# **Preparing for the Meeting of the Parties**

## **Opening Session**

The twentieth meeting of the Open-ended Working Group of the Parties to the Montreal Protocol was held in Geneva from 11 to 13 July 2000.

Milton Catelin (Australia), Co-Chair of the Working Group, opened the meeting which was attended by 291 delegates, representing more than 100 Governments, as well as UN agencies, industry, and environmental nongovernmental organisations (NGOs).

The Executive Secretary of the Ozone Secretariat, Madhava Sarma, welcomed participants on behalf of Klaus Töpfer, Executive Director of the United Nations Environment Programme (UNEP). He noted the tremendous progress made by the Montreal Protocol over the preceding decade, which was unprecedented in the history of international agreements. The developed countries had fulfilled their commitments and had shown the way to the developing countries, he said. The resources provided by them had been wisely utilised by the Multilateral Fund. The more than \$1 billion provided to the developing countries had produced splendid results.

Since it could now be presumed that the remaining part of the implementation of the Montreal Protocol would proceed smoothly, it was time, he said, to look at areas where continued leadership by the Parties would be necessary. One of these was the growing level of emissions resulting from many of the exemptions. Unless the Parties applied pressure and provided incentives to industry, alternative technologies would not develop and emissions would continue to grow.

Another danger highlighted by the speaker was that of the increasing global warming, which was likely to cause the recovery of the ozone layer to take longer than originally thought. A further area of danger was the appearance of new ozone-depleting substances, such as n-propyl bromide. While there were difficulties in determining its ozone-depleting value, the question was whether the Parties should stop its growth now and judge the issue after further research, or wait for the research to be completed before taking action. That, in turn, raised related questions: how would the new ozone-depleting substances in the future be prevented from coming on to the market? Who would be responsible for determining their ozonedepleting potential (ODP)? Who would decide which chemicals should be tested? It would be better for those questions to be answered soon, the Executive Secretary said, through a Meeting of the Parties, rather than being left to future generations.

Another important issue was that of the ratification of the Copenhagen, Montreal and Beijing<sup>1</sup> Amendments. While ratifications had increased, many large countries had not ratified the Copenhagen Amendment and thus were not committed to the phase-out of hydrochlorofluorocarbons (HCFCs) and methyl bromide. There had been only one ratification of the Beijing Amendment. The fact that some large countries were staying outside the Amendments could in time pose the biggest threat to the achievements of the Protocol.

Participants were informed that of the Article 5 Parties<sup>2</sup> that had reported data for 1998, 80 per cent had reported consumption of CFCs below their baseline levels. However, 22 countries had increased their CFC consumption above their baseline levels, and must control their consumption and imports. Hence the importance of policies and regulations if countries were to reduce their consumption. No amount of resources from the Multilateral Fund<sup>3</sup> could ensure compliance if traders could do as they pleased.

Madhava Sarma urged the Executive Committee, implementing agencies and others to help the countries in establishing licensing systems.

He thanked the three Assessment Panels and the nearly 1,000 experts from around the world for their contributions during the past decade.

## **Organisation of Work**

John Ashe (Antigua and Barbuda) and Milton Catelin (Australia) served as Co-Chairs of the Working Group.

The main items on the agenda were: 1) Presentation of the Technology and Economic Assessments Panel (TEAP) on a) emissions of ozone-depleting substances from feedstock applications and b) applications for essential-use exemptions for ozone-depleting substances for the year 2001 and beyond. 2) Presentation of the reports of the Scientific Assessment Panel and Technology and Economic Assessment Panel on a) n.propyl bromide; b) Halon-1202; and c) new ozone-depleting substances. 3) Review of HCFC control measures for Parties operating under paragraph 1 of Article 5. 4) Adjustment to the Montreal Protocol relating to the controlled substances in annex E. 5) Measures to facilitate the transition from chlorofluorocarbon (CFC) -based metered-dose inhalers (proposal by the European Community). 6) Use of ozonedepleting substances as process agents (proposal by India). 7) Assessment of the Technology and Economic Assessment Panel of a long-term strategy for the collection, storage, disposal and destruction of ozone-depleting substances and equipment containing ozone-depleting substances.

## Presentation of the Reports of the Technology and Economic Assessment Panel

Following the presentation of the Panel's report, a number of representatives expressed concern over the size of emissions from feedstock uses, and suggested that a draft decision dealing with promoting the control of emissions and developing non-ozone-depleting alternatives might be helpful. The Co-Chair of the Panel confirmed that emissions from feedstock were currently of greater significance than in the early years of the Protocol, as overall consumption was currently much lower. He pointed out that emissions were, in general, higher from plants in Article 5 countries, and a sharp reduction in emissions was projected between 2003 and 2005 as the least efficient plants were closed, leading to ultimate phase-out by 2010. He also confirmed that the Panel did not anticipate any need for essential use exemptions for feedstock uses after 2010, since it was expected that clear alternatives would be developed by 2005, though one representative pointed out that decisions on essential use exemptions would be a matter for Meetings of the Parties to resolve.

Helen Tope, Co-Chair of the Technical Options Committee on aerosol products, outlined the Panel's assessment of essential use nominations for metered-dose inhalers (MDIs) for asthma and chronic obstructive pulmonary disease. Nominations received in 2000 from Australia, the European Community, Poland and the United States, were recommended for the years and quantities outlined in the Secretariat's summary of the Panel's recommendations. She also requested Parties to note that Australia requested a reduction in the nominated quantity for 2000 from the previously approved 220 tons to 110 tons. She observed that no essential use nomination for production for 1999 and beyond had been presented for the Russian Federation, while information indicated that CFC-based MDI manufacture was continuing. With local CFC production anticipated to cease in mid-2000, the CFC source for current and future MDI manufacture in the Russian Federation was unclear.

She also noted the general recommendation that countries aggregate company-specific information in their nominations. The Panel would like to update the handbook on essential use nominations in preparation for nominations due by 31 January 2001.

Ashley Woodcock, Co-Chair of the Technical Options Committee on aerosol products, reported on progress in the aerosols sector. He reiterated the recommendation for all Parties to develop transition strategies that considered issues such as assured patient access to essential MDIs, as well as the possible need for bulk CFC transfers at the transition "tail" and prudent management of strategic reserves of pharmaceutical-grade CFCs. He further noted that countries with economies in transition and Article 5 Parties would need technology transfer, with funding of projects, where necessary, to encourage transition.

Tom Batchelor, Co-Chair of the Technical Options Committee on methyl bromide, summarised the progress made on methyl bromide including the implementation of national regulations restricting its use, the development and implementation of alternatives, and methods for reducing emissions.

He said that the European Community would adopt a regulation in October 2000 that would accelerate the phaseout of non-quarantine and pre-shipment uses of methyl bromide, but that the final phase-out date of 2005 remained the same as in the Montreal Protocol. The same regulation also placed restrictions on the use of methyl bromide for quarantine and pre-shipment. The United States had also accorded priority registration for methyl bromide alternatives. He noted that most countries met the requirement of the Protocol for 25 per cent reduction of methyl bromide used for soil treatments by using lower concentrations in field cylinders and the use of barrier films. Alternatives under development and implementation included solarization, grafting, organic amendments, other chemicals and combinations of those treatments. He added that, for durable commodities, four new fumigants had been developed but had yet to be registered.

A number of representatives expressed concern over the Panel's expectation that Article 5 countries would not need essential use exemptions for MDIs after 2010, pointing out that progress in replacing CFC-based MDIs in non-Article 5 countries was currently slower than had been anticipated. Also that CFC-free MDIs tended to be more expensive than the CFC versions. It was suggested that technology transfer and financial assistance would be necessary if CFC-based MDIs were to be phased out successfully in Article 5 countries.

A number of representatives queried the suggestion of the Panel that information on the diseases to be treated, which currently had to accompany nominations for essential use exemptions for MDIs, should not be required in future. The Co-Chair of the Panel confirmed that the reason for that suggestion was simply that the information tended not to change from year to year. It was decided to postpone discussion on both those matters until a full discussion on a draft decision on MDIs could be held later in the meeting.

An observer from an environmental non-governmental organisation said that ecological limits dictated that for greenhouse gas concentrations to be stabilised below dangerous climate change levels, their emissions had to be reduced by a minimum of 50 per cent below 1990 levels within the next 50 years. HFCs were potent global warming gases, and it was incumbent upon the Parties to discourage the wide use of HFCs, which should be limited to applications where no alternatives existed at present.

## **Reports of the Scientific Assessment Panel** and Technology and Economic Assessment Panel

## N-Propyl Bromide

Jorge Corona, Co-Chair of the Technical Options Committee on solvents, said that the Technology and Economic Assessment Panel and the Committee continued to investigate the market potential and environmental acceptability of n-propyl bromide. Aggressive marketing had resulted in a higher sales figure than projected. Studies at the Nagoya University in Japan had found neurotoxicity and reproductive toxicity in rats, indicating the potential for toxicity to humans. The Panel and the Solvents Committee were working to provide new estimates of market potential and the geographic distribution of potential emissions, which would be communicated to Parties and the Scientific Assessment Panel.

The Co-Chair of the Scientific Assessment Panel summarised the Panel's report on n-propyl bromide.

In response to questions, he confirmed that local, as well as global, atmospheric circulation patterns affected the diffusion of short-lived compounds into the stratosphere. He also explained that the factors which affected the ozone-depleting potential (ODP) of n-propyl bromide also applied to other short-lived compounds. A major difficulty in assessing the ODP of those substances lay in the fact that the chemistry of their breakdown in the atmosphere into other substances (which could include other ozone-depleting substances) was still uncertain.

In response to a question on the impact of ozone depletion on individual countries, he recommended the global maps of ultraviolet irradiation reproduced in the 1999 assessment, and also the "commonly asked questions" section of the executive summary.

One representative expressed concern with the anticipated increase in production of n-propyl bromide over the coming five years, and suggested that efforts to minimise production and develop alternatives were needed, although another representative expressed doubt over the environmental and health impacts of some of the alternatives mentioned in the report.

An observer from an environmental NGO expressed the view that the precautionary principle should be implemented by banning the production of n-propyl bromide before it increased further.

#### Halon-1202

Walter Brunner, Co-Chair of the Halons Technical Options Committee commented that the halon sector programme for China was reported as making good progress, but that certain critical points remained.

Increased halon emissions had recently occurred during peacekeeping operations from aircraft owned by developed countries, even though progress in replacing halons in military equipment was taking place.

In response to a question, a representative of the Technology and Economic Assessment Panel stated that the Panel had no knowledge of existing stockpiles of halon1202 that might be contributing to observed emissions, but the Panel would investigate further.

### New ozone-depleting substances

The representative of Canada informed the Working Group that a recent assessment in his country had identified hexachlorobutadienne as an ozone-depleting substance with an ODP of 0.07 and an atmospheric lifetime of three years.

The substance is not used in Canada, but it is listed by the Organisation for Economic Cooperation and Development (OECD) as a "high-production chemical," implying that at least one OECD member had production greater than 10,000 tons. Canada would send a formal notification to the Secretariat.

### Other issues arising out of the Report of the Technology and Economic Assessment Panel

Suely Carvalho, Co-Chair of the TEAP, said that the Panel was currently composed of 23 members from 18 countries and that the goal for the Panel was to attain 50 per cent membership from countries with economies in transition and Article 5 countries if adequate funding was provided. Other goals were to maintain geographical balance, to produce short reports focusing on what was new, and to restructure the Panel and the Technical Options Committees to better address technology challenges in developing countries.

A number of representatives reiterated that the Technology and Economic Assessment Panel and its Technical Options Committees needed to appoint more members from Article 5 countries, with the aim of 50 per cent membership in due course.

The Executive Secretary confirmed that there was no shortage of funding for such Article 5 members, but many companies (in both Article 5 and non-Article 5 countries) proved reluctant to release experts for work on Panel matters. More nominations, particularly from Article 5 countries, would be very welcome.

An observer from an environmental NGO stated his concern that countries – particularly Article 5 Parties – were being encouraged to adopt technologies using HCFCs and HFCs, given the impact of those substances on climate change. He pointed to recent announcements from companies and countries intending to end or discourage the use of HFCs, and suggested that efforts should be made to avoid leading Article 5 countries down an HJCFC/HFC cul-de-sac.

## **Review of HCFC Control Measures for Parties operating under Par. 1 of Article 5**

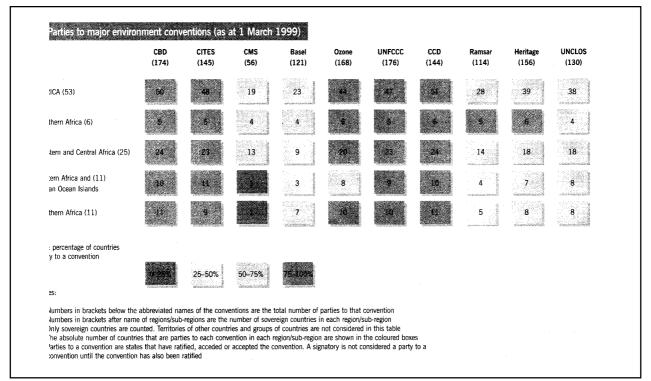
The representative of the European Community introduced a proposal for an adjustment to the Montreal Protocol relating to controls on HCFC consumption in developing countries.

He pointed out that a variety of alternatives to HCFCs had become available in the 10 years since HCFC control measures had first been devised. However, because of the long time-scale involved, their potential contribution to ozone layer depletion was substantial, notwithstanding their low ODP, and he urged the need for further action to reduce their use and emissions. He noted that the introduction of an accelerated phase-out in the Community had prompted the emergence of new alternatives to CFCs.

This EU proposal to tighten the phase-out schedule for HCFC consumption by the Article 5.1 Parties was resisted by the G77 countries who argued that the suggestion was premature. The EU asked for its proposal to be processed, in accordance with the usual procedure, by the paragraphs 3 and 4 of Article 2H. As a result, the three paragraphs contained contradictory methods of calculating the allowance for production of methyl bromide to meet the basic domestic needs of Article 5 Parties.

The Chairman of the Group later introduced a draft decision and adjustments prepared by the Legal Drafting Group to rectify the errors in the Beijing Adjustments. He noted that the work of the Group had been purely technical.

Japan expressed support for the proposed corrections, but sought clarification on several legal points. India requested that a statement be included in the report clarify-



Courtesy: Global Environment Outlook

Protocol's legal drafting group prior to discussion at MOP-12 in Burkina Faso on the merits. The Article 5.1 Parties who said that there was not yet enough agreement on the substance to warrant taking such a step also resisted this. No clear-cut conclusion was reached on this procedural point and the issue will be considered further in December.

## Adjustment to the Montreal Protocol relating to the Controlled Substances in Annex E

Patrick Széll (UK), Chair of the Legal Drafting Group, introduced the proposed adjustment. He apologised to the Meeting for having to raise the issue, which arose from a technical error made by the Legal Drafting Group at the Eleventh Meeting of the Parties, held in Beijing from 29 November to 3 December 1999 (see EPL Vol.30, No. 1-2 at page 34)

The problem arose from the failure to include in the Beijing Adjustments, in addition to the modification to paragraph 5 of Article 2H, consequential modifications to ing that the substance of the Beijing Adjustments would not be changed by the corrections. Co-Chair Catelin agreed to India's request and, following a suggestion from the Chair of the Legal Drafting Group formally convened the Group to consider the legal points raised by Japan.

Patrick Széll later provided clarification on these points. He explained that, *inter alia*, the proposed adjustments to be adopted at MOP-12 would only enter into force in mid or late 2001 and that, in the meantime, Parties would be bound by the Beijing Adjustments, including the technical error, that would come into force on 28 July 2000.

Regarding Japan's question on how to calculate the annual average of the methyl bromide production allowance to meet the basic domestic needs of Article 5 Parties, and whether methyl bromide destroyed or exported for feedstock should be included in the calculation, the Chair said the Legal Drafting Group had not come to a conclusion. He noted that the question also applies to other ODS and was not, therefore, specific to the proposed technical corrections. Co-Chair John Ashe referred the draft decision and adjustments setting out the proposed technical corrections to MOP-12, and invited the Chair of the Drafting Group to consult intersessionally on the calculation of production allowances.

## Use of ODS as Process Agents

Some representatives believed that there was a need to clarify whether or not the use of ozone-depleting substances as process agents had counted as a use of a controlled substance, or not, prior to the Tenth Meeting of the Parties, at which their status had been clarified by decision X/14.India introduced the relevant proposal.

Some other representatives considered that any such discussion was premature in that the Tenth Meeting of the Parties had decided to review the issue in 2001, on the basis of reports on the issue from the Technology and Economic Assessment Panel and the Executive Committee.

In reply, it was stated that the mandate of the TEAP and the Executive Committee in that regard was not to clarify the status of process agents but to report on progress made towards their elimination.

The Chair requested the small number of Parties concerned with the issue to hold informal discussions and report back to the Working Group.

India reported back that it had been unable to reach consensus on this issue through informal consultations. The delegate proposed that a contact group be established at MOP-12 to consider the issue. The US questioned the need to establish a contact group and suggested that bilateral discussions continue during the intersessional period.

The proposal to establish a contact group will be placed on the agenda of MOP-12.

#### **Report of the Implementation Committee**

The President of the Implementation Committee Mamadou Diallo Iam (Mali), reported on the Committee's 24<sup>th</sup> Meeting held prior to the present meeting on 10 July. The Committee had reviewed data submitted by Parties on ODS production and consumption for 1998 and 1999, as well as a report on compliance with, and followup to, the Committee's previous recommendations.

The Committee identified several areas of success. Delegates were informed that total global consumption of CFCs decreased during the period 1994 to 1998. That 137 Parties fully complied with reporting requirements and 19 Article 5 Parties (out of a current total of 120) decreased CFC consumption for four or five years up to 1998. Further, 75 Article 5 Parties reported zero consumption of halons, 66 reported zero consumption of carbon tetrachloride, and 71 reported zero consumption of methyl chloroform.

The Committee identified as areas of concern the fact that 11 Parties reported no data from 1986-1998 and that 17 Article 5 Parties have not reported data on Annex I substances for 1995-1996, information that is necessary for determining a baseline for compliance with CFC and halon control schedules.

### Prevention of Illegal Trade in ODS and Products Containing ODS

The representative of Poland, on behalf of 10 Parties in central and Eastern Europe, introduced a draft decision on the prevention of illegal trade in ozone-depleting substances and products containing ODS. He explained that the proposals it contained originated in discussions at a workshop for ozone and customs officers organised by UNEP in Budapest in May 2000. He believed that the decision, if implemented, would greatly assist customs officers in detecting the ozone depleting content and distinguishing between products containing ODS and mixtures containing ODS. It would thereby help to control illegal trade, a matter likely to be of growing concern as the phase-out process steadily reduced the availability of particular substances.

The Secretariat reviewed the work of the ODS Customs Codes Discussion Group, which holds discussions via the Internet, and remarked that each substance listed in the Montreal Protocol has a harmonised system customs code. Noting that many substances are contained in mixtures, the representative drew attention to the need to address customs codes for ODS-containing mixtures.

Many representatives expressed their concern over the growth in illegal trade and their support for the draft decision, though the representative from Antigua and Barbuda expressed her concern over the possible additional burden on customs officers that might follow from a more complex coding system.

Representatives of several Article 5 Parties highlighted the problems posed by the export of equipment containing ODS substances from non-Article 5 countries. Some of them suggested that non-Article 5 Parties should take further steps to control such exports, thereby ensuring that the burden of controlling the trade did not fall solely on the Article 5 Parties involved.

On the following day, Poland introduced a revised draft decision. The delegate noted that the substance of the proposal remained unchanged, but with the Ozone Secretariat quested to carry out the activities previously proposed for the TEAP. Antigua and Barbuda said that the role of exporting countries was not adequately addressed in the draft decision, and underscored the need to address the issue of import and export of product equipment reliant on Annex A or B substances. The delegate said the MOP-11 decision on the role of exporting countries should be revisited.

The US and Canada commented that they had some concerns with the revised draft decision, but did not elaborate on these, and suggested that these concerns be addressed through bilateral discussions during the intersessional period.

Co-Chair Catelin suggested, and delegates agreed, that proposed amendments should be submitted to Poland during the intersessional period and that the issue should be further discussed at MOP-12.

## Disposal of Controlled Substances

Delegates discussed a draft decision proposed by Australia, Canada and Switzerland on disposal of controlled substances. Canada informed Parties of the outcome of the Workshop on ODS Disposal Technologies, held on 11 July, sponsored by these governments and UNEP. The delegate also introduced the draft decision, explaining that it requested TEAP to establish a task force on ODS destruction technologies, which would report regularly to the Parties on the status of such technologies, with the first report to be submitted by MOP-14. The task force would, among other things, evaluate the technical and economic feasibility of options for the long-term management of contaminated ODS in both Article 5 and on Article 5 Parties, including options such as storage, transport, collection, reclamation and disposal.



Courtesy: Swedenvironment

A representative reminded Parties that the EU will have legislation in force by October 2000 that will include regulations on ODS destruction and will request member States to submit information on systems for recovery, recycling and destruction of ODS. El Salvador suggested that discussion of the draft decision should be extended to regional network meetings. TEAP welcomed the proposed request to create a task force.

The Working Group agreed to forward the draft decision, as amended during the Meeting, to the Twelfth Meeting of the Parties for adoption.

#### **Other Matters**

Other matters discussed by delegates included the following:

Measures to make available halons for essential/critical uses in Parties operating under paragraph 1 of Article 5.

The representative of India introduced a draft decision on this topic pointing out that shortages of halons in various countries had recently arisen, especially where production had been or was being phased out, and that the cost of recycled halons that were available was prohibitive.

Other delegates said that in some areas surpluses of halons existed, to the extent that proposals for destruction had been put forward, and that the UNEP Halon Information ClearingHouse was a possible source of information on where halons could be obtained.

The EU representative informed the Working Group

that the new regulation, due to enter into force in October 2000, might prevent the export of halons from the Community even though a surplus was forecast in most member States. Clarification was being sought.

The Working Group agreed that the matter would be taken up again at MOP-12.

#### New ozone-depleting substances

Concerning the question of the procedure for extending the coverage of the Montreal Protocol to new substances, which the Parties had considered at their Eleventh Meting, the Working Group agreed to defer the matter pending further consultations.

#### **Closing Plenary**

Delegates considered the draft report of the Meeting. India and others noted that several interventions were not recorded in the report. Executive Secretary Sarma invited countries to submit text reflecting the omitted interventions to be added to the final version.

Lithuania regretted the absence of the Global Environmental Facility (GEF) at the Meeting and requested its participation in future meetings. Delegates adopted the report with minor amendments.

The US, on behalf of all delegates, thanked Executive Secretary Sarma, who is to retire in August,\* for his enormous contribution to the protection of the ozone layer and for his able leadership in assisting Parties in the implementation of the Montreal Protocol. Delegates honoured Madhava Sarma with a standing ovation. Co-Chair Catelin then declared the Meeting closed. (MJ)

#### Notes

<sup>1</sup> At MOP-4 (1992), delegates agreed to shorten the existing control schedule, so that developing countries would phase out CFCs, carbon tetrachloride and methyl chloroform by 1996, and halons by 1994. They also added methyl bromide, HCFCs and Hydrobromofluorocarbons (HBFCs) to the list of controlled ODS. For developed countries production and consumption of ethyl bromide was to be frozen at 1991 levels, HBFCs were to be phased out by 1996 and consumption of HCFCs was to be phased out by 2030, with a 95.5 per cent cut to be achieved by 2020. The Copenhagen Amendment also agreed to stronger import and export controls and non-compliance procedures. To date, 108 Parties have ratified the Amendment.

The Beijing Amendment provides for a freeze in the level of HCFC production in 2004 for non-Article 5 Parties and in 2016 for Article 5 Parties; the phase out of bromochloromethane by 2002; a ban on trade in HCFCs with non-Parties from 2004; and reporting on annual consumption of methyl bromide for QPS applications. The Amendment will enter into force on 1 January 2001, providing that at least 20 Parties have ratified it. To date, Chile is the only Party that has ratified the Amendment. The Adjustmnts stipulate the phase out of production allowances to meet the basic domestic needs of Article 5 Parties for CFCs, halons and methyl bromide.

<sup>2</sup> Due to the ten years grace period, laid down in Article 5 paragraph 1, of the Protocol, developing countries would have to phase out CFCs and other ozonedepleting substances by 2006 (halons 2004). However, these countries interpreted the sentence added to Article 5, paragraph 1, by the Copenhagen Amendment as clarification that the Copenhagen Adjustment did not apply to them. Thus, the developing countries would be bound only by the control measures adopted at the London Meeting in 1990, which demand the phaseout of CFCs, halons and carbon tetrachloride by 2001 and of methyl chloroform by 2015.

<sup>3</sup> The Multilateral Fund for the Implementation of the Montreal Protocol was founded in 1991 in order to assist Article 5 countries in complying with the applicable phase-out schedules and eventually achieve a complete phase-out of ozonedepleting substances. It has operated on the basis of three-year budget periods.

\* We have been informed that Dr. Palitha T.B. Kohona, Chief, UN Treaty Office in New York (and a long-standing ICEL member), will take over from Executive Secretary Sarma in September.