

GLOBAL
I G B P
CHANGE

Mr Dennis Tirpak
Subsidiary Body for Scientific and Technological Advice (SBSTA)
UN Framework Convention on Climate Change (UNFCCC)
P.O. Box 260 124
D-53153 Bonn
GERMANY

28 March 2003

Dear Mr Tirpak,

I am writing on behalf of the International Geosphere-Biosphere Programme (IGBP) in response to the kind invitation of the SBSTA to contribute to the further development of the so-called Brazil Proposal on the scientific basis for the attribution of climate change. We indeed appreciate this invitation and the opportunity for our work to contribute to important policy issues.

We discussed the invitation at some length at the recent meeting of the Scientific Committee of the IGBP in Punta Arenas, Chile. I am pleased to report that the Committee agreed that IGBP should accept this invitation and contribute, as best we can, to the work embodied in the Brazil Proposal.

In accepting the invitation, the Committee offered the following more specific points:

1. Bearing in mind that IGBP's scientific expertise lies in the area of global biogeochemical cycling, the Committee believes that IGBP's contribution to the Brazil proposal work should focus on the development of inventories of climatically important trace gases and particles (aerosols), geo-referenced and through time. This information is clearly of fundamental importance to the aims of the Brazil Proposal.
2. To implement this offer, the Committee agreed to upgrade and reinforce an existing IGBP activity of similar aims. This activity, called GEIA (Global Emissions Inventory Activity) has been part of the IGAC (International Global Atmospheric Chemistry) core project. The Committee decided to extend and upgrade GEIA, which is now to be called Global Exchanges and Interactions Activities. A GEIA Coordinating Group has been formed under the leadership of Drs Claire Granier and Alex Guenther. The group has already met and has decided on a number of specific activities. Many are directly relevant to the Brazil Proposal work and are listed briefly below:

(i) An update of emissions inventories by chemical species and their origins; more detailed specification for volatile organic compounds and for particles (aerosols).

(ii) New work on past and future evolution of emissions. The initial aim is to encompass the period 1900-2100 with a temporal resolution of 10 years. This work is explicitly aimed to contribute to the needs of the SBSTA, and to the IPCC assessments and scenarios.

(iii) Critical evaluation of emissions inventories, through intercomparisons of inventories, use of independent observations and models, and inverse modelling. This work is exceptionally important to reduce uncertainties, to establish confidence in the accuracy of the inventories, and to define limits to their reliability.

(iv) A new focus on emissions modelling, which will allow coupling with atmospheric transport and climate models for future scenario development. Importantly, this work includes a comparison and evaluation of the models.

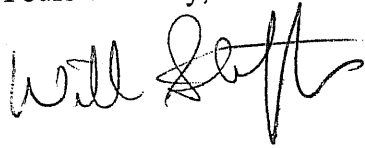
3. The SC-IGBP, although endorsing this IGBP contribution to the work of the SBSTA, sounded a cautionary note. The development of reliable emissions inventories through time and by country/region is neither straightforward nor quick. This will be a long-term effort, perhaps on order of 5-10 years, and will require considerable care to ensure scientific credibility and reliability in terms of the quality of the data. The caveats on the inventories will be important. Thus, the Committee viewed our contribution to work towards the Brazil Proposal as a significant one but one that requires considerable care and time.

In summary, the Scientific Committee of the IGBP authorised me to respond positively to the SBSTA request re: the Brazil Proposal and to offer IGBP's help so far as IGBP's resources and level of understanding allow. More particularly, as noted above, IGBP is extending and upgrading the GEIA activity, which we believe will be in a strong position to make a significant contribution to SBSTA's efforts.

Should SBSTA decide to accept our offer, we will provide you contact details of the GEIA leadership. Please feel free to contact them at your earliest convenience to arrange, in a more practical sense, our contribution to your work.

We look forward to hearing from you soon.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Will Steffen". The signature is fluid and cursive, with a prominent loop at the end.

Will Steffen
Executive Director, IGBP

cc Prof Guy P. Brasseur, Chair, IGBP
Dr Claire Granier, Co-Chair, GEIA
Dr Alex Guenther, Co-Chair, GEIA
Dr David Carson, Director, WCRP