b) developing a framework to evaluate the strengths and weaknesses of the various options that will take account of environmental, economic, legal and administrative issues and also ensure objective and transparent assessment (time-frame: late 1999); and

c) developing a comprehensive report assessing the options in terms of the evaluation framework (time-frame: late 2000) as a basis for policy decisions on the potential role of market-based options in limiting or reducing CO_2 emissions by the ICAO Assembly in late 2001.

12. **Defining the problems.** While there has been considerable progress in defining the impact of aircraft engine emissions at the global level and at ground level, significant uncertainties remain. For example, the IPCC Special Report identified five key areas of scientific uncertainty that limit the ability to project aviation impacts on climate and ozone.[3] CAEP is therefore:

a) continuing to foster development of a scientific basis for the assessment of the potential impacts of aircraft engine emissions, with resolution of scientific uncertainty as a key objective; and

b) updating and further developing existing aviation databases and forecasts for possible use in future scientific assessments.

Endnotes:

1.Radiative forcing is a measure of the importance of a potential climate change mechanism.

2.Assembly Resolution A32-8, Appendix F.

3.These five key areas are: the influence of contrails and aerosols on cirrus clouds; the role of NO_x in changing ozone and methane concentrations; the ability of aerosols to alter chemical processes; the transport of atmospheric gases and particles in the upper troposphere/lower stratosphere; and the climate response to regional forcings and stratospheric perturbations.