, not more, theoretical and conceptual information.

B. Options for cross-Working Group collaboration

1) *Enhance cooperation between WGs such as joint meetings, joint workshops, cross- WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics. Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.*
2) *Produce more SRs and TPs on cross-cutting issues.*

The U.S. support Option (1).

- On Option 1: In addition to what we state under the previous response (which we do not reiterate here, but confirm our position), we note that an additional challenge from AR5 was the **difficulty in assessing information across WGs** – specifically from WG1 & WG2 vs. WG3. A few examples that complicate communication and comprehensibility of the reports to policymakers and lay audiences:
  - Mitigation costs assessed in WG3 cannot be directly compared to costs of impacts cited in WG2
  - Concentration scenarios using CO_2e were used in WG3, whereas RCP scenarios focusing primarily on CO_2 were used throughout WG1 and WG2

  Issues of this sort can be addressed only by **cross-working group coordination at the very start of the assessment cycle**. Furthermore, we think that greater cross-working group coordination and collaboration at early stages can produce the kind of true synthesis that to date has not always been possible in the SYR. We, therefore, think the issue of cross-working group coordination is directly linked to the SYR options above.
- On Option 2: While, in theory, more Special Reports (SRs) and Technical Papers (TPs) could be useful, we are cognizant of the heavy demands this would put not only on the TSUs and other operational entities of the IPCC, but also the scientific community. Therefore, we are **not supportive of expanding the number of SRs and TPs**.

C. Other issues raised:

a. <u>Options to increase the readability and usability of Assessment Reports</u>
The Panel would need to decide when in the process it would be most useful to incorporate such guidance/input.

The U.S. feels early involvement of science communicators – particularly in the Executive Summaries, Figures, Tables and Summaries for Policymakers – would be helpful in providing effective and lasting improvement to the readability and usability of Assessment Reports. The question is how to achieve this while maintaining the present consensus-based government approval process driven by the science, which is essential to the credibility of the SPMs, and the reports more broadly. Such expert science communicators could be utilized, as appropriate, by author teams in their initial drafting phase and could serve a sporadic

consultative role until the Approval Session. We would not support having science communicators directly involved in the Approval Sessions.

b. Options for digitalization

The U.S. does not have particularly strong views on digitalization, though we are cognizant of the increased costs - both financial and in terms of human resources – and the paramount need to ensure robustness of credibility of the science.

II. Organization of the IPCC

A. Options for IPCC Structure

1) *Retain the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI).*
2) *Retain three WGs and the TFI but expand the mandate of WG I to include observed and projected impacts.*

The U.S. supports Option 1.

We direct readers to our response to Topic I.A. "Report Contents" for a more detailed presentation and justification for our view of how the contributions to the AR6 should be structured.

B. Options for the IPCC Secretariat and TSUs

1) *Further clarify the roles of the IPCC Secretariat and the TSU's at the beginning of an assessment cycle regarding, for example, administrative, operational and general coordination matters.*
2) *International recruitment of professional TSU staff – selection, performance appraisal and contract extension by both Co-Chairs of a WG/TF, with involvement of the IPCC Chair and Secretary of the IPCC.*
3) *A TSU could be comprised of both developing and developed country institutes and managed by the two Co-Chairs of a WG/TF. Financing could be sourced from several countries and be managed and coordinated by the IPCC Secretariat or the institutions involved.*
4) *In order to divide the workload, SRs could have a designated TSU working in collaboration with the WGs/TFI TSUs.*

The U.S. supports option 1 and option 2.

- The Panel should not be over-prescriptive of the relationship between the Secretariat and the TSUs. Moreover, neither the Secretariat nor the TSUs should micro-manage the work of

the other. However, a common understanding of respective roles and responsibilities throughout the AR6 cycle should be in place from the start.

- Our understanding is that international recruitment of professional TSU staff already occurs, though we are supportive of taking a more pro-active and widespread approach to attracting the best and brightest from around the world.
- Splitting the duties of a TSU between two different institutes in two different countries could introduce complications, including – but not limited to – communications breakdowns that could affect timelines and the integrity of the report. We support the idea of having developing country co-Chairs have more scientific support to allow them to be more engaged. We also support the idea of developing countries hosting TSUs.
- We do not think it would be effective or efficient to establish new TSUs for Special Reports, though temporary, additional staff could be added to the existing TSUs to provide the support needed to complete an SR while the WG reports ramp up. Some of the same issues that plague a possible split-TSU in Option (3) could apply to this option, as well. In addition, there would also be substantial cost implications associated with the creation of a SR-specific TSU.

C. Options for selection of and support to CLAs and LAs and improving writing and review process

1) *Exploring ways to enhance collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies.*
2) *Expand cooperation with regional institutes and universities from DCs in particular.*
3) *Assist the LAs in their tasks with IT, for instance with reference management.*
4) *Appoint research assistants to support the work of the TSUs and/or the CLAs.*
5) *Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.*
6) *Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC) to increase inclusiveness in the selection of experts.*

The U.S. supports options 1 through 5, pending the availability of resources.

Our reluctance to endorse Option 6 stems from our concern over the ability of such a process to sufficiently assure governmental support of authors to meetings, where needed. If this can be assured at some point in the process, we are open to considering this option. One possible option would be to make this a two-stage process. The IPCC would have open nominations, then share those nominations with the country of origin for the nominees. Member nations would then go over the pool through their regular process and submit a slate of nominees formally to the IPCC. One of the biggest issues we have with this proposal is that it potentially

takes control of nominations away from Member governments, which have to not only support the participation of their authors (in the case of developed countries), but also approve the products. A two-stage process as above may address issues such as these. People could then nominate themselves or others, with the government(s) then selecting CLAs and LAs based on how well they meet the criteria and represent a broad cross section of country and gender balance.

III. Involvement of Developing Countries

A. Options to improve support for DC co-Chairs, participation in the Bureau and TSUs

1) *Employ more experts from DCs in the TSUs through international recruitment of staff. Capacity building for scientists from DCs could happen by way of secondments to the TSUs.*
2) *Give stronger support to Co-Chairs from DCs, including the possibility of hosting a TSU in one of their countries or locating the TSU for a WG/TF in more than one country, while exploring alternative funding arrangements e.g. by a consortium of countries. [Note this option also appears under the heading of options for the IPCC Secretariat and TSUs].*
3) *Revise if necessary the TOR for the Bureau to ensure more active participation of Bureau members from DCs to address their regional role on outreach.*
4) *Give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and as reviewers.*

The U.S. supports Options 1, 3 and 4, pending the availability of resources.

- To be clear, the U.S. does not oppose IPCC agreeing to host a TSU in a developing country or providing more support to co-chairs from DCs as suggested in Option 2, but we do not support the idea of locating the TSU in more than one country as we feel that would pose logistical, administrative and operational challenges that would ultimately do a dis-service to the IPCC. These views are reflected in Part II.B., as well.
- Moreover, with respect to Option 1, we note that the IPCC is a scientific assessment body, not an institution with the mandate to conduct capacity building.

B. Options to increase developing country participation

1) *Ensure a mixture of experts and provide them with adequate training.*
2) *Increase the number of Expert Meetings and Workshops in DCs to enhance the visibility of the IPCC.*
3) *Explore further ways to broaden the nomination of authors and expert involvement in the review processes.*

The U.S. supports the intent of Option 1 as well as Option 3, pending the availability of resources.

- Indeed, more concerted efforts should be made to recruit authors at all levels and TSU staff from developing countries. However, as we noted in above in Part III.A., the IPCC does not have the mandate to be a capacity building institution. Any training can and should be incorporated into initial Lead Author meetings to ensure all experts are aware of their responsibilities, as well as the opportunities for them to engage and be scientific leaders.
- We are not convinced that holding even more meetings in developing countries would be an effective way to increase the visibility of the IPCC in these countries. The IPCC already does a lot of this. Similarly, the proposal to "raid" the Green Climate Fund to support DC participation in the IPCC seems naive.
- As we have stated in previous submissions, we strongly support more active, early engagement with international scientific institutions, such as IAI, START, APN, TWAS, IAC, etc. as a useful means of raising the visibility of the IPCC and attracting young, emerging experts in developing countries, in particular.

C. Options for accessing non-English language literature

1) *Establish (or use existing) regional committees or networks to improve access to non-English language literature.*
2) *Approach authors of such literature to provide expert opinion or specific inputs on particular topics.*
3) *Identify, in consultation with governments and international agencies, relevant government reports and literature published in languages other than English, in particular from DCs. A UN-based language service could assist in translating such documents and authors of such literature could be approached to provide expert opinion or specific inputs on relevant topics.*

The U.S. supports options 1 and 3, with some caveats and pending the availability of resources.

- Regarding Option 1, while we don't support the creation of new networks, we feel it could be useful to utilize existing scientifically-credible regional networks of experts (including some observer organizations of the IPCC) during the early stages of report development to access and consider non-English literature, perhaps in response to open solicitations from CLAs, as appropriate.
- Option 3 is resource-constrained, of course, but we also do not feel it is necessarily essential for foreign-language materials to be translated to English in their entirety to be included. Rather, relevant authors fluent in the language of the material under consideration should be consulted regarding the value of that particular report's inclusion.
- With regard to option 2, we support the involvement of non-English speakers in the Assessment development process but we would, of course, need to follow standard IPCC processes that preclude allowing individuals to opine as experts on behalf of the IPCC.

D. Options for support and training of (young) scientists

1) *Provide more funding to young scientists in DCs to participate in IPCC work.*
2) *Increase the number of young scientists from DCs in the staff of TSUs.*
3) *Provide support to DC scientists and experts to enhance and share regional research and knowledge as part of IPCC outreach activities. The support could include holding conferences, workshops and meetings to share knowledge and enhance capacity building, and partnering with academic institutions in DCs to provide training in climate assessment (using WGs reports as learning and teaching resources in universities for example).*
4) *Develop a training programme or summer school for younger skilled researchers from DCs to participate as junior scientific staff at each TSU.*

The U.S. supports Options 1 through 3, pending the availability of resources.

- Option 4 strays a bit beyond the remit of the IPCC. However, a variant of this - which we should consider - would be to convene a meeting of IPCC Scholarship Programme alumni to present their research, which could then be considered as inputs to future IPCC products.

EUROPEAN UNION

FUTURE WORK OF THE IPCC
COMMENTS OF THE EUROPEAN UNION

I. Products, their timing and their usability

A. Options for product types and their timing

1) Maintain the current 5-7 years assessment cycle of comprehensive ARs together with the three-stage review process, supplemented by SRs and MRs.
2) Both Summaries for Policymakers (SPMs) of the reports and the Synthesis Report (SYR) are the main products of the IPCC, for which the scoping on cross-cutting issues should start at an early stage and could be revisited by the Panel at a later stage.
3) Produce MRs or good practice guidance reports which would enable and assist countries and regions in preparing regional and/or national scientific assessments.

EU: we can agree with all three options. However, we underline the need of aligning with the UNFCCC needs, and adapt the "traditional" frequency and time span accordingly.
We particularly support option 3), in particular for supporting regional clusters to produce regional assessments with an appropriate methodology.
On SRs, these could be better integrated in the AR cycle, so that they form a part of the AR and save duplication of efforts.

B. Options for cross-Working Group collaboration

1) Enhance cooperation between WGs such as joint meetings, joint workshops, cross- WG collaborations at various levels of engagement i.e. between authors, and between Co-Chairs on various topics. Change the timing of the WG reports, to allow a longer gap between WG I and the other WG reports (especially WG II, which relies on model output from the WG I community) to provide the other WGs enough time to incorporate the newest WG I findings into their reports.
2) Produce more SRs and TPs on cross-cutting issues.

EU: cross WG cooperation is essential, and should be the main novelty of the 6th Assessment Report. We have proposed in fact – as it is mentioned elsewhere in this paper – that the future report should be composed of two instead of three parts: the first part should merge the physical science basis and the impacts, and should be carried out in advance of the second part in relation to the "solution space" represented by mitigation and adaptation. Therefore, the first part would be the result of cooperation between WGI and WGII, while the second part will be the result of cooperation between WGII and WGIII. This setting would allow to avoid what happened in AR5, that the RCP scenarios-based modelling made by WGI could not be used for the job of WGII.
SRs could be used for responding to policy needs more rapidly. It is not sure the value of TPs, given that they only summarise existing IPCC findings and do not contain new elements. They have not been that useful.

Options to increase the readability and usability of Assessment Reports

EU: we agree that professional communication writers may help shaping sentences of SPMs in a more understandable way; however, it has to be well-thought, because the intervention of a writer during the approval session may introduce a further layer of discussion and make the approval session even longer.

Options for digitalization

EU: document IPCC-XL/INF.2 (Annex 1) was not attached

II. Organization of the IPCC

A. Options for IPCC Structure

1) Retain the current IPCC structure of the three WGs and the Task Force on National Greenhouse Gas Inventories (TFI).

2) Retain three WGs and the TFI but expand the mandate of WG I to include observed and projected impacts.

EU: in complement to what already replied for point *I* B, we retain that the division in three Working Groups + FFI may be maintained, but through a more enhanced cross-WG cooperation the Assessment Reports may be composed of 2 sub-Reports [(WGI+ WGII Impacts) + ("solution space" on adaptation and mitigation, WGII + WG III)].

B. Options for the IPCC Secretariat and TSUs

1) Further clarify the roles of the IPCC Secretariat and the TSU's at the beginning of an assessment cycle regarding, for example, administrative, operational and general coordination matters.

2) International recruitment of professional TSU staff – selection, performance appraisal and contract extension by both Co-Chairs of a WG/TF, with involvement of the IPCC Chair and Secretary of the IPCC.

3) A TSU could be comprised of both developing and developed country institutes and managed by the two Co-Chairs of a WG/TF. Financing could be sourced from several countries and be managed and coordinated by the IPCC Secretariat or the institutions involved.

4) In order to divide the workload, SRs could have a designated TSU working in collaboration with the WGs/TFI TSUs.

EU: we think that TFUs should stay where the funding source is. For their composition, the recruitment policy should be based on excellence and open to all nationalities. (Earmarking of some posts for least developed countries might be considered.)

C. Options for the selection of and support to CLAs and LAs and improving the writing and review process

1) Exploring ways to enhance collaboration with other relevant international organizations and assessment bodies (UNEP, WMO, IPBES, etc.) in producing SRs, MRs or TPs in partnership with those bodies.

2) Expand cooperation with regional institutes and universities from DCs in particular.

3) Assist the LAs in their tasks with IT, for instance with reference management.

4) Appoint research assistants to support the work of the TSUs and/or the CLAs.

5) Further enhance the use of chapter scientists to support the writing and review process. Assist the LAs in their tasks with IT, for instance with reference management.

6) Initiate an open (online) process to identify experts (in addition to the current government-led practice of nominations by IPCC) to increase inclusiveness in the selection of experts.

EU: no for option 4 – not sustainable. For option 6, a quality assessment system should be considered.

III. Involvement of developing countries

A. Options to improve support for DC Co-Chairs, participation in the Bureau and TSUs

1) Employ more experts from DCs in the TSUs through international recruitment of staff. Capacity building for scientists from DCs could happen by way of secondments to the TSUs.

2) Give stronger support to Co-Chairs from DCs, including the possibility of hosting a TSU in one of their countries or locating the TSU for a WG/TF in more than one country, while

exploring alternative funding arrangements e.g. by a consortium of countries. [Note this option also appears under the heading of options for the IPCC Secretariat and TSUs].
3) Revise if necessary the TOR for the Bureau to ensure more active participation of Bureau members from DCs to address their regional role on outreach.
4) Give more responsibility to Co-Chairs and other Bureau members to engage DCs in TSUs, author teams and as reviewers.

EU: option 1 can be fine, but the IPCC does not have capacity building tasks. For option 2, we already replied before, expressing a preference to maintain the TSU close to its funding source.

B. Options to increase developing country participation:
1) Ensure a mixture of experts and provide them with adequate training.
2) Increase the number of Expert Meetings and Workshops in DCs to enhance the visibility of the IPCC.
3) Explore further ways to broaden the nomination of authors and expert involvement in the review processes.

EU: it is not in the mandate of IPCC to do capacity building. Development Aid Agencies have this mandate. However, Developing Countries receive aid in the areas they indicate as priority areas for development, and rarely DCs indicate climate change among their priorities.
In the context of IPCC Assessment Reports, the relatively low developing countries participation is linked on one side to the low numbers of DC's authors/reviewers, and on the other side on the relatively low amount of data and of peer-reviewed literature addressing DC's case studies. The EU proposes to add in the document a text like the following: "The IPCC should address a recommendation to all major Research funding agencies to open their climate change research funding programmes to less developed countries, to welcome participation of less developed countries research institutions or scientists in consortia, and to welcome the inclusion in climate change research projects of case studies addressing problems related to less developed countries."

C. Options for accessing non-English language literature
1) Establish (or use existing) regional committees or networks to improve access to non-English language literature.
2) Approach authors of such literature to provide expert opinion or specific inputs on particular topics.
3) Identify, in consultation with governments and international agencies, relevant government reports and literature published in languages other than English, in particular from DCs. A UN-based language service could assist in translating such documents and authors of such literature could be approached to provide expert opinion or specific inputs on relevant topics.

EU: we suggest that the methodology for Regional Assessments – as suggested under *I* A 3) – should address this issue. For the use of non-peer-reviewed literature written in non-English language, the IPCC rules for non-peer-reviewed literature should first apply.

D. Options for support and training of (young) scientists
1) Provide more funding to young scientists in DCs to participate in IPCC work.
2) Increase the number of young scientists from DCs in the staff of TSUs.
3) Provide support to DC scientists and experts to enhance and share regional research and knowledge as part of IPCC outreach activities. The support could include holding conferences, workshops and meetings to share knowledge and enhance capacity building, and partnering with academic institutions in DCs to provide training in

climate assessment (using WGs reports as learning and teaching resources in universities for example).
4) Develop a training programme or summer school for younger skilled researchers from DCs to participate as junior scientific staff at each TSU. (See paragraph below).

EU: see EU reply to point III B.

IPCC-XL Doc. 13, Add. 1 'Further Refined Options Paper'

Submission of the WGI Co-Chairs and Technical Support Unit

The Working Group I Co-Chairs and TSU appreciate the opportunity to provide comments to the Co-Chairs of the IPCC Task Group on the Future of IPCC on the content of the 'Further Refined Options Paper'. As requested, the structure of our submission follows that of the Options Paper.

Our responses are based not only on our collective experience working with the IPCC, but also on the feedback provided by authors collected through the WGI Questionnaire for WGI AR5 Authors and Review Editors. A synthesis of the results is available from the WGI AR5 website at http://www.climatechange2013.org/contributors/wgi-questionnaire/. The input of the WGI Co-Chairs and TSU also builds from our collective experience in past assessment cycles, including past involvement as WGI Co-Chair, CLA, and TSU member during the AR4.

I. Products, their timing and their usability

A. Options for product types and their timing

Comprehensive scientific assessment reports have been the cornerstone of the IPCC products and have contributed to the state of knowledge on climate change for over 20 years. They were invaluable for the policymaking process as they provided objective and robust scientific information on climate change, and thus a scientific basis for decision making. The value of the IPCC products lies in the regular sequence of comprehensive, end-to-end reports, each of which has provided the state of knowledge at the time of publication. Together they have assessed the progress of the scientific understanding of climate change in the past 25 years.

The WGI Co-Chairs generally support maintaining the current 5 to 7 year assessment cycle of comprehensive assessment reports, supplemented by special reports and methodological reports. A slightly longer assessment cycle would however allow for a longer period between the WG reports. This would facilitate a much better and pervasive incorporation of the WGI findings, including many of the quantitative analyses, into the WGII and WGIII assessments. An improved utilization of assessment findings is also an investment into a more powerful synthesis of the material at the end of a cycle.

A longer cycle would permit more time to analyse the vast amount of scientific literature and climate modelling results (e.g., in the WGI AR5 the authors assessed more than 9200 scientific papers and analysed over 2 petabytes of numerical data).

As the information to be comprehensively assessed has increased, so has the scope of the report -- the WGI contribution has grown from 365 pages (FAR) to 1535 pages (AR5). In consequence, the burden on the scientific community and the expectation of what can be asked of those who serve the IPCC in a voluntary capacity is reaching a critical threshold. Thus, the WGI Co-Chairs would urge that the future work programme and schedule for the sixth assessment cycle be developed with these constraints in mind and that practical consideration be given to increasing the support of the authors who serve in a leading or cross-WG role.

B. Options for cross-Working Group collaboration

The WGI Co-Chairs and TSU agree that cross-WG collaboration needs to be further developed and enhanced. This is an important component for consistency across the WG reports and provides the basis for a successful Synthesis Report (SYR). We note the positive experiences of the cross-WG Expert Meetings and Workshops during the AR5 and would support strengthened cooperation through these options. Cross-WG special reports (e.g., SREX) have also been effective and we would support a work programme to include Special Reports on highly policy-relevant cross-WG topics. However, there is a limited capacity to develop special reports at the same time as a full assessment report and priorities will thus need to established.

Cross-WG collaboration also crucially depends on the time available for such work. A longer assessment cycle (e.g., 8 to 10 years), would offer many opportunities to strengthen collaboration, enhance consistent utilization of findings and quantitative results period and produce integrated projections of, for example, climate change and impacts.

C. Other issues raised:

Options to increase readability and usability of Assessment Reports

The WGI Co-Chairs and TSU acknowledge that the AR5 WG and SYR Summary for Policymakers still include a large amount of technical detail and might not be easy to digest for non-expert readers. The new feature of Headline Statements has been introduced by WGI in order to increase accessibility and readability of the SPM. Taken together, the headline statements provide a concise and coherent summary of the assessment findings. The Co-Chairs of WGI and the TSU propose that this be adopted for all high-level documents of the IPCC.

Moreover, still less technical SPMs could be attractive, but the scientific accuracy must remain the top priority. WGI has had positive experience with professional Science Writers working on the set of Frequently Asked Questions in AR4 and AR5. We question, however, the usefulness of this approach for the highest level IPCC documents and the line-by-line approved SPMs which often experience substantial changes during the approval plenaries. The balance of scientific accuracy and comprehensiveness with simplicity and readability needs to be carefully considered.

D. Options for digitalization

The WGI Co-Chairs and TSU acknowledge the increasing demand for accessibility of data used in IPCC assessments and this is why WGI has provided digital data of the Atlas of Global and Regional Climate Projections as well as digital data of Scenario information. It is important to caution against dynamic figures and other information that may be custom-managed, as such information could be modified in ways that may go beyond what was assessed by the authors. A further concern is long-term storage and maintenance of such data. Finally, data property rights need to be considered carefully which prevents IPCC from making generally available published works, reports, papers and other material.

II. Organization of the IPCC

A. Options for IPCC structure

The WGI Co-Chairs and TSU support the current IPCC structure with three Working Groups and the Task Force on National Greenhouse Gas Inventories. On the discussion of expanding the mandate of WGI to include observed and projected impacts, we do not have a strong opinion. A merger would only be sensible if it reflects a similar process in the scientific community and in international science programs, (i.e., the production and availability of peer-reviewed literature on impact studies that is based on WGI observations and projections). Any decision would, however, need to balance the benefit of bringing the impacts on natural systems closer to the assessment of the physical science basis with the downside of separating the assessment of impacts of natural and human systems between WGs I and II.

B. Options for the IPCC Secretariat and TSUs

The WGI Co-Chairs support the continued use of international recruitment for professional staff and recognize the value of regional representation within the TSU. We emphasize that during the WGI AR5 process the WGI TSU included nine full-time employees, with the members of the TSU representing seven nationalities, both from developing and developed countries, from four of six IPCC regions. The WGI Co-Chairs and TSU would welcome a number of proposals for enhanced developing country participation within the TSU (please see our comments under Section III).

The WGI Co-Chairs reaffirm the need for a strong TSU to support the work of both of the Co-Chairs and the entire WG Bureau in the fulfillment of their mandate and in the development of the WG products. This requires a very close working relationship between the Co-Chairs, the WG Bureau members and the members of the TSU and a high degree of flexibility in the working arrangements in ensuring the best possible support for the WG. The effective support of the WG Co-Chairs must remain the top priority of the WG TSUs.

The effective support of the Co-Chairs, the WG Bureau, and the assessment process includes the need for high-level scientific, technical, operational and administrative support within the WG TSU with short decision paths and clear responsibilities. The WG Co-Chairs, in collaboration with the WG Bureau, must be the ones responsible for the overall coordination, budget, administration, IT, meeting logistics, and communications and outreach of the Working Group.

The WGI Co-Chairs and TSU do not support proposals for dedicated TSUs for Special Reports or other products during a cycle. For the proper and effective functioning of a WG, one stable TSU attached to one of the Co-Chairs is paramount to successful and timely delivery of mandated products. Separate TSUs for different products during one cycle pose challenges of management, information flow, quality control, continuity of service, and definition of responsibilities that, together, will create significant inefficiencies and consequent unnecessary increases in cost of operation.

C. Options for selection and support to CLAs and LAs and improving the writing and review process

Our collective experience and the input received from the WGI authors and the broader scientific community strongly suggests that certain changes are needed to the modus operandi to ensure the continued success of the IPCC. This is irrespective of the WG structure.

The enormous progress of climate research and related fields during the past 20 years has lead to a very large growth in the amount of research findings and consequently the number of publications in the peer-reviewed literature. Just for illustration, a search for 'climate change' in the Thomson Reuters Web of Science yields 7,106 articles from 1900 to 2000, the time of the third assessment report. More than 110,000 articles published since 2001 include the term. The mandate of a comprehensive assessment therefore confronts the CLAs and LAs with ever growing challenges of digesting the scientific material according to a schedule and level of support that has been essentially unchanged during the past 20 years. This is evidenced by the page length of reports and the number of review comments which are at an all time high. The focus on post-approval outreach and communication has resulted in an overall longer time commitment to the assessment cycle for authors. As the time commitment required to produce an assessment report has grown, the support has not. What has remained constant is the need for rigor, robustness, comprehensiveness and transparency of the assessment.

To ensure the quality of the IPCC reports and the effectiveness of the authors who write them, serious consideration must be given to providing additional support for the authors volunteering their time, and in particular, to CLAs. During the AR5 some additional support has been provided to the authors by the TSU such as, e.g., through the use of document management platforms, referencing software, plagiarism checks, etc. However, the WGI Co-Chairs strongly support the proposal of dedicated assistance through the provision of research assistants for CLAs. Indeed, the WG Co-Chairs and TSU suggest that this should be considered to become a standard approach in future assessments. We also support the proposal for enhancing the use of chapter scientists and/or assistants to provide scientific and technical support to the author teams in their writing and review process. However, terms of reference for chapter scientists or assistants would need to be formulated and clear reporting lines within the WGs would need to be developed.

Although not currently discussed within the options paper, the WGI Co-Chairs and TSU would highlight two other points for consideration for the writing and review process. Perhaps they are better taken-up at the next step, when the IPCC Procedures are reviewed, but we include them here for completeness:

1. **The review process.** The review process is integral to the quality assurance of the IPCC products. However, the expert review component has grown from a peer-review by experts to a world-wide, internet-based review without a clear definition of what constitutes 'expert'. The overall number of comments submitted is at an all time high (54,677 for the WGI Chapters, TS and SPM) with a resulting increase in the workload required to respond to each comment. The number of non-substantive comments has been a major frustration for an already over-burdened author team. This aspect of the assessment process needs to be considered and effective changes could be implemented that would reduce workload but not compromise the rigor of the review process. We propose that the procedures could be amended to allow authors to not respond in detail to non-substantive or unsubstantiated comments. In addition, we would urge that the criteria to serve as an expert reviewer be clarified to ensure that the experts submitting a review have similar standards and scientific expertise as the members of the author teams.

2. **The role of the Review Editors (REs)**. Throughout the WGI AR5 process, Authors and REs alike have struggled with the current role of the RE. Many have expressed concern or dissatisfaction with the role, questioning the general usefulness of the role as currently defined. Some REs have suggested that the role be expanded to allow for either more "control" over the content of the chapter or the ability to submit their own reviews of the chapter. However, many authors voiced concern beyond the usefulness with the RE role, with several commenting that the REs were more of a hindrance than a help and that some of the REs pushed their own views onto the author team. The role of RE was constructed for a specific purpose and it is good to reflect on whether this role still serves that purpose.

III. Involvement of developing countries

The participation and contribution of experts from developing countries is a key component of the IPCC. The WGI Co-Chairs and TSU would seek early and increased involvement by experts from developing countries.

A. Options to improve support for developing country Co-Chairs, participation in the Bureau and TSUs

The WGI Co-Chairs support the continued use of international recruitment for professional staff, including hiring of scientists from developing countries. In fact, during both the WGI AR4 and AR5 the WGI TSU scientific staff included young scientists from developing countries. The WGI Co-Chairs and TSU would greatly appreciate the ability to have additional scientific staff in the TSU and would support the suggestion of a secondment to the TSU to increase capacity building.

During both AR4 and AR5, the WGI Co-Chair from China was provided full scientific and operational support through the WGI TSU, located in the USA (AR4) and Switzerland (AR5) at every stage of the process. In addition, he received support through individuals affiliated with his home institution. These individuals provided valuable support, often coordinating with the TSU to ensure the best possible support, including translation of key documents in advance of pivotal deadlines. It is proposed that all Co-Chairs should receive local support by individuals at their home institutions to enhance overall support. Where funding is an issue, perhaps the budget item assigned to the DC Co-Chair could be used for this purpose.

During both AR4 and AR5, all WGI Bureau members were provided scientific and operational support through the WGI TSU. This included, for example, the organization of periodic WGI Bureau meetings to ensure regular communication and facilitate decision-making; preparing additional information and materials in support of each phase of the process, (e.g., compiling nominations and providing bibliographic and professional information on each expert in support of author selection); coordinating the logistics of WGI meetings and outreach events held in WGI Bureau member countries; and responding to requests for information or assistance as needed.

B. Options to increase developing country participation

The WGI Co-Chairs support the proposal to increase the number of Expert Meetings and Workshops held in developing countries. We would expand that proposal to also include other IPCC meetings, including WG Lead Author meetings and IPCC Bureau and Panel Sessions. It was our experience in WGI that hosting meetings in developing countries provides multiple opportunities for capacity building, (e.g., through outreach events held in conjunction with the meeting) and significantly increases the visibility of IPCC to the next generation of scientists. The role of respective IPCC Focal Points and Bureau members could be enhanced.

The WGI Co-Chairs propose that awareness of available experts in DCs is increased, i.e., in both ways: experts are better known by IPCC WG Bureaus and IPCC is better known by the experts working in DCs. This could be achieved by outreach events on IPCC, its purpose and processes, including the most pressing science questions before the nomination process. The involvement and unique role of the IPCC Focal Points must be stressed in this regard. The WGs need the Focal Points to assist in identifying experts from their countries and regions during nomination and review processes, indeed throughout the entire assessment cycle. Special emphasis needs to be placed on new experts, particularly those with recent PhD degrees. We note that of the over 150 IPCC member DC/EIT countries, only 44 submitted nominations for the WGI AR5. Moreover, only 18 IPCC member DC/EIT countries submitted a review during the government reviews of the WGI AR5. The additional participation by Focal Points in all steps of the IPCC assessment process, from scoping to nominations and from reviewing to outreach activities, will significantly and immediately increase the participation and contribution of developing country experts.

C. Options for accessing non-English language literature

The WGI Co-Chairs support attempts targeted to enhance the access to non-English language literature as part of the assessment process. It will be important, though, that 'contributions should continue to be supported as far as possible with references from the peer-reviewed and internationally available literature' as stated in Section 4.3.3 of Appendix A to the Principles Governing IPCC Work, and supplemented by Annex 2 of Appendix A to the Principles Governing IPCC Work where the procedure on the use of literature in IPCC Reports is further detailed.

D. Options for support and training of (young) scientists

The WGI Co-Chairs support the need for a transition from capacity building to capacity implementation. After more than 25 years of capacity building in climate change science, a new generation of scientists from developing countries is now ready to contribute in responsible positions to the IPCC assessment. This new generation needs to be actively recruited, involved and promoted for the participation in expert meetings, workshops, and the scoping and assessment process. The WGI Co-Chairs and TSU also support increasing the number of young scientists from developing countries in the TSUs. The WGI Co-Chairs and TSU would also suggest that young scientists from developing countries could become involved by serving as chapter scientists. Most importantly, the next generation of scientists from developing countries should be made aware of, and available for, the nomination process of the next assessment cycle as early as possible.

Vicente Barros, Co-Chair Working Group II

Enhancement of developing countries participation in the IPCC future work

IPCC was successful to inform the public and leadership of the world about CC and to increase awareness about it with greater impact in the developed world. This achievement was important since developed countries were the main source of GHG emissions when IPCC reports started in the 90s.

There is so far less public concern about CC in developing countries (DCs) at the time when there is a growing consensus that the solution to CC will require commitments from a great part of the developing world, mainly from the emergent countries.

Participation of DC authors in IPCC contributes to enrich assessments providing local information and literature as well as different visions and approaches, especially on regional problems. But, no less important, an appropriated participation of these authors in the IPCC assessments will enhance DC trust on CC science contributing to reduce suspicions in an environment of complex and sometimes opposite interests. In turn, DCs trust and faith on CC science will facilitate their compromise with CC solutions.

Recent participation from DC and economies in transition (ET) authors

In the fourth and fifth assessment reports, the percentage of authors from DC and ET in the working groups was only 35%[1]. This participation was even lower at higher levels of integration and policy relevance, namely at the technical summaries and summaries for policy makers of the working groups, for example 25 % in AR5. This contrasts with 80 % of global population from DC and ET nations.

In addition, most of DC and ET authors had even less influence on IPCC products, of what is reflected by these percentages. The main reasons are:

- Weak scientific background in some cases.
- Less English fluency (less frequent in other non English native speakers from European countries).
- In certain cases (unfortunately not infrequent), not justified underestimation from developed countries colleagues.

[1] Authors were classified according to the country of their affiliation and in the case of affiliation to an international organization, by their nationality.

The synergy of these factors reduced the influence of DC authors far beyond their numerical disadvantage. The underlying main reason is the general weakness of CC science in DCs. But in addition, IPCC not always obtained the best available human resources from DCs. In some cases author nominations to IPCC did not include the best scientists because of lack of adequate integration between government and the academic world, but also because some high qualified scientists from DCs were reluctant to get involved in the heavy commitment of IPCC work without economic incentives. This attitude is a consequence of their low salaries from their permanent positions and at the same time of profitable temporary contracts that are relatively frequent for them due to the scarce number of high qualified CC scientists.

IPCC has been very active in trying to improve the participation of DC and ET authors with the aim of achieving a better balance with developed countries authors. A specific enabling tool was the Trust Fund that supported travelling from DC and ET authors to IPCC meetings. The mentioned balance, at least nominally aiming at about 40%, was unevenly accomplished across WGs. In addition, the past balance approach resulted not sufficient and can be misused by appointing authors with poor scientific background.

Improving participation from DC and ET authors

Enhancement of past balance policies can be improved by:

- Making available to focal points and all observed organizations detailed explanations of the author selection process.
- Requesting to DC focal points the nomination of their best candidates, outlining the minimum scientific background required.
- Encourage to all observed organizations to make proposals for authors.
- At the selection stage, make a severe screening of candidates using Scopus or other instruments and if necessary increase nominations directly from the bureau of the respective working group.
- Avoid appointments of candidates with little scientific background to simply achieve balance.
- Increase the Trust Fund budget to allow more DC and ET author participation.

In addition, instrument new changes:

- Economic compensation to all coordinator lead authors (CLAs) (from developed as well as from DC and ET countries).
- More participation of DC and ET countries in a revised technical support unit (TSU) system.
- Preparatory workshops in developing regions at the beginning of the assessment cycles.

The last three bullets deserve some further explanation that is given in the following sections.

Economic compensation to all CLAs

This proposal, if implemented, will have implications beyond the issue of DC and ET participation in IPCC. Through its elaborated and participative system, IPCC was able to develop unique and comprehensive assessments of CC science with the support of the scientific community. However, the acceleration of CC science and its growing scope as well as the needs of policy makers will require more frequent and comprehensive assessments, a challenge that will be increasingly difficult to comply without dedicated professional teams.

The IPCC assessments are based with little exceptions on the voluntary work of experts that have other important and demanding activities. The major load of IPCC work rests on CLA shoulders who have the main responsibility in the elaboration of their respective chapters. They constitute the core of the IPCC teams, and therefore creating conditions to improve their labor will result in increasing efficiency and speed on the elaboration of IPCC reports.

Economic compensations under contract[2] for the CLAs could be for about a half full time salary. Assuming an average of 60 CLAs, these would imply a total budget of about 4 to 5 million USD/ year, a relative small amount when compared with the global economic implications of decisions motivated by CC science.

With more impact than in the developed countries, economic compensations for CLAs will facilitate the recruitment of the best candidates from DC and ET strengthening the participation of these countries.

TSU system

As it is now, the TSU system cannot provide to the external public a sense of transparency. The countries hosting the TSUs may be suspected of influencing the process, beyond this happens or not.

The TSUs manage most of the information developed in the assessment cycles. In addition, they have the only paid and full time experts committed to the IPCC assessment processes and because of that can play a crucial role exceeding their necessary functions.

Since the TSUs have been concentrated in a few developed countries, the actual system does not contribute to the DC confidence on the IPCC process and results.

If the actual TSU system is preserved and not replaced by a centralized unit in the Secretary of IPCC, it will be convenient to increase the influence of the scientific community and of the countries which are not managing the TSUs. This can be

[2] Legal contracts not only will assure dedication and timing, but will help to specify responsibilities

partially done by increasing the CLAs weight giving them more responsibilities, especially in the development of policy relevant documents.

Other possible alternative to the actual concentration of the TSUs in a few developed countries could be to involve DC and ET countries in playing an active role in these units by:

- In coordination with the main TSUs, supporting small TSUs for helping DCs and ETs cochairs.
- Encourage some DCs and ETs to host some TSUs. This can start with some TSUs dedicated to special reports.

Workshops in developing regions

Sometimes data and literature from developing regions are not very well known by the international scientific community, either because are not in the English peer reviewed journals or because are of little interest to authors focused in developed regions. To help authors to access to CC knowledge (data and literature) from and on developing regions, it can be organized a set of workshops at the beginning of the assessment cycles. This proposal builds on the success of the WGII regional workshops in the AR5 cycle, which in addition to the detection of literature and data sources, allowed identifying regional problems and possible contributing authors.

These workshops may cover one or many related relevant chapters for each of the four developing regions, possibly in a number of 12 to 15 at the beginning of each assessment cycle and include the respective chapter authors and other scientists and practitioners relevant to the region.