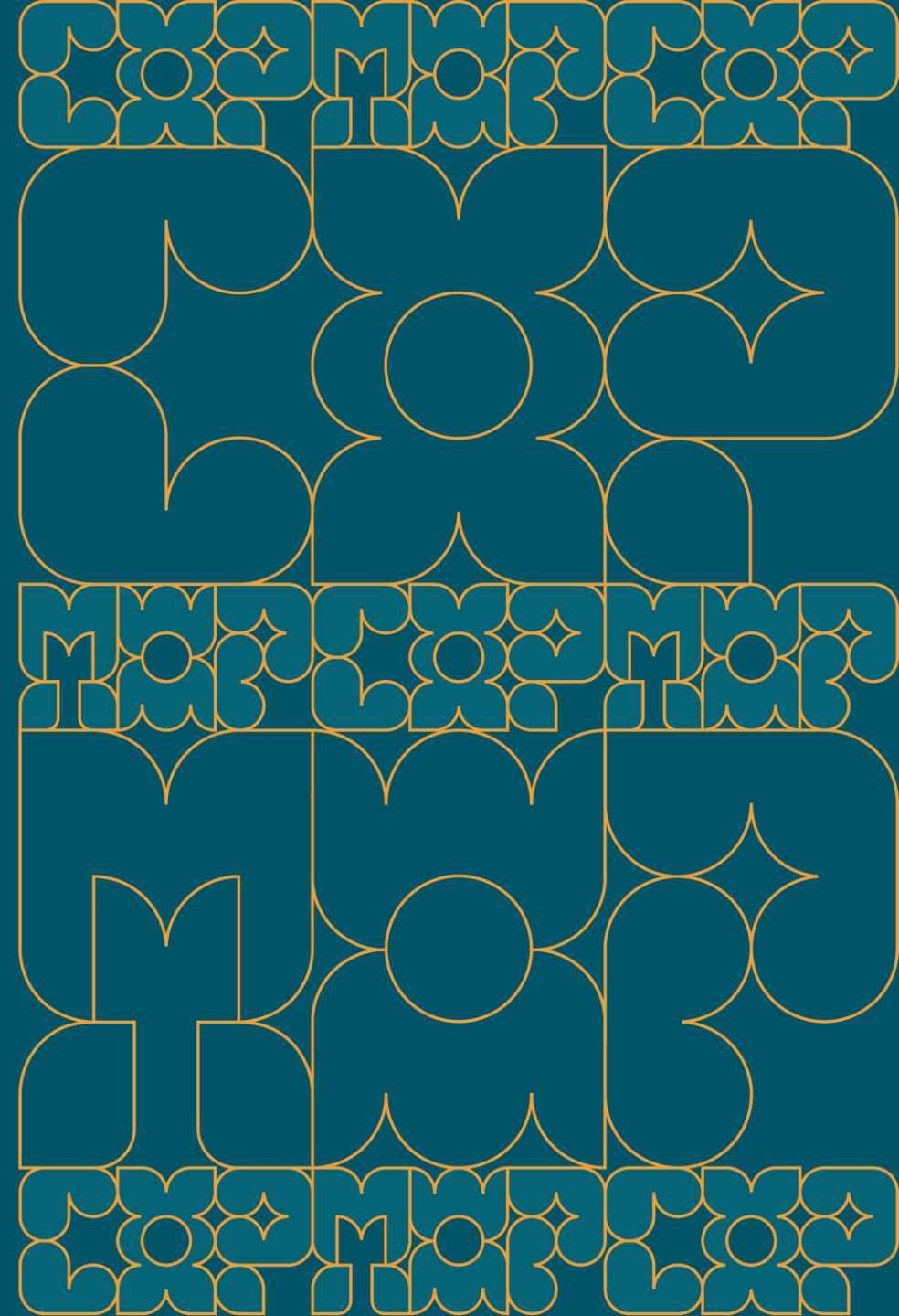


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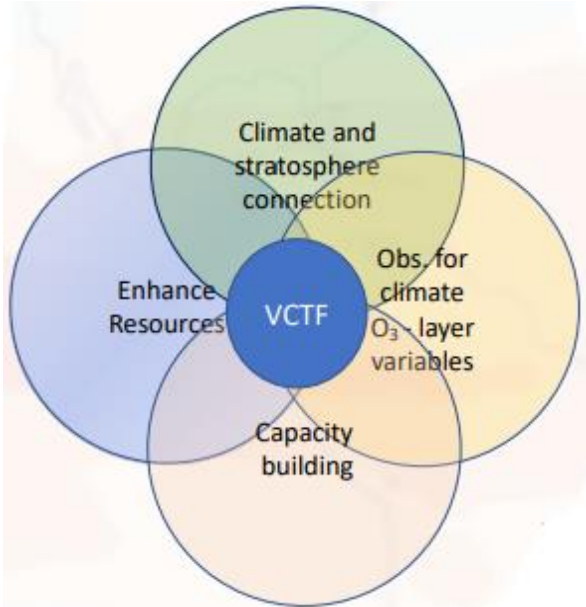
Report of the Advisory Committee of the General Trust Fund for Financing Activities on Research and Systematic Observations Relevant to the Vienna Convention

S. Godin-Beekmann, Chair of the Advisory Committee

Presented by A.R. Ravishankara, Advisory Committee member



Goals of the Advisory Committee of the Trust Fund



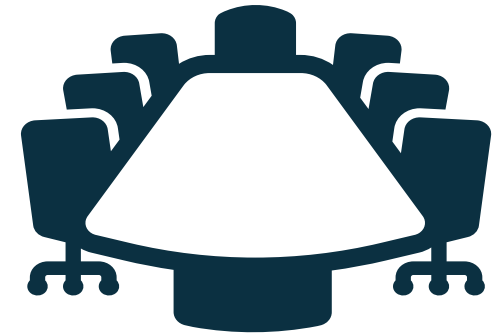
- Established in 2014 (Decision X/3, COP10)
- Mandate:
 - Long-term strategy: implementation objectives of the Trust Fund support & priorities (from ORM overarching goals)
 - Short-term action plan (urgent needs of the Global Ozone and UV Observing system with best possible use of resources)
 - Quality control of individual proposals: regional balance and liaison with proposers for improvement
- Science needs and capacity building : **support for developing countries & CEITs**
- Maintain & extend observations dedicated to ozone layer science – Current focus on total ozone, ozone vertical distribution in the stratosphere and upper-troposphere, surface UV radiation



The present composition of the Advisory Committee

- Lucy Carpenter (UK, SAP Co-Chair)*
- Maria del Carmen Cazorla (Ecuador, ORM Co-Chair)*
- Sophie Godin-Beekmann (France, Chair since 2023)
- Kenneth Jucks (USA, SAP Co-Chair)*
- M. Venkat Ratnam (India)
- A.R. Ravishankara (USA, Chair up to 2022)*
- Wolfgang Steinbrecht (Germany, ORM Co-Chair)*
- Matt Tully (Australia, WMO SAG Ozone & UV Chair)
- Sophia Mylona (UNEP, Ozone Secretariat)*
- Paolo Laj (WMO, GAW chair)*

* *Present at this meeting*



Advisory Committee activities since COP12 (2021) – Excellent yield for money spent

- Evaluation of all proposals received in response to a call issued in Dec 2020
- Consideration of all proposals received in response to a call issued in Nov 2023

Guidelines for proposals:

- Limit of US\$ 50K per proposal
 - Emphasize the need for cost-sharing
 - Guarantee for the sustainability of projects supported by the Trust Fund –
“seed money”
- Limited funding led to the current short-term plan:
 - Focus on calibration & intercomparison campaigns, training activities, instrument refurbishment and acquisition by Article 5 countries and CEITs;
enhance capacity
 - More resources would allow proposals related to monitoring of controlled substances- the long-term strategy.
 - Progress made on the implementation of long-term strategy & short-term plan of action



Advisory Committee's Progress in implementation of long-term strategy and short-term plan of action

In accordance with decision XII(II)/2, the Advisory Committee has worked to implement its long-term strategy and short-term plan of action for the Trust Fund as follows:

- **Identification of gaps and needs** in research and monitoring of ozone and related climate variables (more from ORM co-Chairs)
- **Facilitating the relocation of unused Dobson and Brewer instruments and the use of ozonesondes** to new observation programmes in line with global and regional observation priorities
- **Fostering stronger relationships with scientific institutions and related global networks** to build capacity and enhance knowledge
- **Exploring opportunities to leverage and catalyze the resources of the Trust Fund** to safeguard necessary research and observation activities in line with its strategic plan



Identification of gaps and needs

- **Need to strengthen total ozone observations in the tropics and subtropics, and parts of the southern hemisphere** –effects of circulation changes due to climate change on ozone levels while ODS decreases.
- **Need for high-quality measurements:** Regional calibration campaigns to ensure consistency with global networks across timescales. Possibilities of instruments repairs and training of operators
- **Calibration and validation of satellite sensors:** support to help in timely delivery of observations to data centres (e.g. WOUDC). Essential component for trend analyses based on satellite and ground-based data.
- **Dobson and Brewer spectrometers still the cornerstone of total ozone observing system but expertise is dwindling and instruments production discontinued:** Need to test new cost-effective spectrometers, e.g. PANDORA, BTS and SAOZ spectrometers
- It is essential to transition from legacy instruments. Ground-based O₃ observations are essential to anchor O₃ trends from satellite data



Identification of gaps and needs

- **Ozone vertical distribution:** ozonesondes are the most effective technique for measuring ozone in the free troposphere and lower stratosphere: Expand ozone sonde network in tropics and other under-represented areas (SH)
- **Scientific activity supporting the Montreal Protocol:** encourage greater participation of scientists from Article 5 countries: in assessments, CCMI, APARC/LOTUS, regional modeling activities
- **Need for quantification of emissions of controlled substances:**
Collaborations between Article 5, non-Article 5 countries, and CEIT for abundance measurements and emission quantification. (Helps build expertise in Article 5 countries and CEITs for emission quantification of other greenhouse gases)
- **Suggestion to organize a virtual workshop:**
For interested representants of the parties to explain the terms of the call for proposals, contents, the type of monitoring instruments to target in the proposals, and other logistics



Relocation of idle ozone monitoring instruments

Recommendations- To do more with what we have

- Compile a database of potentially available instruments and their conditions.
- Connect with individual networks or site operators to gain insights on:
 - Instruments that are currently inactive but still functional.
 - Instruments that are currently inactive due to damage or malfunction but can be repaired
- Contact owners of these instruments to encourage their deployment in Article 5 countries or CEITs
- Devise a strategy for training personnel in Article 5 countries and CEITs to operate these instruments upon deployment
- Explore ways to secure funding for refurbishment and calibration of identified instruments. List of potential funders for outreach

Joint efforts by all Parties would make this feasible and successful



Foster stronger relationships with scientific institutions and related global networks

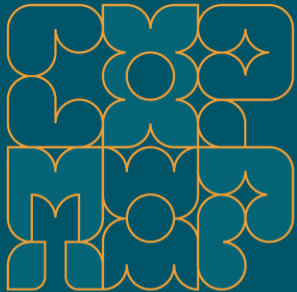
- Maintain close connection between the Advisory Committee and:
 - Ozone & UV monitoring networks (WMO GAW, NDACC, SHADOZ, EuBrewnet)
 - Science bodies involved in the science of the ozone layer (IO3C, APARC, IGAC)
- Enhance relationship with the Pandora Global Network based on Pandora spectrometers (funded for the validation of satellite missions dedicated to air quality)
- Enhance relationship with the GCOS Reference Upper-Air Network (GRUAN) network
- Increase visibility of the Trust Fund within GCOS (climate observations): Trust Fund contributes to 2022 GCOS implementation plan (e.g., Actions A1, B1 and B4)
- Maintain close connection between the Advisory Committee and existing controlled substance monitoring networks, e.g., NOAA and AGAGE networks- if this Trust Fund takes on monitoring of Montreal Protocol gases



Leverage resources to safeguard research and observations in line with strategic plan

- **Due to limited resources: maintain present focus on ozone and UV measurements**
- Leverage of resources: work with other programs, such as WMO GAW, NDACC, SHADOZ, GRUAN, Greenhouse Gas Watch program for potential infrastructure- and personnel-sharing
- **Contribution to the monitoring of controlled substances upon additional funding from the parties** (In line with long-term strategy)
 - Take advantage of existing sites and projects to reduce costs and allow faster action. Leveraging resources of existing programs, especially in-kind contributions
 - Shared resources could help meet the data exchanging and archiving needs associated with controlled substance monitoring
 - Stands ready to take on this important task if so desired by the Parties.





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Thank you

